Alexithymia and Suicidal Ideation among Patients with Obsessive-Compulsive Disorder

Mai Mohamed Elsayed Abd-Elhamed [1], Rehab Fathy Abdel Hady Ghaith [2], Bothina Elsayed Said Mohamed [3], and Shadia Fathy Mahmoud Mohammed [4]

[1] Demonstrator of Psychiatric and Mental Health Nursing, Faculty of Nursing - Zagazig University, & [2, 3, 4] Assistant Professor of Psychiatric and Mental Health Nursing, Faculty of Nursing - Zagazig University

Abstract

Background: Obsessive-compulsive disorder(OCD) is a highly prevalent and chronic condition that is associated with substantial global disability, OCD is a prevalent and chronic psychiatric disorder that significantly impairs global functioning, quality of life, and well-being of the individual and associated support systems. Alexithymia is known to be associated with suicidal ideation as well in the clinical population of people with obsessive-compulsive disorder. **Aim of the study:** Was to assess alexithymia and suicidal ideation among patients with obsessive-compulsive disorder. **Subjects and Methods; Research design:** A cross-sectional design was adopted to carry out this study. **Setting:** The study was conducted at psychiatric outpatient clinic at Zagazig University Hospitals and Abbasyia Hospital for mental health in Cairo city. **Subjects:** A purposive sample of 140 patients with obsessive compulsive disorder. **Tools of data collection:** Four tools will be used to collect the necessary data for this study. They were: Socio-demographic questionnaire, Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Toronto Alexithymia Scale (TAS-20) and scale for Suicidal Ideation. **Results:** The study reveals that more than two thirds of studied patients had mild obsessive compulsive level, more than two-thirds of studied patients had alexithymia, more than two-thirds of studied patients had suicidal ideation, and there were statistically significant positive correlations between patients' obsessive compulsive and alexithymia and suicidal ideation score. **Conclusion:** Patients' suicidal ideation score was statistically significant positive predictor for obsessive compulsive disorder. Also, patients' obsessive compulsive score was statistically significant positive predictor for suicidal ideation. **Recommendations:** Developing psychoeducation program to patients and family member (s) about OCD, its course, treatment options including duration of treatment. Developing emotion focused intervention strategies for patients to reduce alexithymia and enhancing their self- efficacy of emotional dysregulation (alexithymia).

Key words: Alexithymia, Obsessive Compulsive Disorder, Suicidal Ideation.

Introduction:

Obsessive - compulsive disorder (OCD) is a mental disorder in which a person feels the need to perform certain routines repeatedly (called "compulsions"), or has certain thoughts repeatedly (called "obsessions"), the person is unable to control either the thoughts or activities for more than a short period of time, common compulsions include hand washing, counting of things, and checking to see if a door is locked, some may have difficulty throwing things out [1]. Obsessive-compulsive disorder affects about 2.3% of people at some point in their life. Rates during a given year are about 1.2% and it occurs worldwide, it is unusual for symptoms to begin after the age of thirty five and half of people develop problems before twenty, males and females are affected about equally [2].

Obsessive-compulsive disorder is characterized by a malfunction in the brain's communication system, which creates issues with information processing, OCD is one of the most distressing mental illnesses, It has a negative impact on patients' social and familial interactions, self-esteem, and self-efficacy, as well as a higher risk of depression, suicidality, and illicit drug abuse [3]. Extensive research that

measures the heterogeneity of OCD focuses largely on certain maladaptive beliefs but many other factors such as emotion appraisal also predict the severity of OCD, a person with OCD diagnosis is unable to distinguish between imagined mental events and real it, this could heighten the distress associated with unpleasant thoughts and contribute to the sense that thoughts and reality are closely linked [4].

Alexithymia derived from the ancient Greek: "a" for lack, "lexis" for word and "thymos" for emotion, no words for emotions, it is a psychological trait characterised by a difficulty in identifying and expressing one's own feelings and by a cognitive style called "externally oriented thinking" (described perational thinking style associated with poor imaginative abilities), alexithymia was also observed in many mental disorders, such as in anxiety, depressive and obsessive-compulsive disorders [5].

It has been reported that people with alexithymia tend to have higher levels of anxiety, depression, and psychological suffering, and their suicide rate has increased than non-alexithymics, after the detection of alexithymia, patients should be carefully evaluated and suicide prevention programs should be established if necessary [6].

Alexithymia is predictive of multiple psychological problems such as interpersonal issues, aggression, somatization, obsessionality, depression, and anxiety while the prevalence rate of alexithymia is reported to be significantly higher in people with multiple psychopathologies, eating disorders, obsessive-compulsive disorder, and post-traumatic stress disorder [7].

Suicidal ideation can be defined as the desire, thought, or plan about the act of committing suicide, or image-oriented cognition about the loss of meaning in life, or self-destructive

images, it is therefore the cognitive component of suicidal behavior, anxiety, and depressive symptoms have been identified in the literature as predictors of suicidal ideation, moreover, according to previous research, the prevalence of suicidal ideation is higher in girls than in boys [8].

The most risk factors for suicide (e.g., depression, mental illnesses, hopelessness, impulsivity) are in line with those that predict ideation, but not behavior. Thus, suicidal ideation is an especially important focus for investigation. Suicidal ideation appears to be particularly prevalent in comorbid anxiety disorders and obsessive-compulsive disorder (OCD). Previous studies have reported rates of suicidal ideation as high as 30-40% in anxiety disorders/OCD vs 14% in those without comorbid anxiety/OCD [9].

Several studies have shown that OCD is linked to an increased risk of suicidal ideation, suicide attempts, and death by suicide, at some time during their life, more than 10% of individuals with OCD attempt suicide and around half struggle with suicidal ideation. Research on OCD symptom dimensions and suicidality has suggested that sexual and religious obsessions may be specifically linked to an increased risk of suicidal thoughts and behaviors [10].

Obsessive-Compulsive Disorder (OCD) has been traditionally considered to have a relatively low suicide risk; this assumption was based mainly on the typical secrecy/shame associated with obsessive-compulsive symptoms, higher severity of obsessions and depressive symptoms, lower education, higher unemployment rates, lifetime alcohol use disorders, personality disorders and family history of completed suicide [11].

Significance of the study:
The OCD has been considered an important determinant of suicide. In

patients with OCD, suicidal ideation rates ranged from 10 to 53% and suicide attempts ranged from one to 46% [12]. Additionally, alexithymia may be present in 20%-40% of patients with OCD, It has been linked to increased disorder severity and its presence may increase suicide risk [13].

Aim of the study:

The aim of the study was: To assess alexithymia and suicidal ideation among patients with obsessive-compulsive disorder.

Research Questions:

- What is the severity of obsession and compulsion among OCD patients?

- Do OCD patients suffer from alexithymia?

- What is the percent of suicidal ideation among OCD patients?

- Is there a relationship between alexithymia and suicidal ideation among OCD patients?

Subjects and Method:
Research Design:

Cross-sectional design will be used to conduct this study was adopted for this study.

Study Setting:

The study was conducted at psychiatric outpatient clinic at Zagazig University hospitals and Abbasyia Hospital for mental health at Cairo city.

Psychiatric outpatient clinic locates in the fifth floor of outpatient clinics building and includes ten rooms (department manager room, two teaching rooms, general psychiatry room, psychiatric measurements room, forensic psychiatry and psychotherapy room, geriatric psychotherapy, addiction therapy and child psychiatry room, secretarial room and two bathrooms).

Abbasyia Hospital, composed of sixteen rooms that include (treatment at state expense room, clinics manager room, two rooms of patient affairs, psychologist room, social worker room, two rooms of pharmacy, four rooms of medical examination, bathroom, three medical store rooms).

Study Subjects:

A total study subjects consisted of 140 psychiatric patients with obsessive compulsive disorder at psychiatric outpatient clinic at Zagazig University Hospitals and Abbasyia Hospital for mental health at Cairo city. The total OCD patients, who attend outpatient clinic of Zagazig University hospitals, and Abbasyia mental hospital, are estimated to be 288 patients in one year. Percent of suicidal ideation was 23.3% among OCD patients [14]. Confidence level is 95% with power of study 80%. The required sample size is 140 patients.

Tools for data collection:

Four tools were used for data collection:

Tool I: Socio-demographic data questionnaire:

This section was developed by the researcher to document the personal characteristics of patients. It included questions about age, gender, education, marital status, employment status, and family history of OCD, age of first OCD onset and disorder duration.

Tool II: Yale-Brown Obsessive Compulsive Scale (Y-BOCS):

This scale was developed by **Goodman et al.** [15,16]. It consists of 10-item, semi structured, clinician-administered measure of obsession and compulsion severity.

Scoring system:

Items are rated on a five-point Likert scale ranging from 0-4, with higher scores corresponding to greater symptom severity. Items pertaining to obsession and compulsion are summed to derive the Obsession and Compulsion Severity Scales. All items are summed to derive the Total Severity Score. Total scores range from 10-40 [17]. The level of obsessive compulsive symptoms was categories as:

- **Atypical obsessive compulsive symptoms:** Total score 0-7.

- **Mild symptoms:** Total score 8-15.

- **Moderate symptoms:** Total score 16-25.

- **Sever symptoms:** Total score 26-35.

- **Profound symptoms:** Total score 36-40.

Tool III: Toronto Alexithymia Scale (TAS-20):

The Toronto Alexithymia Scale (TAS-20) was developed by **Bagby et al.** [18] and was used to assess alexithymia. The questionnaire consists of 20 items, measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).The TAS-20 measures three dimensions of alexithymia: Difficulty in identifying feelings, difficulty in describing feelings and externally-oriented thinking.

Scoring system:

A total score equal to or greater than 61 indicates alexithymia, a score ranging from 52 to 60 suggests borderline alexithymia, and a score equal to or less than 51 indicates no alexithymia.

Tool IV: Scale for Suicidal Ideation:

This scale was developed by **Beck et al.** [19]. It consists of 19 items .This Scale was used to assess the suicidal ideations in patients with OCD; the SSI is a clinician rating scale with a semi-structured interview format. This 19-item scale evaluates intensity of the patient's active suicide desire, specific plans for suicide, passive suicide desire, and previous suicide attempts.

Scoring system:

Items were rated on a 3-point scale ranging from 0 to 2 and suicidal ideations level was categories as no suicidal ideations, weak level, and moderate to strong level.

Content validity and reliability:

The tools were revised by a 3 panel of consultants. Three are assistant professor of psychiatric and mental health nursing conducted content validity of all the items of these tools. All suggested modifications were performed. All scales were translated into Arabic by the researcher using the translate-back-translate technique to confirm their original validity. Reliability of the tools was assessed by Cronbach's α test in SPSS V.20 (SPSS Inc., Chicago, Illinois, USA). They show a good level of reliability.

Field work:

Once permission was granted to proceed with the study, the researcher explained the study aim and procedures, as well as information assortment forms to the psychiatric patients of OCD then the researcher introduced herself to psychiatric patients, and also the purpose and the nature of the study were explained, voluntary participation and confidentiality were ensured. The psychiatric patients were asked to fill in the form sheet beneath the guidance of the researcher once their written approval was taken. Patients took approximately 35 to 40 minutes for answering the queries. The researcher went to psychiatric outpatient clinic at Zagazig University Hospitals two days per weeks and Abbasyia Hospital for mental health at Cairo city one day per week to collect data. This study lasted for three months from the beginning of November 2022 to the end January of 2023.

Pilot study:

A pilot study was conducted on 14 psychiatric patients of OCD approximately ten percent of the calculated total sample size. The purpose was to test the feasibility and clarity of the tools and to help know the time needed for filling out the data collection forms. From the pilot study results, the average time to fill in the tool was 35-40 minutes. The psychiatric patients of OCD involved in

the pilot study were included in the main study sample since no modification was needed in the data collection form.

Administrative and Ethical considerations:

The study proposal was approved by the Ethical Committee at the Faculty of Nursing at Zagazig University. Participants were informed about the aim of the study and their participation was voluntary and they had the right to withdraw from the study at any time while not giving any reason. Additionally, the confidentiality and namelessness of the participants were assured through the coding of all data.

Statistical analysis:

All data were collected, tabulated and statistically analyzed using IBM Corp. Released 2015. IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp. Quantitative data were expressed as the mean ± SD & median (range), and qualitative data were expressed as number & (percentage). Wilcoxon sign rank test was used to compare between paired of non-normally distributed variables. Percent of categorical variables were compared using, Chi square test or Fisher Exact test when appropriate. Spearman' correlation coefficient was calculated to assess relationship between various study variables, (+) sign indicate direct correlation & (-) sign indicate inverse correlation, also values near to 1 indicate strong correlation & values near 0 indicate weak correlation. Multiple linear regressions are a predictive analysis. Multiple linear regression is used to describe data and to explain the relationship between one dependent continues variable and one or more independent variables. All tests were two sided. P-value < 0.05 was considered statistically significant, p-value ≥ 0.05 was considered statistically insignificant.

Results:

Table (1): Displays that slightly more than one half of patients with obsessive compulsive disorder (50.7%) aged more than 30 years old, with mean 33.2±10.2 and range (19-55) years, with slightly more than half of them (53.6%) were being female and single. Two-thirds (66.4%) of them had a university level of education and (40.0%) of them unemployed.

Table (2): Shows that, the majority of studied patients (83.6%) had no family history of disease, with more than half (57.9%) of them age onset of disease ranged from (20-40) years and slightly more than half (52.1%) of them duration of disease ranged from 1≥ 5 years.

Table (3) and figure (1): Shows that obsessive compulsive mean score was 19.4±8.5 and more than two thirds (70%) of studied patients had mild obsessive compulsive level.

Table (4): Shows that, slightly more than two-thirds of studied patients (68.6%) had alexithymia, meanwhile, 18.6% of them had no alexithymia. moreover the alexithymia mean score was (65.9±15) with median (range) 67.5 (20-99).

Table (5): Shows that that 69.3% of studied patients had suicidal ideation, more than half (57.9%) of studied patients had weak suicidal ideation level and (11.4%) of them had moderate to strong suicidal ideation level with mean score (7.3±7.2).

Table (6): Demonstrates statistically significant positive correlation between patients' obsessive compulsive score and alexithymia score (r = 0.202) and suicidal ideation score (r = 0.44).

In multivariate analysis **table (7):** Patients' suicidal ideation score was statistically significant positive predictor for obsessive compulsive disorder.

Table (8): Shows that patients' obsessive compulsive score was statistically significant positive predictor for suicidal ideation.

Discussion:

Concerning studied patients' obsessive compulsive level, the current study results showed that more than two thirds of studied patients had mild obsessive compulsive level. This may be because studied patients were under treatment (taking medication and exposure to cognitive behavioural therapy) in outpatient clinics, so there is control to symptoms of disorder in studied patients.

This study finding is not on the same line of **El-Azzab et al.** [20] in Egypt about efficiency of nursing intervention on psychological adjustment, perfectionism and symptoms among patients with obsessive compulsive disorder which revealed that only 12.5% of the study group had mild symptoms of OCD, while about one- fourth (25%) of them had moderate symptoms of OCD, and 62.5% of them had severe symptoms of OCD, that study was conducted at outpatient clinics at the psychiatric and mental health hospital in Meet-Khalf at Menoufia. This disagreement with the current study result may be explained by these studies had used different tool for OCD severity measurement.

Regarding the total alexithymia score, the current study results showed that slightly more than two-thirds of studied patients had alexithymia, with alexithymia mean score was (65.9±15). This may be because OCD changes the cognitive processing ability of emotional information where Feeling, identifying, and understanding is necessary for emotion regulation skills, so patients with OCD had deficit in emotional awareness and a lack of correct emotions leading to social dysfunction.

This result goes on line with the study of **Uslu et al.** [21] in Turkey about comparison of alexithymia level differences associated with obsessive compulsive disorder patients and healthy people that revealed the levels of alexithymia in OCD patients were significantly higher than those of healthy individuals.

Additionally, this study was in partial agreement with a study performed by **Pozza et al.** [22] in Italy with the title of the contribution of alexithymia to obsessive-compulsive disorder symptoms dimensions: An Investigation in a large community sample in Italy, which revealed that global alexithymia may be specifically associated only with ordering and pure obsessing OCD symptoms but not with the other OCD dimensions.

Concerning of suicidal ideation score of studied patients, the current study results showed that the mean suicidal ideation score of the studied patients was 7.3±7.2 and slightly more than two-thirds of studied patients had suicidal ideation. This means the patients with OCD are associated with suicidal ideation for many causes where obsessions and compulsions cause functional impairment, interfering with leisure activities and affecting family, marital, and social relationships, this leads to sever depression and then suffering from suicidal ideation. The reported rates vary widely from country to country according illness severity, personality traits and culture of patients.

In comparison with the current study results **Khalkhali et al.** [23] in Iran about suicidal ideations in patients with obsessive-compulsive disorder which reported that prevalence of current suicidal ideations in studied patients with OCD was (22.1%).

Also, a study conducted by **Sehlo et al.** [14] in Egypt about prevalence and risk factors of suicidal ideations among patients with obsessive compulsive disorder in Egypt which revealed that (23.3%) of studied patients with OCD had current suicidal ideations.

The current study revealed that there were statistically significant positive correlation between patients' obsessive compulsive and alexithymia and suicidal ideation score. This is attributed to the patients with OCD have often sever anxiety and

depression and this is accompanied by alexithymia which is the difficulty in labeling and processing emotions may affect the representation of emotional states and cause personal distress with this emotional effort can cause suicidal ideation.

This result is in agreement with the study of alexithymia, responsibility attitudes and suicide ideation among outpatients with obsessive-compulsive disorder: An exploratory study by **De Berardis et al.** [24] who found OCD patients with alexithymia showed higher suicide ideation; alexithymia has been found associated with increased suicide risk and behaviors in several medical and psychiatric disorders.

Moreover, the current study results are in harmony with **Albert et al.** [25] study about suicide risk in obsessive-compulsive disorder and exploration of risk factors: a systematic review which revealed suicidal ideation is referred by simple above quarter to nearly three quarters of OCD individuals and Epidemiological studies found that OCD increases significantly the odds of having a lifetime suicidal ideation as compared to the general population.

Finally, in multivariate analysis, the current study result showed that patients' suicidal ideation score was statistically significant positive predictor for obsessive compulsive disorder. Also, patients' obsessive compulsive score was statistically significant positive predictor for suicidal ideation. This means the more suicidal ideation score of patients was, the more obsessive compulsive disorder they suffered and the more patients' obsessive compulsive score was the more suicidal ideation they experienced.

These findings are in line with **Sehlo et al.** [14] in Egypt who studied prevalence and risk factors of suicidal ideations among patients with obsessive compulsive disorder in Egypt. They found that the presence of religious obsessions was the strongest predictor for the current suicidal ideations among Egyptian Muslim patients with OCD.

Conclusion:

Patients' suicidal ideation score was statistically significant positive predictor for obsessive compulsive disorder. Also, patients' obsessive compulsive score was statistically significant positive predictor for suicidal ideation.

Recommendations:

Based on findings, the study recommended:

- Developing psychoeducation program to patients about OCD, its course, treatment options including duration of treatment.

- Developing emotion focused intervention strategies for patients to reduce alexithymia.

- Developing training program for patients with obsessive compulsive disorder to reduce suicidal ideation.

- Developing and implementing a special training program for people with obsessive-compulsive disorder to deal with their symptoms and stressful experiences in daily life.

- Further research: To achieve more generalizability of the results, it is recommended to repeat the current study on a larger, representative probability sample size in different governorates of Egypt.

Table (1): Socio-demographic characteristics of patients in the study sample (no. =140)

Items	No.	%
Age per years		
≤30 years	69	49.3
>30 years	71	50.7
Mean + SD	33.2±10.2	
Median	31(19-55)	
Sex		
Males	65	46.4
Females	75	53.6
Marital status		
Single	75	53.6
Married	59	42.1
Divorced	3	2.1
Widow	3	2.1
Educational level		
Read & Write	15	10.7
Secondary	32	22.9
University	93	66.4
Occupation		
Students	30	21.4
Employer	54	38.6
Un employed	56	40

Table (2): Disease characteristics of patients in the study sample (no. =140)

Items	No.	%
Family history of disease		
Yes	23	16.4
No	117	83.6
Onset of disease		
< 20 years	53	37.9
20-40 years	81	57.9
>40 years	6	4.3
Duration of disease		
< 1 years	20	14.3
1> 5 years	73	52.1
5 < 10 years	28	20.0
> 10 years	19	13.6

Table (3): Frequency distribution percent of obsessive compulsive scale of studied patients (no. =140)

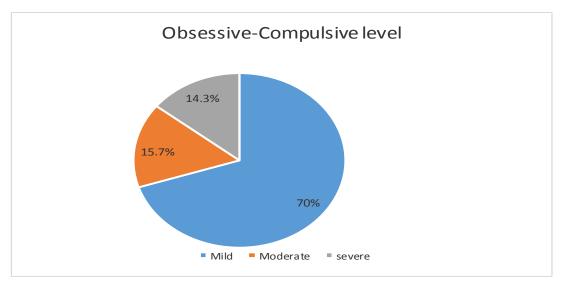| Items	Score 4		score 3		score 2		score 1		score 0	
	No.	%	No.	%	No.	%	No.	%	No.	%
How long do your compulsive thoughts last?	30	21.4	36	25.7	24	17.1	50	35.7	0	0
To what extent do the compulsive thoughts interfere with your work, study, or other social roles?	12	8.6	18	12.9	52	37.1	58	41.4	0	0
How much stress do the compulsive thoughts cause you?	28	20.0	13	9.3	80	57.1	19	13.6	0	0
How much effort do you put in to resist the compulsive thoughts? And how often do you try to ignore it when it enters your mind?	9	6.4	11	7.9	29	20.7	73	52.1	18	12.9
How much control do you have over equal thoughts?	19	13.6	25	17.9	38	27.1	50	35.7	8	5.7
How long does it take to perform these routine activities, and how often do you repeat these rituals?	22	15.7	36	25.7	31	22.1	48	34.3	3	2.1
To what extent does it interfere or affect daily activities?	21	15.0	9	6.4	53	37.9	45	32.1	12	8.6
How would you feel if you were prevented from engaging in compulsive behavior?	22	15.7	25	17.9	35	25.0	39	27.9	19	13.6
How much do you resist your compulsive behavior?	6	4.3	17	12.1	25	17.9	62	44.3	30	21.4
What is the strength of the motive for the compulsive behavior and what is the degree of your control over the compulsive behavior?	15	10.7	28	20.0	35	25.0	59	42.1	3	2.1
Obsessive-Compulsive (40)*										
Mean ± SD					19.4±8.5					
Median (range)					17(8-40)					

(Maximum score)*

Figure (1): Percent of obsessive compulsive level of studied patients (n=140)

Table (4): Frequency distribution percent of total alexithymia score of studied patients (no. =140)

Items	No.	%
Alexithymia Scale score (100)*		
No	26	18.6
Border line	18	12.8
Alexithymia	96	68.6
Mean±SD	65.9±15	
Median (range)	67.5(20-99)	

Table (5): Frequency distribution of suicidal ideation score in studied patients (no. =140)

Items	Score 0 No.	Score 0 %	Score 1 No.	Score 1 %	Score 2 No.	Score 2 %
Wish to live	97	69.3	27	19.3	16	11.4
Wish to die	68	48.6	43	30.7	29	20.7
Reasons for living/dying	70	50.0	47	33.6	23	16.4
Desire to make active suicide attempt	77	55.0	40	28.6	23	16.4
Passive suicidal desire	108	77.1	14	10.0	18	12.9
Time dimension: Duration of suicide ideation/wish	130	92.9	10	7.1	0	.0
Time dimension: Frequency of suicide	98	70.0	42	30.0	0	.0
Attitude toward ideation/wish	90	64.3	41	29.3	9	6.4
Control over suicidal action/acting-out wish	105	75.0	29	20.7	6	4.3
Deterrents to active attempt (e.g., family, religion)	124	88.6	13	9.3	3	2.1
Reason for contemplated attempt	71	50.7	40	28.6	29	20.7
Method: Specificity/planning of contemplated attempt	117	83.6	20	14.3	3	2.1
Method: Availability/opportunity for contemplated attempt	95	67.9	21	15.0	24	17.1
Sense of "capability" to carry out attempt	91	65.0	35	25.0	14	10.0
Expectancy/anticipation of actual attempt	88	62.9	42	30.0	10	7.1
Actual preparation for contemplated attempt	108	77.1	29	20.7	3	2.1
Suicide note	128	91.4	12	8.6	0	.0
Final acts in anticipation of death	126	90.0	14	10.0	0	.0
Deception/concealment of contemplated suicide	93	66.4	31	22.1	16	11.4
Suicidal ideation (No)	43(30.7%)					
Suicidal ideation (yes)	(69.3%)					
Weak	81(57.9%)					
Moderate to strong	16(11.4%)					
Suicidal ideation (38)*						
Mean±SD	7.3±7.2					
Median (range)	5 (0-26)					

Table (6): Correlation matrix between obsessive compulsive score, alexithymia score and suicidal ideation score (no. =140)

Items	Obsessive score		Alexithymia score		Suicidal ideation score	
	r	p	r	p	r	p
Alexithymia score	0.202*	0.017	1			
Suicidal ideation score	0.44 **	0.0001	0.39**	0.0001	1	

(r) Correlation coefficient ** Correlation is significant at the 0.01 level * Correlation is significant at the 0.05 level.

Table (7): Multiple linear regression model for predict obsessive compulsive score among studied patients (no. =140)

Predictors OCD	Regression coefficients β	t	Sig.	r	R^2
(Constant)	16.442				
Alexithymia score	.022	0.401	0.689		
Suicidal ideation score	.446	4.62	0.0001		
Age of disease onset	-1.68	1.38	0.170		

β = regression coefficients, R square = 22.6% of predictors anova model=7.6, p=0.0001

Table (8): Multiple linear regression model for predict suicidal ideation among studied patients (no. =140)

Predictors Suicidal ideations	Regression coefficients β	t	Sig.	r	R^2
(Constant)	-3.86				
Alexithymia score	.072	1.56	0.121		
Age of disease onset	.109	.108	0.915		
Obsessive compulsive score	.308	4.62	0.0001		
Disease duration	1.187	1.89	0.060		

β = regression coefficients, R square = 26.4% of predictors anova model=9.6, p=0.0001

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