PREVALENCE OF SUICIDAL IDEATION AMONG THE PATIENTS SUFFERING FROM OBSESSIVE COMPULSIVE DISORDER ATTENDING PSYCHIATRY DEPARTMENTS OF TERTIARY CARE HOSPITALS OF LAHORE, PAKISTAN

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ABSTRACT

Background: Obsessive-compulsive disorder (OCD) is a debilitating disease which runs a chronic course and affects patient's functioning badly. Frequency of Suicidal thoughts and attempts is much more common in OCD patients than it was thought previously.

Objective: To determine the frequency of suicidal ideation among patients with obsessive compulsive disorder presenting in a tertiary care hospital.

Methods: This Cross-sectional study was done in a tertiary care hospital on 159 patients of OCD. Demographic data was taken. All patients were assessed for history of suicidal attempt. History of suicidal ideation was obtained from patients on a Performa comprising of BECK suicidal intent scale. Data was analyzed on SPSS version 20.

Results: Suicidal ideation was found in 40(25.2%) patients. Frequency of suicidal ideation was higher among female (57.5%) patients as compared to male (42.5%) patients. Socio-demographic factors like age, gender, duration of OCD, marital status, educational status and financial condition did not show any statistically significant association with suicidal ideation.

Conclusion: Current study showed that suicidal ideation was present in 25% of the patients of OCD which signifies the importance of assessment of suicidal ideation in all OCD patients routinely.

Key words: Suicidal ideation, Obsessive compulsive disorder, Psychiatry department.

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INTRODUCTION:

Suicide is considered to be among the ten major causes of mortality n USA. Suicide is a major cause of premature mortality. The rate of suicide in males was found to be 3.7 times higher than the rate for females during the year 2018 (22.8 and 6.2, respectively).

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It is the second major cause of death for age between 10 years -34 years and is the fourth in the people between the ages 35–54. There were 41,149 deaths due to suicide in 2013 in the United States. This is equal to a rate of 12.6 per 100,000. This can be calculated as equal to 113 suicides each day i.e. one death by suicide in every 13 minutes.² About 2.7 million people (1.1%) planned suicide in the past year.³ This data clearly indicates that suicide is a serious public health problem. A global burden of more than 800 000 deaths per year was estimated which is equal to 1.4% of all deaths worldwide.⁴ The presence of a psychiatric illness is a major risk factor for suicide.⁵ It is considered that more than 90% of people who commit suicide suffer from mental illness at the time of death.⁵Among people who die by suicide relatively few have sought mental health services in the weeks preceding their death. 6Therefore

mental disorders are undoubtedly the most important risk factor for suicidal behavior worldwide. Anxiety and poor impulse control disorders may act as a triggering factor in such people to act upon on their negative thoughts especially in developing countries.

Obsessive-compulsive disorder (OCD) is a part of anxiety disorder and is characterized by disturbing, intrusive obsessive thoughts and/or repetitive behaviors of compulsive nature. Although previously considered as rare, OCD has a lifetime prevalence of 2.5% in the Epidemiological Catchment Area study⁹. Worldwide prevalence of obsessive-compulsive disorder (OCD) is approximately 2% .¹⁰

OCD is a chronic debilitating psychiatric illness resulting in significant disability and sufferings in the patients.¹¹ OCD is amongst the top ten most disabling illnesses.1. People with OCD usually have to face serious problems in their relationships and also at work place. For some people, living with OCD can become so distressing that they lose hope or even go on suicidal attempt.11It is estimated that there is 10 times greater risk of suicide in patients of OCD. 12 The factors leading to suicidal behavior in OCD have been studied relatively less commonly as compared to other anxiety disorders.¹³ According to a study fifty outpatients suffering from OCD who presented to a public university of Brazil were assessed. Among them70% reported having negative thought of worthlessness, 56% expressed death wish, 46% had suicidal ideation, 20% had suicidal plans, and 10% had a previous history of attempted suicide.6 According to another study, a research was done on One hundred subjects who attended the specialty OCD clinic and the inpatient services of a large mental hospital in India. The rates of suicidal ideation was found to be28% currently and 59% in worst ever phase. A history of previous suicide attempt was present in 27% of the subjects. 14 According to another similar study, 36 % of the OCD patients reported that they had suicidal thoughts during their life time at some point, 20% patients actually thought of suicidal plans, 11% had history of attempted suicide, and 10% had currently expressed their suicidal thoughts. 15 According to another prospective study conducted in Barcelona, Spain on two hundred and eighteen outpatients from a specialized OCD Unit 8.2% patients reported persistence of suicidal ideation, 0.91% patients actually committed suicide and 5.0% patients had attempted suicide. 16 Suicide is not uncommon in psychiatric patients rather it is thought that suicide is one of the major cause of deaths among patients with mental illnesses. It is known that mood disorders and psychotic illnesses are common cause of suicide. There are only few Studies which probe the suicidal behavior in the patients suffering from anxiety and obsessive-compulsive disorders (OCD). The risk of suicide further increases if patients of OCD have a comorbid mood disorder, anxiety disorder, history of substance abuse, or specific personality traits. ¹⁷According to the data available so far, no studies on the suicidal behavior in patients suffering from OCD, have been carried out in Pakistani population. So, this study will act as a primary study and set the baseline data for future studies.

METHODS

This cross-sectional study was carried out at the psychiatry Departments of tertiary care Hospitals of Lahore. One hundred and fifty-nine subjects already diagnosed as having obsessive compulsive disorder (OCD) according to DSM-IV-TR criteria of diagnosis selected through convenience sampling techniques. Patients between the age range of 15 to 50 years from both genders were selected. Patients suffering from Co-morbid psychiatric illness and learning disability were excluded. Patients with comorbid general medical condition were also excluded. The nature of study was explained to every patient and written informed consent was taken. Demographic details, history of OCD and history of suicidal attempts was taken and documented. All the patients also filled the structured proforma of BECK Suicidal Intent Scale. Beck score of 7 was taken as cutoff score for suicidal ideation.

DATA ANALYSIS

The data was entered and analyzed using SPSS version 20. The quantitative variables such as age (in years), BECK scale score, duration of OCD were presented as mean± standard deviation (S.D). Qualitative data like demographics (sex; male or female and suicidal ideation) was presented as frequency distribution and percentages. Data was stratified for age, gender, duration of OCD, education, socioeconomic status and mental status. Post stratification chi-square test was used taking p-value ≤0.05 as significant.

RESULTS

This study was conducted on 159 patients through convenience sampling technique. Out of these 159 patients, 40 (25%) patients showed suicidal intention (Cut off value of Beck scale 7) the mean beck score was 6.08±1.31 the minimum beck score was 4 and maximum was 9. The mean age of the sample was 35.18±8.21 years the minimum age was 20 years and maximum was 50 years. Frequency of suicidal ideation did not show any statistically significant difference between the age groups of patients. i.e. 20-30 years:

35%, 31-40 years: 27.5% & 41-50 years: 37.5%, pvalue=0.148. There were 86 (54.1%) males and 73 (45.9%) females in our study. More female patients had suicidal ideation as compared to male patients but it was statistically insignificant. i.e. Male: 42.5% & Female: 57.5%, p-value=0.089. There were 60 (37.7%) married, 50 (31.4%) unmarried respondents while 49 (30.8%) were widow. Marital status of patients had no significant influence on suicidal ideation though among widow (45%) suicidal ideation frequency was highest followed by married patients (30%). P- Value was more than 0.05. There were 60(37.7%) patients with low, 55 (34.6%) with middle and 44 (27.75%) with high social Economic class. In the patients with low socioeconomic status frequency of suicidal ideation was highest (45%) followed by the patients who belonged to the middle class (32.5%) and in patients with higher socioeconomic status, frequency of suicidal ideation was lowest (22.5%). However, socioeconomic status had no statistically significant association with suicidal ideation among OCD patients. i.e. p-value=0.514, There were 47 (29.6%) patients who were illiterate, 56 (35.2%) were educated up to middle and 56 (35.25%) up to 10th grade or higher. Although in patients with higher educational status i.e. Matric or higher, frequency of suicidal ideation was highest as compared to those patients who were illiterate or education up to middle, educational status of patients was not significantly associated with suicidal ideation of patients. The mean duration of OCD was 5.16±2.23 years the minimum duration of disease was 1 year and maximum was 10 years. Duration of disease was not significantly associated with suicidal ideation of patients. Patients with lower duration of diseased (1y-3y) had the highest frequency of suicidal ideation (37.5%), followed by patients with duration of diseases (7y-10 y), frequency if suicidal ideation was 32.5% and patients with duration of disease 4-1y years, frequency of suicidal ideation was 30 %. value=0.558.

Table-1: Frequency distribution for Suicidal Ideation

Suicidal	Frequency	Percent
Ideation		
Yes	40	25.2%
No	119	74.8%
Total	159	100

Table 2 Association of suicidal ideation with different variables

Variable	Sub groups	Suicidal	Suicidal ideation		Chi square	P
		Present	Not present	Total	-	value
	20 - 30	14(35%)	35(29.4%)	49	3.819	0.148
Age(Years)	31-40	11(27.5%)	53(44.5%)	64		
	41-50	15(37.5%)	31(26.1%)	46		
	Total	40	119	159		
Gender	Male	17(42.5%)	69(58%)	86	2.890	0.089
	Female	23(57.5%)	50(42%)	73		
	total	40	119	159		
Duration of OCD (years)	1-3	15(37.5%)	34(28.6%)	49	1.168	0.558
	4-6	12(30%)	43(36.1%)	55		
	7-10	13(32.5%)	42(35.3%)	55		
	Total	40	119	159		
Socioeconomic status	Low	18(45%)	42(35.3%)	65	1.332	0.514
	Middle	13(32.5%)	42(35.3%)	55		
	High	9(22.4%)	35(29.4%)	44		
	Total	40	119	159		
Marital status	Married	12(30%)	48(40.3%)	60	5.042	0.080
	Unmarried	10(25%)	40(33.6%)	50		
	Widow	18(45%)	31(26.1%)	49		
	Total	40	119	159		
Educational status	illiterate	9(22.5%)	38(31.9%)	47	5.120	0.077
	Middle	11(27.5%)	45(37.8%)	56		
	Matric or higher	20(50%)	36(30.3%)	56		
	Total	40	119	159		

DISCUSSION

In the current study frequency of suicidal ideation was determined in patients with obsessive compulsion disorder. This study shows that suicidal ideation was found in 40(25.2%) patients. These figures indicate that there is a significant number of patients of OCD who can exhibit the suicidal thoughts, plans or actual attempts of suicide. Previously, it was thought to be a less common phenomenon in OCD patients, however more recent data has pointed out that the suicidal behavior is much common in this group of people.⁸ An English epidemiological study showed that 63% of OCD patients had suicidal thought sat least once in their life time and 25% had a history of at least one previous suicide attempt. 18 According to some other studies, frequency of suicidal attempt ranged from 4% to $27\%^{8,14,16}$ A recently conducted systematic review concluded, after the analysis of 25 studies that from 1% to 46.3% of patients of OCD had a history of suicidal attempt in the past. 19 Similarly, in another study 36% of OCD subjects reported that they had suicidal thoughts during their life time; 20% mentioned that they made suicide plans; 11% were among those who attempted suicide; and 10% patients expressed suicidal thoughts on current examination. 15The reported frequency regarding suicidal ideation among OCD patients in the current study falls to a lower side. i.e. 25.2% of the range mentioned in literature.

Chaudhary RK in his study reported suicidal ideation was reported as 52% in OCD patients. ²⁰ Another Indian study by Pavan Kumar reported that one fourth of the patients had significant suicidal ideation. ²¹ Frequency of suicidal ideation among patients of OCD was quite lower as that of reported by Chaudhary RK and almost similar to fidnings reported by Pavan Kumar.

There is not sufficient literature on the risk factors associated with Suicidal behavior in patients suffering from OCD and there are no consistently reported socio demographic factors associated with suicidality in patients with OCD. Data in general supports the view that suicidality in patients with OCD is often associated with severity of obsessive compulsive symptoms and presence of aggression, symmetry, orderliness, sexual and religious obsessions. An early age of onset and poorer disease control are also associated factors. 8,14, 15, ²² Some other studies have also searched the factors which can contribute towards the increased risk of suicidal behavior in patients of OCD. It was found that concomitant presence of depressive disorder 19,23 and severity of its symptoms^{13,22}; higher severity of OCD symptoms: 13,22 higher rate of aggressive behaviour, ¹³ severity of sexual and religious thoughts²⁴ and/or symptoms of symmetry/ordering increase the

suicidal behavior in patients of OCD.¹⁶ In the current study younger age group patients (20-30 years) had the second highest rate of suicidal ideation. i.e. 35%. Pavan Kumar and Mohan Dhyanialso reported in their studies high frequency of suicidal ideation in the younger age groups. 20,21In the current study frequency of suicidal ideation was higher among female patients as compared to male patients. Mohan Dhyani and Rupesh Kumar Chaudhary (70%) showed the same findings in their study that suicidal ideation was higher among female patients as compared to male patients.^{20,25} P. Velloso in his study showed the same trend as reported in this current study.²⁶ So this shows that female patients with OCD may require vigilant monitoring and careful follow up. Some studies of suicidal behaviors in OCD have shown inconsistent findings, though concomitant presence of depressive symptoms or depressive disorder as possible risk factors for suicidality has been a common finding. In fact, depression is so common in OCD patients that it can be considered as an integral part of the disorder or a factor that may be etiological in the pathway of suicidal behaviors, rather than a true 'confounder'.²⁷ Other important aspects remain unknown, including the effects of stressful life events, of a family history of suicide attempts or completed suicide, and of co morbid personality disorders. In addition, little is yet known concerning the underlying motivations and mechanisms that lead to suicidal behaviors in OCD, the temporal relationship between certain clinical features and suicide related outcomes, and the possible impact of preventive measures. Therefore, much research still needs to be done, in order to clarify the independent correlates of suicidal behaviors among sufferers.²⁷So it can be concluded that OCD is associated with not only the depression but also with high risk of suicidal behavior. Therefore It should be a routine practice to investigate every patient of OCD for not only depression but also for suicidal ideation. Aggressive treatment of depression is essential to reduce the risk of suicide in these patients. Behavioral and cognitive techniques along with pharmacotherapy may be an effective tool to target co-existing depressive symptoms so as to decrease morbidity and mortality.

CONCLUSION

This study showed about 25% of the patents had suicidal ideation, which is a significant number. Current study signifies that every patient of OCD should be assessed for suicidal ideation and managed accordingly. There is also a need for further probing of problem with relatively large sample.

ETHICAL APPROVAL:

The study was approved by the Ethical Review Committee of DHQ Hospital, Kasur, Pakistan.

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AUTHORS' CONTRIBUTION:

AW, MIT: Manuscript writing, conduction of study **SQB:** Conduction of study, statistical analysis and critical review

SHW, AR, SFH: Critical review and appraisal of findings in actual write up of the manuscript