RESEARCH ARTICLE

Relationship of Obsessive-Compulsive Disorders with Religion and Psychosocial attitude among Local Medical College Students of Karachi: An epidemiological study

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Abstract

Objective: To evaluate the awareness, prevalence and attitude of medical students towards obsessive compulsive disorder.
Method: The cross-sectional study was conducted at different medical institutions in Karachi from August to October 2018, and comprised medical students who were selected using random sampling. The participants were asked to fill demographic form as well as the obsessive compulsive disorder Yale-Brown scale-based questionnaire. Data was analysed using SPSS 23.
Results: Of the 1172 subjects, 602(51.4%) were aware of obsessive compulsive disorder, while 570(48.6%) were unaware. Washing, counting and arranging were higher among females than in males ($p<0.004$). Fear, shame and stigma were of major concerns ($p<0.05$).
Conclusions: Awareness level of medical students regarding obsessive compulsive disorder was very low.
Keywords: Epidemiology, Attitude, Obsessive-compulsive disorders, Fear-shame-stigma, Cross-sectional survey.
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Introduction

Obsessive-Compulsive Disorder (OCD) is estimated to be the fourth most common mental illness, and the World Health Organisation (WHO) ranks it the 10th leading cause of disability in the world. The WHO report of 2001 depicted the estimated burden of OCD to be 2.5% of the total global years lived with disability (YLDs), and identified OCD as a leading global cause of non-fatal illness.[1] It is a chronic and long-lasting neuropsychiatric disorder that includes two major components: obsession and compulsion. Obsession is defined as recurrent or persistent thoughts, impulses or images that are experienced as unsuitable and which cause anxiety or distress. Compulsion is defined as repetitive actions, like hand-washing, or mental acts, like silently repeating numbers, often performed to alleviate anxiety or distress brought on by the obsessions.[2] There are two most common types of compulsion; one is called cleaning compulsions, in which individuals constantly wash, and checking compulsions in which a person checks repeatedly to see if they have accurately finished an activity.[3]

OCD can worsen the overall quality of life and impair the interpersonal relationship, working potential and academic capabilities.[4] Lack of awareness about mental health is one of the major issues that creates a barrier towards effective mental healthcare. Awareness can refer to recognition of aberrant aspects of one's appearance or functioning, like symptoms of mental disorder. It has been suggested that most of the time people do not ask for help when they face psychological health issues. There is a wide range of stress and fear about the attitudes of family, friends and relatives which has an impact on the probability of self-report by help-seeking people.[5]

It is well understood that mental illness continues to provoke negative attitudes, mostly characterised by stigma, fear and rejection. Such observed attitudes cause reluctance to seek help often because such people feel too shy to express their illness. It has been posited that stigma may act as the barrier to get treatment for psychological health problems.[6] Various attitudes, such as fear of embarrassment, fear associated with past experience, fear of change or fear of negative judgment by others, are related to those who experience mental health problems. There are some evidences which suggest that patients might express their less severe unpleasant obsessive-compulsive symptoms while hiding more severe of the symptoms.[7] One of the main determinants in seeking help for psychiatric problems from healthcare professionals is the severity of symptoms. Not to disclose obsessive-compulsive health problems is suggested as a key factor in sustaining such problems.[8]

Various studies have assessed the awareness, frequency

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and attitude related to OCD in different countries.[9-12] The current study was planned to assess the awareness, prevalence and attitude towards OCD among medical students.

Subjects and Methods

The cross-sectional study was conducted at four medical institutions in Karachi from August to October 2018, and comprised undergraduate medical students of Jinnah Sindh Medical University, (JSMU), Karachi Medical and Dental College (KMDC), Dow University of Health Sciences (DUHS) and Hamdard University (HU). After approval from the HU ethics committee, the sample size was calculated using Raosoft website's calculations, with 50% response distribution, 5% margin of error and 95% confidence interval (CI).[13,14] The sample was raised using convenience sampling technique. Those included were medical students of either gender aged 18-24 years and were studying in different years of the undergraduate programme. Those excluded were students of 1st or 2nd modules and those who were not willing to participate.

After obtaining informed consent from the subjects, data was collected using a questionnaire that had three main components: awareness of OCD, frequency and attitude toward the disease (Table 1).

Different variables of OCD with three levels were used to assess the attitude. These were: checking, washing and harming. Each variable contained 9 questions related to the attitude of participants, with a total of 27 outcomes. All questions were categorised and labelled to produce a lesser number and meaningful outcome variables. These questions were mainly categorised into three domains: 'Treatable disease' (three questions addressing the perception about problem requiring treatment); 'Self-management of disease' (three questions relating to fear, shame, and stigma to share disease problems); and 'Relationship impact' (three questions assessing the impact on social life and relationships).

Three different case levels were used to assess the attitude of participants towards OCD. These cases were modified based on the level described in 1998.[15] The first level described that a person suffers from OCD experiencing compulsions and obsessions of continuous checking, for instance, to assure that doors are locked or all things are fine. Another level described that the person having compulsions of extensive washing results in skin loss. The final level belonged to the violent, harming and blasphemous obsessions. It also took into account the explanation of participants related to these levels as based on medical reasons or past experiences.

Table-1: Study design with component of questionnaire.[16,17]

Components of questionnaire	Assessed by
Awareness	5 random questions
Frequency and Severity	DSM-IV Scale and Yale-Brown Obsessive Compulsive Scale
Attitude towards OCD	Using three variables (checking, washing and harming)

The subjects were asked to fill the questionnaire consisting of 14 questions to assess the awareness, frequency and attitude toward OCD. Initially, 5 questions were asked of all the participants related to awareness of OCD. After that, the presence of OCD was determined using the Yale-Brown Obsessive Compulsive (YBOC) scale.[16] Subjects with high scores were further assessed by a psychiatrist interview using Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) criteria.[17] The final outcome related to attitude towards OCD which was evaluated only among participants whose response was >16. As it is considered moderate OCD, according to the YBOC scale. Data was analysed using SPSS 23, and was expressed as frequencies and percentages as well as means ± standard deviation (SD). Non-parametric tests were applied to evaluate the significance of the study. Wilcoxon signed-rank test was used to evaluate the significance of data. Data was compared and analysed at a significance level of 0.05.

Results

Of the 1172 subjects, 680(58%) were males and 492(42%) were females. Overall, 602(51.4%) subjects were aware of obsessive compulsive disorder, while 570(48.6%) were unaware of OCD (Figure 1). Besides, 375(32%) subjects were aware of types of OCD, its symptoms and diagnosis. OCD frequency was significantly higher in students with no awareness compared to aware group (Table 2). The mean YBOC score was 18.0±3.2 among those with no awareness compared to 12.4±3.1 among those having complete awareness of OCD. Pattern of OCD vignettes along gender lines was also noted (Figure 2). There was no significant difference in the responses of aware and non-aware groups regarding OCD levels (Table 3).

The responses of self-management of OCD among participants related to fear, shame and stigma (Table 4).

Table-2: Prevalence of OCD based on the awareness of disease.

Groups of participants	Gender ratio	N (%)	p-value*
Aware group	M (n: 350)	25 (7.1)	0.030
	F (n: 252)	11 (4.3)	
	T (n: 602)	36 (5.9)	
Unaware group	M (n: 330)	56 (16.9)	0.022
	F (n: 240)	27 (11.2)	
	T (n: 570)	83 (14.5)	

M = Male, F = Female, T = Total, *(P = 0.05), OCD: Obsessive compulsive disorder

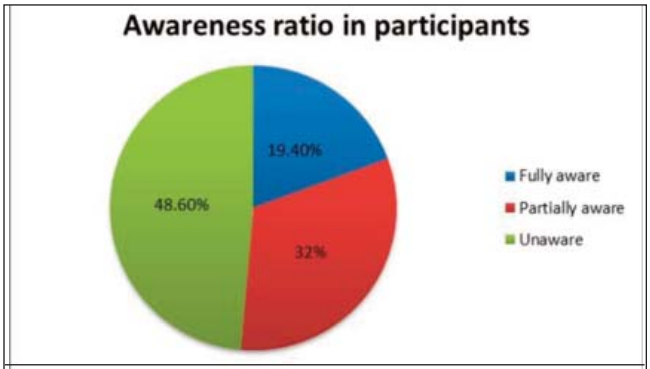

Figure-1: Ratio of participants related to awareness of obsessive compulsive disorder (OCD).

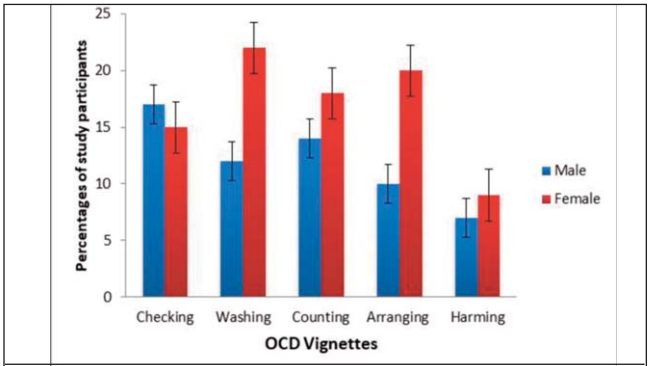

Figure-2: Percentages of obsessive compulsive disorder (OCD) vignettes in study groups with respect to gender.

Table-3: Treatable disease perception of participants for each OCD vignette (n=119).

OCD Vignette	Mean±SD	p-value*
Checking	12.98±2.44	0.011
Washing	14.54±2.87	
Counting	12.41±2.99	
Arranging	8.22±2.41	
Harming	22.87±3.01	

*(p = 0.05) OCD: Obsessive compulsive disorder

Table-4: Problem recognition for self-management of disease for each OCD vignette (n=119).

	Checking	Washing	Counting	Arranging	Harming	p-value*
Fear	5.74 ± 0.74**	6.97 ± 0.57	5.88 ± 0.87	3.74 ± 0.17	14.54 ± 2.47	0.027
Ashamed	7.40 ± 1.42	11.18 ± 1.10	8.47 ± 1.40	3.10 ± 0.79	11.87 ± 2.11	0.010
Stigma	8.22 ± 2.14	5.44 ± 0.70	4.11 ± 0.29	1.40 ± 0.15	17.40 ± 1.42	0.004

*(p = 0.05), **Mean ± SD, OCD: Obsessive compulsive disorder.

Table-5: Relationship impact of disease for each OCD vignette.

OCD Vignette	Mean±SD	p-value*
Checking	17.72±2.74	0.004
Washing	19.79±2.41	
Counting	10.79±2.08	
Arranging	3.47±0.71	
Harming	24.11±2.71	

OCD: Obsessive compulsive disorder; SD: Standard deviation.

Students saw harming more negatively compared to checking or washing compulsions (p=0.004). Participants also rated more negatively having compulsions of washing than checking compulsions (Table 5).

Discussion

The study revealed that 48.6% of the medical students had not even heard about OCD, which is not only a surprising but also alarming finding that needs to be addressed aggressively. It is really of concern that the majority of medical students who will hold much of the nation's future and will be part of the healthcare system in the country, were not aware about the disease. Given the fact that any effort to control this condition can only be successful if students are well aware, there is a need to take thoughtful action to raise awareness.[18]

The findings from quantitative data (Table 2) revealed that OCD was more prevalent in the unaware group (14.5% vs 5.9%). The overall prevalence was 10.1%, which is much higher than the values reported in Israel (3.6%), United States (2.3%), Spain and Iran (1.8%), Netherlands (0.4%) and Germany (0.39%).[19-24] This shows that OCD is increasingly becoming a public health problem that should no longer be ignored in Pakistan.

Male participants had OCD more compared to female participants. However, it has been reported that mental illness like anxiety and depression is more prevalent in females.[25]

In the current study, signs of washing, checking, arranging and harming compulsions were found more in female compared to male participants except checking. On the other hand, signs of washing compulsion were found to be 22% and 12% in females and males respectively. Whereas 15% female and 17% male participants showed signs of checking compulsion. Similarly, it was reported that symptoms of OCD varied across the gender, for instance, contamination and washing were reported significantly higher in women compared to men.[26] This difference might be due to variation in the social responsibilities of males and females in society. Socio-cultural and religious factors also play a vital role in the development of characteristics of obsessive thoughts. Hence, among all compulsions, washing represents overall more percentage among participants which is in alignment with another study which reported that washing and cleaning were more common among all the compulsions. It might be due to preventing the contamination either health-related or filth-related contamination.[27] Cleanliness is a major factor which with any person may be obsessed and this will be the reason to do wash repeatedly.[28]

Similarly, Saleem et al. found the most frequently reported compulsion in participants of Pakistan to be hand-washing.[27] This is again a compulsion related to cleanliness and discussed as an aspect of Islamic culture, called "Napak", which is a feeling of contamination that includes religious connotations of being unholy or unclean. The occurrence of multiple compulsions is also revealed by the results of the current study and earlier studies.[27]

Our findings showed that harming could affect more on relationships compared to other OCD vignettes (Table 3), indicating that harming was considered the most treatable among all OCD vignettes. It was followed by washing, checking, counting and arranging. Most participants perceived that mental illness was 'self-treatable'. This is causing increased negativity in their attitudes between these time points.[29]

In a study conducted in India, almost one-third participants perceived that OCD could be prevented by keeping a home with a friendly environment and sharing thoughts and problems with others. According to that study, stress-relieving activities, like meditations and yoga, were considered important preventive measures against mental disorders. However, 11% of participants felt that mental illness was non-preventable.[30]

Further, fear, shame and stigma were reported to be more influential in the treatment of OCD (Table 4). Harming compulsion received the most negative evaluations on all outcomes of questions related to attitude. Simonds et al. reported that fear and shame evaluations were significantly greater when participants assessed the harming vignette than the other two vignettes.[11] It is explainable that students would associate fear and shame with harming compulsions and obsessions.

Children of people with mental illness may be viewed as contaminated by their parents. These people are not aware of their family and social role in society. It is a barrier to those individuals who need mental health services, but who are reluctant or refuse to seek help because of the potential for discrimination and rejection by others.[31]

Goodwin et al. reported that those who did not ask for treatment did so because of lack of information about where to get help from, or willing to handle it on their own, as well owing to incapacity to afford it, and out of fear of the stigma associated with the act of seeking help.[32] There are numerous barriers that can hinder the treatment of OCD patients, but stigma and shame, are major reasons. Thus, most OCD patients spend up to 8-10 years before seeking proper treatment.[33] The community may play an effective part by showing kind, non-stigmatising and positive attitude toward the future of the people with mental illness.[34]

In the current study, the harming vignette produced major impact on social interactions compared to the other three (Table-5). Again, this type of concealment is understandable. Similar findings have been reported from United Kingdom.[11] Participants showed least willingness for social contact with the harming vignette due to high measurements of unpredictability and dangerousness.[34]

The current study has a few limitations. Although the sample size was comparatively large, it may not be representative of all universities and age groups. Further investigations using diversify and larger sample size from different educational institutions are recommended. Additionally, the results of the study should be interpreted with caution as the participants were taken from just four medical universities in a large educational setting in Karachi.

In Pakistan, there is a need for developing more insight into the existence of OCD. Awareness programmes, Continuing Medical Education (CME sessions for both family practitioners and psychiatrists will go a long way in helping to identify the problem. Further studies are required in order to evaluate the magnitude of OCD in the community.

Conclusion

Attitudes towards OCD were likely to be more complex and that help-seeking behaviour varied across the diverse OCD manifestations. It looked like that OCD was under-recognised and under-treated in sample.

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