

OBSESSIVE COMPULSIVE SYMPTOMS AMONG STUDENTS OF FACULTY OF MEDICAL SCIENCES AND FACULTY OF HUMANITIES EDUCATION IN UNIVERSITY OF SULAIMANI



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ABSTRACT

Background

Obsessive Compulsive Disorder (OCD) is one of the common psychiatric disorders worldwide, studies show high prevalence of Obsessive Compulsive Disorder among university students. There are limited data on the prevalence of obsessive-compulsive disorder among college students in Kurdistan region.

Objectives

The main aim of this study is to estimate the prevalence of Obsessive Compulsive Disorder among students of Faculty of Medical Sciences and Faculty of Humanity Education.

Methods

A cross-sectional study was conducted in the Faculty of Medicine Sulaimani University and Faculty of Humanity, from May to June 2017. Two hundred students from faculty of medicine and 200 students from faculty of Humanity were included, Self-administered questionnaire was used to assess sociodemographic data of the students. OCD was assessed by using The Obsessive-Compulsive Inventory-Revised. p Value less than 0.05 considered statistically significant.

Results

The participant's age was between 17 to 26 years. Most of participants in the medical and humanity faculty were single, 186 (93%), 187 (93.5%) respectively. The prevalence of probable OCD in medical colleges was 6%, while in humanity colleges was 4%. Having family history of mental illness was the only significant risk factor among medical students.

Conclusion

Our study reveals a higher prevalence of symptoms among medical than humanity university students. Further studies are needed to determine the prevalence and associated factors for OCD in different college students.

Keywords: *Obsessive compulsive disorder, Medical student, Obsession, Compulsion.*

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INTRODUCTION

Obsessive Compulsive Disorder (OCD) is one of the common psychiatric disorders worldwide (1, 2, 3). OCD is recognized by the existence of obsessions and/or compulsions (2).

Obsessions are defined as recurrent and persistent thoughts, impulses, or images that enter the individual's mind and experienced as intrusive and unwanted (2,4). While compulsions are stereotyped actions that are behaviors or mental acts occurring repeatedly (2,4).

According to the Classification of Mental and Behavioral Disorders tenth edition (ICD 10), Obsessive Compulsive Disorder (OCD) is classified as an anxiety disorder (4). While current edition of the Diagnostic and Statistical Manual of Mental Disorders, the fifth revision (DSM5) which is published by American psychiatric association (APA), categorized OCD in a different chapter as an independent disorder (2). To diagnose OCD the obsessions or compulsions must be time-consuming or cause clinically significant distress or impairment (2,4).

Lifetime prevalence in the general population estimated at 2 to 3 percent (1). A study done by Adam Y. et al, about prevalence of Obsessive-compulsive disorder in the community, the 12-month prevalence of OCD was 0.7%, and obsessive compulsive symptoms (OCS) was 8.3% (3). Other studies showed high prevalence of OCD among university students (5-8). In one study, (1.7%) of Japanese university students were diagnosed as OCD (6), whereas the point prevalence of OCD among Indian college students was 3.3% (8). In our neighborhood country, Turkey was a higher prevalence of OCD among a group of university students compared to other prevalence studies of OCD in Turkish society demonstrated (7). Also OCD is more common in medical students than in the general population (9).

Obsessive compulsive disorder is equally common in men and women, although the age of onset varies, the riskiest periods for OCD development are adolescence and early adulthood (1,4).

Inadequate studies have explored the frequency of mental disorders among university students (10). There are limited data on the prevalence of college student obsessive-compulsive disorder (OCD) in Kurdistan region. The aim of this study is to estimate the prevalence of OCD among students of Faculty of Medical Sciences and Faculty of Humanity Education.

MATERIALS AND METHODS

A cross-sectional study was conducted in University of Sulaimani, Faculty of Medicine and Faculty of Humanity, during the period of May to June 2017. The minimum recommended sample size was 378 students, 200 students from Faculty of Medicine which include (College of Medicine, College of Dentistry, College of Pharmacy, and College of Nursing), and 200 students from Faculty of Humanity which included (Department of Sociology, Department of Media, Department of Geography, Department of History, Department of Archaeology, and Department of Social work) were included.

Students had been selected through stratified random sampling in which the 7th student in each 10 had been selected by using the list of students taken from the registration department. 500 questionnaires had been distributed among the selected students to overcome the non-respondents and questionnaires with missed data. Out of 500 distributed questionnaires, 440 were returned back, 40 of them had been excluded (missed data); at the end they remained number of the respondent were 400 only.

This study was approved by the Ethic Committee and Scientific Research Units in Kurdistan Board for Medical Specialties (KBMS), Informed consent was taken from the University of Sulaimani and oral consent was obtained from all participants before filling the questionnaires.

Self-administered predesigned questionnaire was used to assess sociodemographic data of the students, in addition to other variables like substance and alcohol use, and family history of mental illnesses.

Obsessive Compulsive Symptoms assessed by using The Obsessive-Compulsive Inventory-Revised (OCI-R) (11). This is a reduced version of the original instrument (OCI) and has 18 self-report items that evaluates OCS severity in the preceding month. It evaluates six OCS dimensions: checking, hoarding, neutralizing, obsessing, ordering, and washing (9, 12). Kurdish version had been used for non-medical students, at first it is translated to Kurdish by a psychiatrist, and then checked for linguistics errors by a professional linguistic person, after that distributed among four psychiatrists for their comments, after doing corrections we did a questionnaire test on ten persons.

The 18 items have five possible answers in a Likert scale (from 0=not at all to 4=extremely), with a maximum total score of 72, which can be used as a continuous variable. Since OCD patients generally have scores exceeding 27, this was the cutoff point used to define probable OCD in this study ^(12, 13).

After explaining the aim of study for the participants, the confidentiality (oral explanation and the questionnaire do not need to mention names) was ensured for all of them, the self-administered questionnaires were distributed, and filling questionnaire was taking about twelve to fifteen minutes of time. All demographic data and questionnaire results were registered in a special inventory, and analyzed by using Statistical Package for the Social Sciences (SPSS version 21.0 for Windows). We used the Chi square test statistic (χ^2) to find the significance of association between various variables and OCD and between both faculties. When the expected count of more than 20% of the cells of the tables was less than 5, Fisher's Exact Test was used. When the P Value was <0.05 it is considered statistically significant.

RESULTS

The range of participant's age was between 17 to 26 years. Most of participants among medical and humanity faculty were single (186(93%), 187 (93.5%) respectively). Alcohol use and cigarette smoking is higher among medical students. Other sociodemographic characteristic features are shown in Table 1.

The prevalence of probable OCD in medical colleges was 6 % (95 % CI; N=12), while in humanity colleges was 4% (95% CI; N=8). Results statistically are not significant (p value: 0.359) Table 2.

Having family history of mental illness is related to OCD diagnosis in medical group (P value 0.001), while among humanity student marital status is statistically significant for OCD diagnosis (P value 0.001). Results show in Table 3 and 4.

Table 1. Demographic data of the participants

Characteristics	Medical No. (%)	Humanity No. (%)
Gender		
Male	87(43.5%)	109(54.5%)
Female	113(56.5%)	91(45.5%)
Marital status		
Single	186(93%)	187(93.5%)
Married	13(6.5%)	12(6%)
Separated	1(0.5%)	1(0.5%)
Residence		
Urban	130(65%)	127(63.5%)
Rural	70(35%)	73(36.5%)
Religion		
Muslim	194(97%)	196(98%)
Yezidi	6(3%)	3(1.5%)
Christian	0(0%)	1(0.5%)
Ethnicity		
Kurd	200(100%)	198(99%)
Arab	0(0%)	2(1%)
Others	0(0%)	0(0%)
Alcohol use		
Yes	20(10%)	9 (4.5%)
No	180(90%)	191(95.5%)
Substance use		
Cigarette Smoking	26(13%)	19(9.5%)
Other substances	2(1%)	3(1.5%)
No substance use	172(86%)	178(89%)
Family history of Mental disorder		
Yes	12(6%)	3(1.5%)
No	188(94%)	197(98.5%)

Table 2: Prevalence of OCD among students

Type of faculty	OCD		P value
	Yes	No	
Medicine	12 (%6)	188 (%94)	0.359
Humanity	8 (%4)	192 (%96)	

Table 3. The relationship between the variables and OCD among Medical students

Variables	Total (N)	OCD N (%)	Non OCD students N (%)	P value
Gender				0.464
Male	87	4(2%)	83 (41.5%)	
Female	113	8(4%)	105 (52.5%)	
Marital status				0.619
Single	186	12(6%)	174 (87%)	
Married	13	0 (0%)	13(6.5%)	
separated	1	0 (0%)	1(0.5%)	
Residence				0.170
Urban	130	10(5%)	120 (60%)	
Rural	70	2(1%)	68 (34%)	
Religion				0.530
Muslim	194	12 (6%)	182 (91%)	
Yezidi	6	0 (0%)	6 (3%)	
Christian	0	0 (0%)	0 (0%)	
Ethnicity				0.561
Kurd	200	12(6%)	188(94%)	
Arab	0	0(0%)	0(0%)	
others	0	0(0%)	0(0%)	
Alcohol consumption				0.074
Yes	20	3(1.5%)	17(8.5%)	
No	180	9(4.5%)	171(85.5%)	
Substance use				0.93
Cigarette smoking	26	4(2%)	22(11%)	
Other substance use	2	0(0%)	2(1%)	
No substance use	172	8(4%)	164(82%)	
Family history of mental illnesses				0.001
Yes	12	5(2.5%)	7(3.5%)	
No	188	7(3.5%)	181(90.5%)	

Table 4. The relationship between the variables and OCD among Humanity students

Variables	Total (N)	OCD N(%)	Other students N(%)	P - Value
Gender				
Male	109	3(1.5%)	106(53%)	0.324
Female	91	5(2.5%)	86(43%)	
Marital status				
Single	187	5 (2.5%)	182 (91%)	0.001
Married	12	3 (1.5%)	9 (4.5%)	
separated	1	0(0%)	1 (0.5%)	
Residence				
Urban	127	4(2%)	123(61.5%)	0.466
Rural	73	4(2%)	69(34.5%)	
Religion				
Muslim	196	8(4%)	188(94%)	0.918
Yezidi	3	0(0%)	3(1.5%)	
Christian	1	0(0%)	1(0.5%)	
Ethnicity				
Kurd	198	8(4%)	190(95%)	1.000
Arab	2	0(0%)	2(1%)	
Others	0	0(0%)	0(0%)	
Alcohol consumption				
Yes	9	0(0%)	9(4.5%)	1.000
No	191	8(4%)	183(91.5%)	
Substance use				
Cigarette smoking	19	1(0.5%)	18(9%)	0.902
Other substance use	3	0(0%)	3(1.5%)	
No substance use	178	7(3.5%)	171(85.5%)	
Family history of mental illnesses				
Yes	3	0(0%)	3(1.5%)	0.722
No	197	8(4%)	189(94%)	

DISCUSSION

Prevalence of OCD among medical and humanity students was 6 %, 4% respectively, which was found to be similar to other studies that were done among university students worldwide (7,9,10). In a study done by Yoldascan E. et al, results demonstrated that OCD was diagnosed in (4.2%) of Turkish university students (3), also 4.21% of French university students was diagnosed as OCD (10).

While in this study result is not consistent with the study conducted by Zaki N. et al, in which obsessive compulsive disorder diagnosed in (44.4%) of third year medical students in Egypt (5). Although in two studies, OCD is diagnosed in 3.46% (14) and 3.3% (8) of university students.

The results of this study revealed that among the demographic variables, family history of mental disorder was the only determinant of OCD in medical students. This result consistent with the study of Assareh M. et al, who concluded that only family

history, is a risk factor of OCD among Iranian College Students (14). Although another study concluded that the majority of patients with OCD had a positive family history in their first- or second-degree relatives (15).

The demographic characteristics of our sample did not considerably influence the risk of having OCD. Like other studies gender and age are not associated with OCD among medical and university students (5, 8, 14, 16).

The explanations for our relatively high levels of OCD among university students cannot be attributed to single factor or to be rationalized by the students stress. Changes in financial support to students because of financial crisis in the last 4 year in Kurdistan region have resulted in students having to fund their studies, and this is an additional factors of stress (17). Another acceptable explanation of the existed high prevalence of OCD is the fact that our study was conducted near the end year exams, which actually might be accompanied with overloaded stress (5).

Rather than above factors, we should consider the role of environmental stress as well as family systems and genetic predisposition to OCD⁽¹⁸⁾.

Also the differences among the studies can be due to variations in data collection tools, statistical methods⁽¹⁴⁾ using a self-reported questionnaire may lead to a higher prevalence rate than other methods of assessment^(19,20).

OCD is higher among medical student, because medical students represent a highly educated population under significant pressures⁽²¹⁾.

There are few limitations that need to be admitted regarding this study. The first one is about the method of the study, our study was a cross-sectional study but we know that prospective studies are of great importance for evaluating OCD. The second limitation is the results of this study are built on self-reported information provided by students and some potential or reporting bias may have occurred because of respondents' understanding of the questions or wish to report their emotions in a certain manner.

In conclusion, this study reveals a higher prevalence of OCD among Medical and humanity university students. The findings suggest relationships between OCD and family history of mental disorder. However, the study showed no clear association between OCD and demographic variables (age, gender, and residency). Further studies are needed to determine the prevalence and associated factors for OCD in different college students.

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