

PREVALENCE OF THE SUBTYPES OF OBSESSIVE-COMPULSIVE DISORDER AMONG DIAGNOSED PATIENTS IN THE KURDISTAN REGION IN IRAQ

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ABSTRACT

Background

The clinical manifestation of obsessive-compulsive disorder (OCD) differs from patient to patient, indicating that the content of the obsessions and compulsions varies. Therefore, the present study aims to find the prevalence of the sub-types of OCD.

Objectives

This study addresses the association of the sub-types of obsessions and compulsion with gender, age, and marital status.

Patients and Methods

Seventy-five patients with OCD from a psychiatric clinic, who were diagnosed through an unstructured interview, participated in this study, which utilized a retrospective research design. The data was obtained from the case files of the patients, where their diagnosis and the content of their obsessions and compulsion were specified.

Results

The results showed that the most prevalent obsession in the sample was contamination obsessions. They were followed by religious, doubting, aggressive, symmetry, and sexual obsessions. As for compulsions, cleaning/washing was the most common among the participants, followed by mental rituals, whereas checking and arranging compulsions were the least common. The results also revealed that contamination obsession had a significant association with gender.

Conclusion

Similar results regarding cleaning/washing compulsions showed a significant association with gender..

Keywords: *OCD, obsession, compulsion, clinical sample, Kurdistan Region- Iraq.*

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INTRODUCTION

Patients diagnosed with obsessive-compulsive disorder (OCD) experience distinct obsessions and compulsions. OCD patient is characterized by obsessive thoughts and urges or distressing images, usually accompanied by compulsive behavior to prevent feared outcomes from happening and to counteract the obsessions⁽¹⁾. Obsessions are recurrent and unwanted thoughts, urges, or images that the individual attempts to control or suppress but faces difficulty in doing so, which, in turn, leads to increased anxiety⁽²⁾. The anxiety caused by obsessive thoughts is often dealt with through a compulsion: repetitive and excessive mental acts or behaviors that an individual performs to prevent some dreaded situation from happening⁽³⁾. According to the diagnostic and statistical manual of mental disorders, the diagnostic criteria for OCD are the presence of obsessions, compulsions or both that are time-consuming and cause clinically significant social or occupational impairment and that the symptoms do not attribute to another medical condition or substance use (i.e., drug abuse, medication). The symptoms are also not attributable to another mental condition⁽⁴⁾.

Obsessive-compulsive disorder (OCD) occurs in 1.2% of the United States population; males are commonly more affected in childhood, while the opposite is true in adulthood⁽⁵⁾. As for the Kurdistan Region-Iraq (KRI), a mental health survey conducted by the world health organization revealed that the lifetime prevalence of OCD is 2.42%, and the 12-month prevalence of OCD is 2.03%. These prevalence levels of OCD in the KRI are higher compared to the southern and central regions of Iraq⁽⁶⁾. There are various types of obsessions and compulsions; common obsessions include contamination: fear of contamination by germs, dirt or other diseases, ordering: fear of negative consequences if things are not in the correct order; religious: fear of blasphemy or being preoccupied with religious thoughts, aggressive: fear of harming others or oneself, sexual: unwanted or forbidden sexual thoughts, images or urges (e.g. incest), and doubting: fear of making a mistake⁽⁷⁾. Cleaning/washing, repeated checking, ordering or arranging, and counting are the five primary compulsions⁽⁸⁾.

Culture influences the clinical manifestation of psychopathology⁽⁹⁾. Therefore, different aspects of OCD, as a heterogeneous type of psychopathology, can be influenced by cultural context; these aspects include severity, risk factors, prognosis, prevalence, and the

clinical manifestation of the disorder. As cited in⁽¹⁰⁾. A study in the United States mentioned that among the participants with lifetime OCD, moral (43%) obsessions were the most common. As for compulsions, ordering and checking were the most prevalent⁽¹¹⁾. Another study in New Zealand showed that harming and shameful thoughts and obsessions were the most prevalent. At the same time, the least common compulsions were washing and ordering⁽¹²⁾. In a study using a five-cluster solution, 25% of the treatment-seeking OCD patients were contamination-fearful and washed compulsively⁽¹³⁾. Another study that used a seven-cluster solution reported that 18% of the population belonged to the contamination/washing group⁽¹⁴⁾.

Several studies have examined the clinical manifestation of OCD in Middle Eastern countries. One study in Pakistan showed that the prevalence rate of contamination fears was 82%, and for sexual obsessions, it was 81%. Regarding compulsions, the prevalence rates among the sample were as follows, cleaning/washing (90%), counting (73%), checking (64%), and ordering/arranging (53%)⁽¹⁵⁾. investigated OCD symptoms among Iranian patients. The authors reported that the most frequent obsessions were contamination fears (48.1%), and the most frequent compulsion was checking (51.9%), followed by ordering/arranging compulsions (49.1%). In a meta-analysis of 60 studies, in which patient classification was based on the symptoms subtype, patients with primarily cleaning and checking predominated, accounting for 75% of the population, while only 12% of the patients were with other compulsions, such as counting, ordering mental rituals, and hoarding⁽¹⁶⁾.

The prevalence of the different types of obsessions and compulsions remains unexplored, mainly in the Kurdistan region in Iraq, especially using studies using clinical samples that still need improvement. Therefore, the present study aims to find the prevalence rates of the different types of obsessions and compulsions in a clinical sample in the Kurdistan region in Iraq. Furthermore, this study aims to find the association of obsessions and compulsions with gender, age, and marital status.

METHODS

Participants and design

This study was a retrospective one. The participants were visitors to a psychiatric clinic in Sulaimani city of the Kurdistan region in Iraq. Individuals diagnosed

with OCD and the subtypes of their OCD specified were eligible to participate in this study. The researcher made the diagnosis. The data from those patients were included in the current study that visited the psychiatric clinic from 2012 to 2017. The research proposal is accepted by the ethical committee of the psychiatry department, college of medicine, university of Sulaimani.

Data Collection and procedure

The data for this research was collected by conducting unstructured interviews. The individuals who visited the psychiatric clinic were diagnosed with OCD by a psychiatrist in an unstructured interview. The information about their diagnosis and the patient's type of obsession and compulsion were written inside their file. At their first visit, oral informed consent was obtained from the participants to use their data in the current study.

Data Analysis

Data were analyzed using the Statistical Package for Social Science (SPSS) version 23, which included descriptive statistical analysis, demographic information and the prevalence of obsessions and compulsions. Association between the types of obsession and compulsions with gender, age, and marital status was found through cross-tabulation analysis. Furthermore, since more than 20% of the cells for both types of obsessions and compulsions had an expected count of less than five, the likelihood ratio was consulted. Additionally, the contingency table was more extensive than a two-by-two. Therefore, Cramer's V was used to calculate the effect size, which was interpreted using Cohen's recommendations⁽¹⁷⁾.

RESULTS

Participant's characteristics

The study examined 75 patients with OCD. The demographic information of the patients is shown in Table 1. The majority of participants were female (62.7%), while only 37.3% of the participants were male. The participant's marital status was composed of 44 individuals that were married (58.7%), and 36 were single at the time of their visit to the psychiatric clinic (41.3%). Of the participants, 49 were aged 25 to 44 (65.3%), and 13 were aged 14-24 (17.3%). Only three participants were 65 years of age or older.

Prevalence of the subtypes of obsessions and compulsions

As depicted in table 2, the overwhelming majority of the participants had contamination fears as their primary obsession (66.7%), while sexual and symmetry obsessions were the least common (4%). In addition, 14.7% of the patients were experiencing religious obsessions, and 5.3% of the patients were experiencing doubting and aggressive obsessions. With regards to compulsions, Cleaning/washing compulsions were the most common (73.3%), followed by mental rituals, ordering/arranging, and checking compulsions.

Association of the sub-types of obsessions with gender, marital status and age

After conducting a cross-tabulation analysis, it was revealed that there is a significant association between sub-types obsession and gender $G^2(5) = 13.85$, $p < .05$, based on likelihood ratio, and the effect size is at $V = .41$, which indicates that the variables are strongly associated. As shown in table 3, contamination and religious obsessions are associated with the female gender. However, the results showed no significant association between sub-types of obsessions with age and marital status.

Association of the sub-types of compulsion with gender, marital status, and age

Table 4 shows the results of the cross-tabulation analysis. Based on the likelihood ratio, the sub-types of compulsion are significantly associated with gender $G^2(3) = 12.19$, $p < .05$. The effect size is large, $V = .38$, which reveals that there is a relatively strong association between the sub-types of compulsion with gender. The female gender was associated with cleaning/washing compulsions, whereas the male gender was associated with checking compulsions. The results did not show a significant association of the sub-types of compulsion with marital status and age.

Table 1. Participant's Demographic information.

Variables	Categories	Frequency	Percentage (%)
Gender	Female	47	62.7
	Male	28	37.3
Marital Status	Single	36	41.3
	Married	44	58.7
Age (Year)	14-24	13	17.3
	25-44	49	65.3
	45-64	10	13.3
	65 or above	3	4.0

Table 2. Prevalence of the different types of obsessions and compulsions.

Variables	Subtype	Frequency	Percentage
Obsessions	Contamination	50	66.7
	Religious	11	14.7
	Doubting	4	5.3
	Symmetry	3	4.0
	Aggressive	4	5.3
	Sexual	3	4.0
Compulsions	Cleaning/Washing	55	73.3
	Mental Rituals	10	13.3
	Ordering/Arranging	5	6.7
	Checking	5	6.7

Table 3. Association of Obsessions with Gender, marital status and age.

		Types of Obsessions						Likelihood ratio		
		Contamination	Doubting	Ordering	Religious	Aggressive	Sexual	Value	df	sig
Gender	Female	34	0	2	9	1	1	12.60	5	.027
	Male	16	4	1	2	3	2			
Marital status	Single	18	3	1	4	3	2	5.31	5	.379
	Married	32	1	2	7	1	1			
Age (Year)	15-24	7	1	0	2	2	1	16.65	15	.340
	25-44	33	3	3	7	1	2			
	45-64	9	0	0	0	0	0			
	65 or above	1	0	0	2	0	0			

Table 4. Association of Compulsions with Gender, marital status and age.

		Types of Compulsions				Likelihood ratio		
		Cleaning/washing	Checking	Ordering/Arranging	Mental Rituals	Value	df	sig
Gender	Female	39	0	3	5	12.19	3	.007
	Male	16	5	2	5			
Marital status	Single	20	3	3	5	2.28	3	.516
	Married	35	2	2	5			
Age (Year)	15-24	8	1	1	3	9.15	9	.423
	25-44	37	3	3	6			
	45-64	9	1	0	0			
	65 or above	1	0	1	1			

DISCUSSION

The results from this study showed that the most prevalent type of obsession among the sample was contamination obsession⁽¹⁸⁾. found similar results in a study conducted in Saudi Arabia; they reported that obsessions related to washing and prayers and contamination obsessions were the most prevalent. A more recent study in Pakistan found similar results using a clinical sample. This study showed that contamination was the most prevalent obsession among the sample⁽¹⁵⁾. The results also showed that the most common compulsion among the sample was cleaning/washing. A study conducted in Iran on OCD patients reported that washing compulsions were the most frequent⁽¹⁹⁾. In another study⁽²⁰⁾ reported that contamination obsessions and cleaning/washing compulsions were more common among the participants who had spent their entire life in turkey than Turkish individuals living in Bulgaria and those who were immigrants. The authors reported that this could be due to Islam being more rigorous in Turkey.

These findings can be explained by the fact that in Islam, individuals are required to wash certain places of their bodies three times each five times a day. Furthermore, there is a general emphasis on cleanliness in the religion. Furthermore, in Middle Eastern countries, cleanliness is desired. Individuals with homes that are not clean face judgment and harsh criticism, which can lead to a more sustained focus on cleanliness. Overall, part of the reason for the prevalence of contamination obsessions and cleaning compulsions is religious, and the other part is cultural.

From the findings of this study, it can be noted that religious and sexual obsession are the least common, whereas other studies have found religious and sexual obsession to be more common^(21, 22), this can be because these topics are sensitive in Kurdish culture; therefore, there is a tendency for individuals to hide these obsessions. Sometimes, individuals with OCD, especially religious OCD, are taken to faith healers before receiving scientific psychiatric treatment⁽²³⁾. However, these faith healers usually judge the individuals who disclose the scrupulous contents of their obsessions. Therefore, patients with OCD may choose not to disclose religious and sexual obsessions.

This study also showed that gender was associated with contamination obsessions and cleaning/washing compulsions. More specifically, contamination

obsessions and cleaning/washing compulsions were more prevalent in the female gender.⁽¹⁹⁾ Reported similar results regarding gender differences. Their study reported that contamination obsessions and cleaning/washing compulsions were more prevalent among the female participants, while scrupulous obsessions and ordering compulsions were more common among male participants. The higher prevalence rates of contamination obsessions and cleaning/washing compulsions among the female gender can be because, in Islamic cultures, females are seen as responsible for the cleanliness of their homes, and they usually perform cleaning/washing. As discussed, indifference about cleanliness leads to females experiencing social judgments and criticism.

The current study had several limitations. Firstly, the sample size needed to be increased to draw generalisable results. Secondly, the study design was retrospective, and data was collected through unstructured interviews. Thirdly, this study did not use culturally validated questionnaires as measurement tools.

In conclusion, contamination obsession and cleaning/washing compulsions among the clinical sample of this study were the most prevalent. Furthermore, gender was associated with both contamination obsession and cleaning/washing compulsions. These results are consistent with the literature on OCD in Islamic countries, whereas sexual and religious obsessions are considerably less common than in previous studies. The results of this study show that more systematic research is needed in the Kurdistan region, and their treatment and etiological implications should be considered.

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