

Phenomenology of Obsessive-Compulsive Disorder in Sudan and its association with Socio-demographic Factors

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ABSTRACT

Background: Symptoms of Obsessive-Compulsive Disorder OCD tend to be shaped by socio-cultural context. There are very few studies related to OCD in Sudan.

Aim: This study aimed to explore the phenomenology of obsessive-compulsive disorder in a sample of Sudanese patients in relation to socio-demographic factors.

Methods: We reviewed the case notes of Sudanese patients with Obsessive-Compulsive Disorder who presented to a psychiatry clinic in Khartoum, Sudan during a period of two years. Data was collected using a checklist of obsessive and compulsive features, subtypes of Obsessive-Compulsive Disorder, comorbidities, as well as socio-demographic data.

Results: Eighty-nine Sudanese patients were included in this study. The mean age of the first onset of the disorder was 21.72 years (SD \pm 7.51). The most common obsession among participants was doubting followed by Religious thoughts while the most common compulsion was washing, then checking. Obsession of contamination was significantly higher in females while religious obsessions were more common in males. Obsession of contamination and compulsive washing was significantly associated with younger age of onset.

Conclusion: Common features of obsessive-compulsive disorder in Sudanese patients are doubts, religious thoughts, contamination obsession, and washing compulsion which is likely to be related to the strong emphasis on traditional values and religiosity in Sudanese culture.

Key words: Obsessive-Compulsive Disorder, Sudan, culture, epidemiology.

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INTRODUCTION

Obsessive Compulsive Disorder (OCD) is characterized by recurrent, intrusive, and unwanted obsessions and/or repetitive behavioral or mental compulsions forcibly applied by the affected individual in an inflexible way. OCD is a common psychiatric condition that ranks fourth among the most common psychiatric disorders worldwide and is the 10th leading cause of disability in the world [1]. The lifetime prevalence for OCD in the general population ranges between 2% and 3%, whereas its estimated one-month prevalence is 1.1% [2]. OCD causes substantial distress to the affected patients with considerable economic burden. One important aspect of OCD-related distress is the increased level of stigma associated with its symptoms [3]. Perceived stigmatization profoundly affects the severity and course of OCD and exerts a negative impact on both insight and help-seeking behavior of the affected individuals. Hence, a better understanding of its symptomatology could help alleviate the burden of the condition. By large, the most common obsession is contamination, while the most prevalent compulsion is checking. However, OCD symptoms are extremely variable across individuals and tend to be tainted by the socio-cultural context of the affected patients [4].

Several studies explored different OCD features and examined their association with socio-demographic factors. Sexual thoughts, exactness and symmetry obsessions were found to be more frequent in male OCD patients [5-6], as well as checking, symmetry, and bizarre compulsions [5]. On the other hand, washing rituals and contamination fears were more common in females with OCD [7-8]. However, there were no significant differences in the phenomenology of OCD regarding gender according to some other studies [9]. Sudan, which is located in northeast Africa, is a country rich in diversity, with an environment, languages, cultures, religions, and ethnicities that are all quite complicated. Although both African and Arabs form the origin of the country's population, most Sudanese speak Arabic and Arab culture predominates. About 97% of Sudan's population are Muslims, with only a small Christian minority [10]. The current study aimed to explore the phenomenology of obsessive-compulsive disorder in a sample of Sudanese patients in relation to socio-demographic factors. There is a lack of research related to this area among Sudanese patients, and this study attempted to fill this gap in the existing literature with a focus on unique cultural factors.

METHODOLOGY

This was an observational cross-sectional hospital-based study that was carried out among Sudanese OCD patients who attended the Ibn Elhaithum Psychiatry clinic, in Khartoum, Sudan, during the period from January 2015 to December 2016. Ibn Elhaitham Psychiatry clinic is part of a specialized outpatient facility in the central area of Khartoum, Sudan. It serves a monthly average of 210 patients with a variety of psychiatric disorders in terms of comprehensive assessment, diagnosis, multidisciplinary treatment, and follow-up. Almost all patients who visit this clinic are Sudanese and most of them live in Khartoum and surrounding areas although they may originate from different geographic regions in Sudan.

In this study, we included all Sudanese patients who visited the clinic during the mentioned period, and have previously received the diagnosis of OCD according to the DSM-5 diagnostic criteria after being clinically assessed by at least a psychiatry specialist. We excluded patients below 12 years and non-complete records. We aimed at completely including every single patient who presented between January 2015 and December 2016. Data were collected from patients' medical records by a psychiatry specialist using a questionnaire prepared for the purpose of this study containing the socio-demographic data (age, gender, marital status, and occupation), a list of obsessive and compulsive features (contamination, aggressive, Sexual, or Religious thoughts... etc.), and subtypes of OCD (Predominantly obsessive, predominantly compulsive, or Mixed type).

The collected data were analyzed using the statistical package for social science (SPSS) version 24. Distribution of participants according to socio-demographic factors was presented in numbers and percentages. A chi-square test was carried out to examine the relationship between demographic and OCD features and types among participants. A P-value of less than 0.05 was considered significant. The study was ethically approved from Health Research Ethics Committee of the Ministry of Health in Sudan.

RESULTS

Table 1: Distribution of the study sample according to socio-demographic factors.

Variables		N (%)
Gender	Male	55 (61.8)
	Female	34 (38.2)
Marital status	Single	67 (75.3)
	Married	21 (23.6)
	Divorced	1 (1.1)
Age of onset	< 18	26 (29.2)
	18-22	38 (42.7)
	> 22	25 (28.1)
Occupation	student	34 (38.2)
	employed	28 (31.5)

	housewife	12 (13.5)
	unemployed	15 (16.9)
Total		89 (100%)

Table 2: Association between OCD features, and gender and age of onset.

OCD features			Gender			Age of onset			
			Male	Female	P-value	<18	18-22	>22	P-value
Obsessions	Contamination	Yes	8 (14.5%)	14 (41.2%)	0.005*	11 (42.3%)	7 (18.4%)	4 (16%)	0.046*
		No	47 (85.5%)	20 (58.8%)		15 (57.7%)	31 (81.6%)	21 (84%)	
	Aggressive thoughts	Yes	2 (3.6%)	1 (2.9%)	0.860	1 (3.8%)	0	2 (8%)	0.224
		No	53 (96.4%)	33 (97.1%)		25 (96.2%)	38 (100%)	23 (92%)	
	Sexual thoughts	Yes	7 (12.7%)	3 (8.8%)	0.571	3 (11.5)	5 (13.2%)	2 (8%)	0.816
		No	48 (87.3%)	31 (91.2%)		23 (88.5%)	33 (86.8%)	23 (92%)	
	Religious thoughts	Yes	25 (45.5%)	6 (17.6%)	0.007*	9 (34.6%)	17 (44.7%)	5 (20%)	0.131
		No	30 (54.5%)	28 (82.4%)		17 (65.4%)	21 (55.3%)	20 (80%)	
	Doubting	Yes	46 (83.6%)	31 (91.2%)	0.312	21 (80.8%)	34 (89.5%)	22 (88%)	0.586
		No	9 (16.4%)	3 (8.8%)		5 (19.2%)	4 (10.5%)	3 (12%)	
	Others	Yes	7 (12.7%)	4 (11.8%)	0.893	2 (7.7%)	7 (18.4%)	2 (8%)	0.325
		No	48 (87.3%)	30 (88.2%)		24 (92.3%)	31 (81.6%)	23 (92%)	
Compulsions	Washing	Yes	15 (27.3%)	18 (52.9%)	0.015*	16 (61.5%)	11 (28.9%)	6 (24%)	0.008*
		No	40 (72.7%)	16 (47.1%)		10 (38.5%)	27 (71.1%)	19 (76%)	
	Checking	Yes	15 (27.3%)	11 (32.4%)	0.609	7 (26.9%)	14 (36.8%)	5 (20%)	0.339
		No	40 (72.7%)	23 (67.6%)		19 (73.1%)	24 (63.2%)	20 (80%)	
	Repeating	Yes	11 (20%)	8 (23.5%)	0.693	4 (15.4%)	9 (23.7%)	6 (24%)	0.677
		No	44 (80%)	26 (76.5%)		22 (84.6%)	29 (76.3%)	19 (76%)	
	Counting	Yes	4 (7.3%)	5 (14.7%)	0.258	4 (15.4%)	4 (10.5%)	1 (4%)	0.401
		No	51 (92.7%)	29 (85.3%)		22 (84.6%)	34 (89.5%)	24 (96%)	
	Others	Yes	5 (9.1%)	3 (8.8%)	0.966	1(3.8%)	4 (10.5%)	3 (12%)	0.541
		No	50 (90.9%)	31 (91.2%)		25 (96.2%)	34 (89.5%)	22 (88%)	
Total			55 (100%)	34 (100%)		26 (100%)	38 (100%)	25 (100%)	

Table 3: Association between types of OCD and gender, marital status, and age of onset.

Variables		Type of OCD			P value
		Mixed type	Predominantly obsessive	Predominantly compulsive	
Gender	Male	32 (58.2%)	22 (40%)	1 (1.8%)	0.287
	Female	25 (73.5%)	9 (26.5%)	0	
Marital status	Single	44 (65.7%)	22 (32.8%)	1 (1.5%)	0.668
	Married	13 (61.9%)	8 (38.1%)	0	
	Divorced	0	1 (100%)	0	
Age of onset	< 18	18 (69.2%)	7 (26.9%)	1 (3.8%)	0.423
	18-22	25 (65.8%)	13 (34.2%)	0	
	> 22	14 (56%)	11 (44%)	0	
Total = 89 (100%)		57 (64%)	31 (34.8%)	1 (1.1%)	

Eighty-nine Sudanese patients were included in this study, (61.8%) of them were males, and most of them were single (75.3%) as shown in table 1. All of them were Muslims. The mean age of all patients was 27.12 years (SD ±8.72) and the mean age of the first onset of the disorder was 21.72 years (SD ±7.51). The most common obsession among participants was doubting (86.5%), followed by Religious thoughts (34.8%), contamination (24.7%), sexual thoughts (11.2%) and aggressive thoughts (3.4%). Religious obsessions were mainly intrusive thoughts about the presence of God, being Muslim or not, and other religious thoughts. The most common compulsion was washing (37.1%), then checking (29.2%), repeating actions (21.3%), and counting (10.1%). Some OCD features, e.g. "insistence on symmetry" and ordering, were not seen among this group of patients. Obsession of contamination was significantly higher in females (P-value=0.005), religious obsessions were more common in males (P-value=0.007), and washing compulsions were more

common in females (P-value=0.015) table 2. No gender differences were found to be statistically significant regarding other obsessions and compulsions (table 2). Regarding age of onset, obsession of contamination and compulsive washing were significantly associated with younger age of onset (table 2). Mixed obsessional thoughts and compulsive acts were seen in most of the cases (64%), while predominantly obsessional type of OCD represented 34.8%. No associations were found between these types of OCD and gender, marital status, or age of onset (table 3).

DISCUSSION

The current study investigated the phenomenology of eighty-nine OCD patients from Sudan. It is, to our knowledge, the first study to explore the socio-cultural correlates and symptomatology of OCD in Sudan. We found the age of onset of OCD symptoms to roughly be in the early twenties. This is a bit older than results from recent international surveys that identified late adolescence to mark the onset of OCD symptoms. It is likely that Sudanese OCD patients present late for clinical assessment, not that OCD symptoms have a late onset. However, this assertion will indeed need to be confirmed with further well-designed local studies. One other explanation may be an underrepresentation of 'very-young' and pediatric patients in our study as we excluded below-twelve patients. Recent theories of age of onset of OCD symptoms have proposed the presence of two distinct groups; namely 'very-early' and 'early' age-of-onset groups with different phenomenology and presentation [11].

In terms of obsessional preoccupations, 'doubts' were the most prevalent, affecting nearly nine out of every ten in our sample, followed by religious obsessions in one third of the participants. This is in contrast with international findings of high prevalence for 'harming' obsessions and sexual/religious obsessions. Regional studies from Arabic speaking Middle Eastern countries, however, are in line with our findings, as obsessional doubts and religious preoccupations dominate the symptomatology of OCD patients [12]. This could be viewed as further evidence to the variability of OCD-related presentations in different cultures in accordance with the cultural identity, cultural explanation of diseases, and unique psychosocial stressors of Arabic-speaking communities as compared to other parts of the world [13].

Obsession of contamination was commoner in females in our participants, whereas religious obsessions were more common in males. International literature confirmed the feminine dominance in terms of contamination obsessions and cleaning compulsions. Puberty and pregnancy events were noted to mark the onset of obsessive-compulsive symptoms in women, with a generally higher tendency for thoughts of aggression, somatic preoccupations, religiousness, and uncleanliness. Men tend to have an earlier age of onset and more preoccupation with blasphemous obsessions [14-16]. However, in our study, a predominance of religious obsessions was uncovered in Sudanese men. A mixture of sexual and religious preoccupation was noted in OCD men in a recent review [17]. As in our findings in Sudanese OCD subjects, many papers found no substantial differences between men and women in terms of obsessions related to aggression, symmetry and hoarding, and compulsions related to checking and ordering. Many theories exist attempting to explain such gender differences in the clinical presentation of OCD symptomatology. Genes were proposed to express differently in different genders [17] with a group of researchers proposing that genetic susceptibility to OCD may be explained by 'sexually dimorphic pattern' [18]. Very recently, gender was shown to exert some influence on the genetic makeup of OCD, as two gene-based associations could be identified in OCD female patients, namely: GRID2 and GRP135, but not in males [4]. A recent study [19] found that gender differences are not in the nature of the individual presenting symptoms of OCD, rather, gender differences lie in the dimensions of OCD symptoms, as they were found to be more homogenous in males compared to females.

The commonest compulsions were washing and checking, each affected nearly a third of the sample. This is consistent with large-scale international studies, specifically a recent replica of the National Comorbidity Survey in the United States that found checking and hoarding to be the most frequent compulsions encountered, with rates of 15.4% and 14.4% respectively [2].

Our study is cross-sectional and case notes-based, a couple of limitations that should be taken on board when interpreting its findings or designing future studies into OCD phenomenology. Recruitment should be at the onset of OCD symptoms, follow up should be performed using well-structured rating scales and for a long enough duration to pick up any changes in the course of OCD symptoms. The use of advanced imaging

techniques could add an important biological dimension to the body of knowledge currently exists in terms of how demographic factors influence the expression of OCD symptoms. Although this study covered all OCD patients presented to the clinic over a 2-year-period, but still its generalizability is limited since it is only one clinic and most of the patients are from Khartoum, the capital. A multicentre study with larger sample size is recommended.

CONCLUSION

Our survey of Sudanese OCD patients identified doubting as the most frequent obsession, followed by religious obsessions, and washing as the most frequent compulsion, followed by checking. Sudanese women were more likely to have obsession of contamination, whereas men were more likely to have religious obsessions. We could not identify any substantial effect on OCD type for gender, age at onset, or marital status. The study increased our understanding of OCD cases in Sudan which is to be considered in assessing and managing patients.

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