The Impact of Obsessive Compulsive Disorder on Patients' Life: A Transcultural Perspective

Salwa Erfan and Mona Rakhawy

Institute of Psychiatry, Internal Medicine and Hematology Department, Faculty of Medicine, Ain Shams University, Cairo, Egypt.

ABSTRACT

Introduction: Despite the common sociocultural background in the Arab world, considerable differences exist between its different countries.

Aim of the Study: The study was conducted aiming at evaluating the impact of obsessive compulsive disorder on patients' life in two relatively different Arab cultures and the implication of these cultures on OCD presentation and symptomatology.

Subjects and Methods: Forty four OCD patients (22 Saudi and 22 Egyptian) were compared to 43 control subjects (19 Saudi and 24 Egyptian) matching age, sex, social class and education of patients. All subjects were assessed using:

1. A emi-structured interview that covers demographic data, psychiatric and medical history.
2. Structured Clinical Interview for DSM - IV (SCID).
3. World Health Organization Quality of Life Scale (WHOQOL-100). Patients group was further subjected to

A. Yale-Brown Obsessive-Compulsive Scale (Y-BOCS).
B. Yale-Brown Obsessive-Compulsive Scale Symptom Checklist (Y-BOCS).

Results: The negative impact of obsessive/compulsive symptoms on patients' life in both Egyptian and Saudi patients was highly significant. There was no statistically significant difference between the two studied groups (including patients and control subjects) on any domain of QOL scale ($p>0.05$). Female patients had higher cleaning, ordering and contamination than male patients. Miscellaneous obsessions and compulsions, contamination and aggression were the most prevalent obsessive/compulsive symptoms in the whole sample. Egyptian patients had generally higher rates of obsessive and compulsive symptoms that was statistically significant only for cleanliness and counting, while Saudi patients had higher sexual, somatic and contamination obsession. Despite the detected negative correlations between QOL scores and those of YBOCS, they did not amount to be of statistical significance ($p>0.05$).

Conclusion: Obsessive compulsive disorder has a negative impact on all domains of quality of life in both Saudi and Egyptian patients. The presentation of the disorder is affected by sociocultural factors that are subject to rapid changes and instability in the current time.

Key words: quality of life, obsessive compulsive disorder, obsession, eompulsion, eulture.

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INTRODUCTION

Obsessive-compulsive disorder (OCD) is relatively uncommon but undoubtedly a severe mental illness, that is often associated with significant distress and impairment in functioning[1,2]. The instrumental role performance and social functioning of OCD patients were found to be worse than those of the general population and of diabetic patients. Their quality of life (QOL) was reported to be poorer than in depressed patients[3] as well as people with other neuroses[4]. Moreover, severe OCD patients were found to encounter significant disability and poor QOL comparable to heroin dependents and schizophrenia[5,6] and even worse than schizophrenia[2].

The relation between culture, QOL and obsessive compulsive symptoms has been considerably emphasized. Quality of Life is defined by the World Health Organization (WHO) as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns[7]. QOL is better approached as a multidimensional construct, covering a certain number of conventionally defined domains[8,9]. Based on the WHO's QOL scale, the current study focuses on six broad domains: Physical, psychological, levels of independence, social relationships, environment and spiritual.

Nevertheless, it was reported that the core symptoms of obsessive-compulsive disorder merge more closely with normal human behavior and cultural traditions than those of most other mental illnesses[10]. The Arab world is full of diverse communities, groups and cultures. By focusing on two similar but distinctly different cultural backgrounds as Egypt and Saudi Arabia, we may gain insight into the cultural dimensions of peoples in the region. We may also suppose the implication of this dimension on the presentation of OCD, the disorder that is highly linked to religious and ethical rules and influences. Both Egypt and Saudi Arabia are of the Arab world, but Egypt originates from an ancient civilization and is more liberal[11]. Stemming from the hypothesis that OCD is a disorder affecting QOL of patients that might be influenced by the cultural background; this study was conducted aiming at assessing the quality of life of OCD patients and the relation between severities of the disorder to the different domains of QOL among patients from both Arab countries.

SUBJECTS AND METHODS

Participants:

Forty four patients (22 Saudi and 22 Egyptian) and 43 control subjects (19 Saudi and 24 Egyptian) were recruited. Patients were chosen sequentially from treatment seeking OCD patients who visited psychiatry outpatient clinics of private hospitals in Jeddah and Cairo over three months. They were diagnosed according to DSM-IV (SCID), patients of both sexes were included, age ranged from 18 to 45. To avoid any influence of different religious backgrounds, we included only Muslim subjects. Patients with other current or lifetime psychiatric disorders, significant medical disorders, neurological disorders, mental retardation, as well as care givers for a seriously ill close family member, were excluded. Control subjects were volunteers who were willing to participate in the study and fulfilled the inclusion criteria. Patients and control subjects from both countries were assessed during same time period.They all agreed to participate in the study and signed a consent form.

Tools:

The whole sample was subjected to the following tools:

A semi-structured interview that covers demographic data including age, sex, marital, educational, occupational and socioeconomic conditions; in addition to psychiatric and medical history.

Structured Clinical Interview for DSM -IV (SCID)[12]: has been applied to confirm diagnosis of patients and to exclude any other current or life time disorder among patients and control subjects.

World Health Organization Quality of Life Scale (WHOQOL-100)[7] was developed as a multidimensional assessment of QOL of patients with chronic illnesses. The scale is set of five ratings by the clinician on the basis of information from the patient (or care giver if the patient is unable to provide information). It includes six domains: physical domain; psychological domain; levels of independence; social relationships; environment and spiritual domain. Items are scored on a 5-point Likert scale with only the anchor points being specified (never-always, etc.). Internal reliabilities of the 25 facets (as measured by Cronbach alpha) range from 0.65 to 0.93. The universality of the WHOQOL-100 was examined in several ways and was found to be remarkably adept at identifying facets of QOL which are cross-culturally important[7,13]. Its international and multicultural aspects make it a very useful instrument. The scale demonstrates excellent reliability and validity. It has been translated into many languages (including Arabic) and used extensively in a variety of settings around the world[7]. It has been recently applied in an Egyptian study. Ratings were done after the clinical interview and other assessment tools.

The patients group was subjected to the following tools:

Yale-Brown Obsessive-Compulsive Scale (Y-BOCS)[14] a 10-item clinician-rated scale; each item rated from 0 (no symptoms) to 4 (extreme symptoms). For all items, a higher numerical score corresponds to greater illness severity. The total Y-BOCS score is the sum of items 1 to 10 (range, 0 to 40). There are separate subtotals for severity of obsessions (sum of items 1 through 5) and compulsions (sum of items 6 through 10). Symptoms are assessed with regard to how much they occupy the patient's time, interfere with normal functioning, cause subjective distress, are actively resisted by him and can actually be controlled. Thus, the core items (1 to 10) of the YBOCS measure the severity of the cardinal symptoms of OCD (i.e. obsessions and compulsions) along the dimensions of time, interference, distress, resistance and control.

Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) Symptom Checklist[15] has been used to assess the patient's symptoms. The list includes 70 items grouped under these lists: 40 obsessions and 29 compulsions.

Data management and statistical analysis:

The data was coded and entered on an IBM compatible computer among the statistical package SPSS version 16. Appropriate descriptive statistics were used to present and summarize the studied variables. The qualitative variables were presented as percentages in frequency tables and cross tables as indicated. The qualitative valuable were summarized using the appropriate measures of central tendency and dispersion. Differences between the studied groups were statistically assessed using the t-test and chi-square test as indicated. Continuous data was analyzed by t-test in case of two groups and by one way ANOVA in case of more than two groups. Post-Hoc comparison was used to locate the significance within ANOVA and was done through Scheffe's test. Associations between the quantitative variables were assessed using person's correlation. Difference between the studied groups as well as the presence or absence of association was considered statistically significant at a p-value ≤ 0.05.

RESULTS

Mean age of patients was 28.48±7.86 and that of control subjects was 30.88±8.97. Mean social class of patients was 20.97±7.04 and that for control group was 21.60±5.88. The compared groups were matched for age (p=.192), social class (p=.683), gender (p=0.773), marital status (p=0.496) and level of education (p=0.406), but were not matched as regards occupational status (P=0.003) (Table 1).

Table 1: Socio demographic Characteristics of Patients and Control Subjects.

	Saudi sample		Egyptian sample		Significance
	Patients No.=22	**Control No.=19**	**Patients No.=22**	**Control No.=24**	
Mean age	29.23	28.68	27.91	32.62	P=.129
Mean social class	15.75	18.26	25.91	26.14	P=.683
Sex					
Males	9 (40.9%)	9 (47.4%)	9 (40.9%)	13 (54.2%)	P=.773
Females	13 (53.1%)	10 (21%)	13 (59.1%)	11 (45.8%)	
Marital Status					
Single	11 (50%)	9 (47.4%)	14 (63.6%)	16 (66.7%)	P=.496
Married	11 (50%)	9 (47.4%)	7 (31.8%)	6 (25%)	
Divorced	0	1 (2.1%)	1 (4.5%)	2 (8.3%)	
Educational level					
Primary	3 (13.7%)	0	1 (4.5%)	1 (4.2%)	P=.406
Secondary	8 (36.4%)	7 (36.8%)	8 (36.4%)	5 (20.1%)	
University	11 (50%)	12 (63.2%)	13 (59.1%)	18 (75%)	
Occupation Student	5 (22.8%)	2 (10.5%)	7 (31.8%)	1 (4.2%)	P=. 003
Employee	3 (13.6%)	7 (36.8%)	6 (27.3%)	19 (79.2%)	
Skillful job	1 (4.5%)	0	0	0	
Professional	6 (27.3%)	5 (26,3%)	3 (13.7%)	3 (12.5%)	
Unemployed	7 (31.8%)	5 (26.3%)	6 (27.3%)	1 (4.2%)	

Ranking obsessive and compulsive symptoms in the whole sample revealed that 93% of the whole sample had miscellaneous compulsions and 93% had miscellaneous obsessions, representing the highest rates among the Y-BOCS Symptom Checklist. They are followed by contamination (84%) and aggressive obsessions (84%). Checking compulsions came next (81.5%), followed by repeating compulsions (65%), somatic obsessions (65%), sexual obsessions (58%) and exactness (58%). Hoarding obsessions and compulsions were the least reported by patients (32%) (Figure 1).

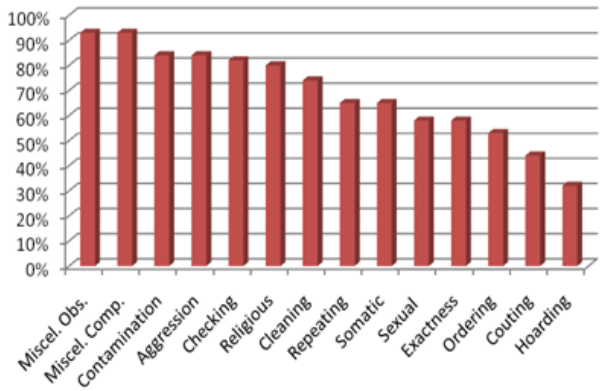

Figure 1: Percentages of Obsessive/ Compulsive Symptoms in Patients of Both Countries

As for sex differences on Y-BOCS Symptom Checklist, (Figure 2) demonstrates that cleaning, ordering and contamination are higher among females with a statistically significant value (p<0.05). Females had also higher rates of somatic obsessions (68% versus 55%) exactness (65% versus 44%) and counting (50% versus 39%) than males, but the difference is of no statistical significance. Males had higher rates of sexual obsessions (67% versus 50%), repeating compulsions (67% versus 61%) and hoarding (39% versus 31%). The two groups had nearly similar rates (difference <3%) of miscellaneous obsessions and compulsions, checking, religious obsessions and repeating. Apart from cleaning, ordering and contamination, no statistically significant difference was detected.

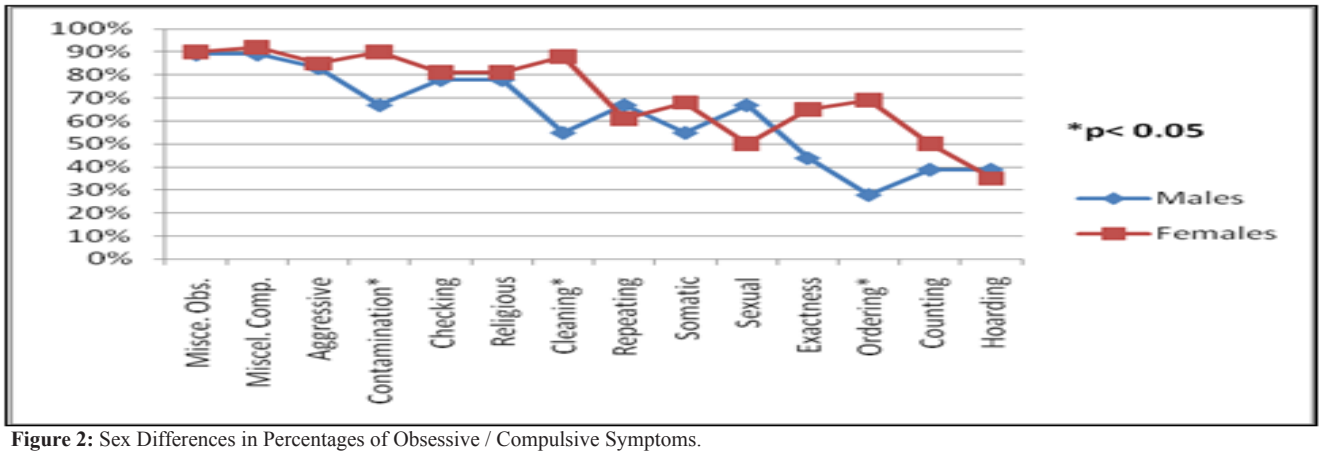

Figure 2: Sex Differences in Percentages of Obsessive / Compulsive Symptoms.

Comparison of severity scores of obsessive and compulsive symptoms on YBOCS is demonstrated in (Table 2). It revealed that global scores, as well as scores on obsessions and compulsions did not show any statistically significant difference between Saudi and Egyptian patients. However, as shown in (Figure 3), Egyptian patients had generally higher rates of obsessive and compulsive symptoms than Saudi patients. This is applied to cleaning (91% versus 57%), counting (64% versus 24%), aggressive (91% versus 76%), religious (86% versus 76%) and exactness obsession (68% versus 48%), as well as cheking (91% versus 71%), repeating (73% versus 57%), ordering (59% versus 48%), hoarding (45% versus 33%) and miscellaneous obsessions and compulsions (100% versus 86% each). Sexual, somatic and contamination obsessions were higher among Saudi than Egyptian patients (62% versus 54%; 67% versus 64% and 86% versus 82%, respectively) and ordering was equal in both groups. Differences between the two groups were of no statistical significance except for cleaning (p=0.04) and counting (p=0.02).

Table 2: Comparison between Scores of Yale Brown Scale in Saudi and Egyptian Patients.

YBOCS	Saudi patients		Egyptian patients		t-test for equality of means	
	Mean	SD	Mean	SD	T	Sig.(2-tailed)
Obsession	14.3819	4.15303	12.50000	4,42665	-.145	.159
Compulsion	13.7619	4.78440	12.4091	4.13647	-.993	.396
Global	28.0000	8.64292	24.7273	6.79062	-1.384	.174

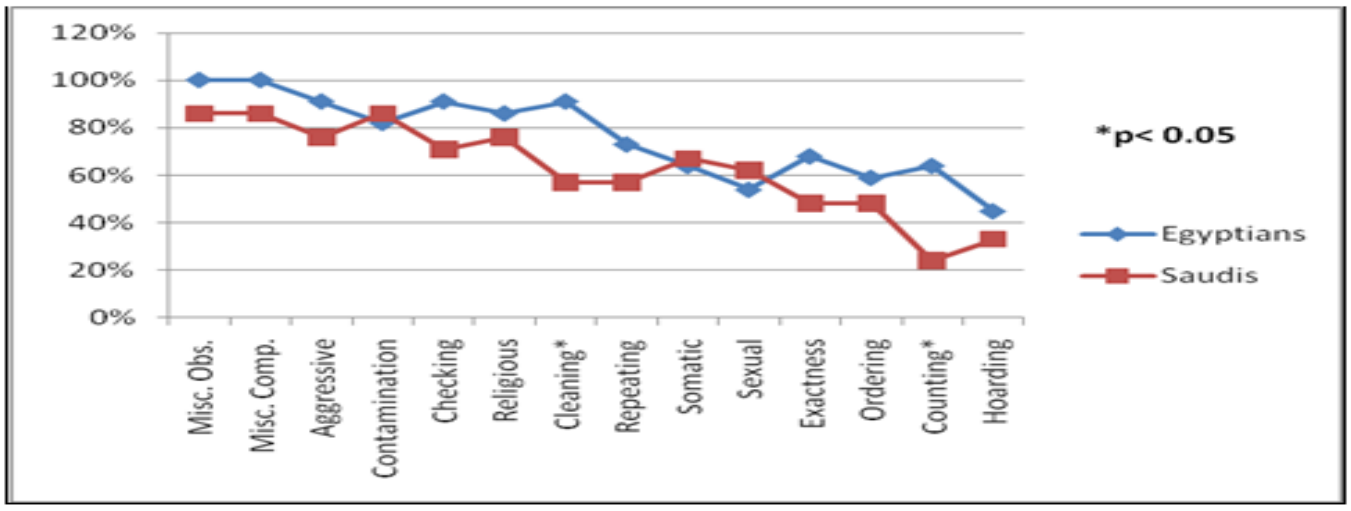

Figure 3: Percentages of Obsessive/ Compulsive Symptoms: Comparison between Saudi and Egyptian Patients.

As shown in table 3, the mean scores of QOL-100 domains are significantly lower for patients with OCD compared to control subjects. On the other hand, analysis of data did not show any statistically significant difference between Saudi and Egyptian patients on scores of QOL-physical domain (p=0.999), QOL-psychological domain (p=0.935), QOL-level of independence (p=0.812), QOL-social relationships (p=0.439), QOL-environment domain (p=0.327) and QOL- spiritual domain (p=0.887). Furthermore, there were no significant differences between QOL mean scores of control subjects from both countries.

Table 3: Quality of Life Domains: Comparison between Patients and Control.

					t-test for Equality of Means	
DOMAIN		**No.**	**Mean**	**SD**	**T**	**Sig.(2-tailed)**
Physical domain	Patients	43	11.8508	2.51638	-.3.973	.000**
	Control	43	13.9373	2.35106		
Psychological domain	Patients	43	11.2512	2.63026	-5.787	.000**
	Control	43	14.6419	2.80019		
Levels of independence	Patients	43	12.6919	2.59970	-6.652	.000**
	Control	43	16.0814	2.09926		
Social relationships	Patients	43	12.0153	2.89432	-3.444	.001**
	Control	43	14.0149	2.47406		
Environment	Patients	43	12.8459	2.33263	-2.945	.004**
	Control	43	14.2799	2.16042		
Spiritual domain	Patients	43	11.9767	3.49482	-4.344	.000**
	Control	43	15.0698	3.09681		

** Highly Statistically Significant

Post Hoc analysis of data showed a negative correlation between severity of obsessive compulsive disorder (global score, obsession and compulsion subscales) and the scores of different domains of WHOQOL-100; none of the correlations was statistically significant (Table 4).

Table 4: Correlations between Severity of Obsession Compulsive Disorder and Different Domains of Quality of Life.

Domain	**Yale Brown global score**		**Obsession subscale**		**Compulsion subscale**	
	Pearson correlation	**P**	**Pearson correlation**	**P**	**Pearson correlation**	**P**
Physical domain	-.127	.412	-.156	.312	-.074	.632
Psychological domain	-.244	.110	-.223	.146	-.216	.159
Level of independence	-.195	.205	-.234	.126	-.138	.373
Social relationships	-.916	.273	-.130	.399	-.206	.179
Environment domain	-.195	.204	-.191	.214	-.166	.283
Spiritual domain	-.046	.767	-.052	.738	-.134	.385

DISCUSSION

The current study was conducted to verify the implication of the cultural dimension on the presentation of OCD; the disorder that is highly linked to religious and ethical rules and influences. It also aimed at assessing the impact of the disorder on 'patients' life. Both Egypt and Saudi Arabia are of the Arab world, but have two different sociocultural backgrounds. The study results reveal that comparing the severity of obsessions and compulsions in 22 Saudi patients and 22 Egyptian patients using YBOCS did not show any statistically significant difference. The two groups were classified among the moderate to severe on YBOCS, the fact that is consistent with Okasha's finding[16] and was attributed to the high tolerance for psychiatric patients and to the fact that seeking mental health services comes as a last resorts, following failure of other help seeking options.

Previous Egyptian and Saudi studies have shown plenty of culturally determined OC symptoms, where religion and prevailing traditions seemed to color not only the clinical picture of the condition, but also the patients' attitudes about their disorder[17-18]. Wolfgang[19] referred to the cultural influences on obsessive and compulsive symptoms as "pathoplastic" i.e., shaping rather than causing psychopathology. In contrast, Pallanti[20] found that cultural differences do not have influence on presentation of obsessive-compulsive disorder. Despite the specific cultural characteristics of Japanese population[21], OCD patients did not counter the similarities between obsessive-compulsive

disorder in Japan and elsewhere. Pallanti[20].suggested that obsessive-compulsive disorder is more deeply embedded in common neurobiology than in cultural differences.

Assessing the impact of OCD on patients' life revealed that they had significantly lower scores on all QOL domains when compared to control subjects (Table 3). This is consistent with previous findings showing that OCD patients had significantly decreased mean QOL scores for all SF-36 subscales[22] and on all WHOQOL- BREF domains[2], the fact that highlights that OCD significantly encroaches upon ability to function productively in social, family, work and school settings. This impact has been supported by a survey study by Hollander and others[23] who demonstrated that 73% of OCD patients had impaired family relationships, 62% had impaired friendships, 58% experienced academic underachievement, 47% experienced interference with work and 40% were unemployed.

As for the specific domains of QOL, the statistically significant lower scores found in patients on physical domain compared to control subjects does not go along with Koran et al.[3] who found ratings of physical health domains in OCD to be similar to those in the general population. Rodriguez-Salgado et al.[24] also found significant differences between OCD patients and control in all SF-36 subscales except those related to physical health and pain. This contradiction can be understood if we follow the assumption that Arab patients are more alexithymic, using physical complaints to express underlying suffering. This was more supported by the presence of somatic obsessions in more than 60% of the sample.

The lower scores on other domains of QOL were found to match with several studies conducted on OCD patients: disturbed psychological wellbeing was previously reported[25,26]; low score of QOL-level of independence were also detected[25] and an association between moderate to severe obsessive-compulsive disorder and impaired social relationships and impaired instrumental role performance was demonstrated by Koran et al.[3].

Despite the lack of statistical significance, a clear negative correlation between the severity of global Yale Brown score, obsession and compulsion subscales to QOL domains was detected (Table 4). This relation was also proved to be significant in many other studies. For instance, subjects with a YBOCS score of 20 or higher were found to have significant decline in QOL compared with those subjects with lower than 20 scores[27]. Also, higher YBOCS obsessions and compulsions scores were found to predict poorer score on the mental health subscale of the SF-36[28]. Koran et al.[3] found only the impairment in social functioning to be linearly related to severity of obsessive-compulsive disorder

Analysis of the differential impacts of obsessions and compulsions on QOL did not reveal any statistically significant difference. Obsessions particularly interfere in conscious intentional activities such as reading, writing, counting and simply sustaining concentration, while compulsive rituals leads individuals to miss out on social occasions, to fail to accomplish tasks within the work setting, to experience distress and tension in their important relationships and to experience recurrent embarrassment and shame[29]. This was somehow confirmed by Rodriguez-Salgado et al.[24] who reported differential impact of obsessions and compulsions; obsession subscale was correlated to all SF-36 items, while compulsion subscale was correlated only to social functioning, emotional role, mental health and vitality. Some studies went further and analyzed the correlation between YBOCS headings and QOL. For instance, Naserldin et al.[30] found a statistically significant correlation between symmetry symptom of YBOCS and physical, social and cognitive domains.

Pertaining to specific obsessions and compulsions items, our results revealed that miscellaneous obsessions and compulsions came first in rank in the whole patients' sample, as well as in each group separately (Figures 4 and 5). The heterogeneity of the items included under these headings poses the possibility that further subdivision of these categories can lead to better understanding and analysis of our results. Contamination comes next in ranking of obsessive and compulsive symptoms. It seems that the concern about contamination is universal across different cultures; it was found to be the most frequent in different studies conducted in countries with different cultural backgrounds, including Egypt[31-34,16].

Despite the high rank of religious and cleaning obsessions in our results (Figure 4), they were not the most abundant in the whole sample, as recorded in previous studies conducted on Muslim populations[35,36]. As our results demonstrate, it seems that Egyptian obsessive patients are more pathologically oriented towards cleaning than Saudi patients. According to Okasha[16], the emphasis on cleanliness or ritual purity is the cornerstone of most of the compulsive rituals. The ritualistic cleaning procedures can also be a source of obsessions and compulsions about religious purity[16]. It was also found that the obsessional contents of the samples from Egypt and Jerusalem were similar, dealing mainly with matters of religion, cleanliness and dirt. While Hindus and Christian obsessive symptoms were mostly related to orderliness and aggressive issues; the finding that stressed more on the role played by cultural and religious factors in the presentation of OCD[31-34,18]. Our findings revealed that aggression was more prevalent than religious and cleaning compulsions and obsessions.

A statistically significant higher rate of cleanliness, orderliness and contamination was found in female compared to male patients. This finding is not surprising in a culture where women are known to be responsible of doing household duties including cleaning and ordering. In addition, this goes along with the description of obsessive-compulsive disorder as a pathological form of altruism or maternal love that was

referred to the deregulation of the brain circuits responsible for threat detection as part of normal parental behavior[37].

According to Okasha[16], it is characteristic of a conservative society like Egypt to expect sexual obsessions to be among the most frequent in female patients. The female gender is surrounded by so many religious and sexual taboos that the issue becomes a rich pool for worries, ruminations and cleansing compulsions in women susceptible to developing OCD[16]. However, as revealed in (Figure 6), in the current study females had less frequent sexual obsessions than males, with a difference approaching significance. This finding may be referred to the deeply rooted repressions in our societies. As for the statistically significant higher level of counting found in the Egyptian sample, this finding can be the subject of further analysis in future studies conducted on larger samples.

In a more general perspective, despite that the current study revealed some similarity to previously conducted equivalent ones; differences were also detected to a considerable extent. Sayed et al.[38] reported that the interaction of cultural factors and the rapid urbanization of the Saudi society might explain the pattern of OCD presentation. Henry Murphy[39] previously ushered to the effect of the rapid socio-cultural change, through overwhelming or imposed Westernization of small scale non-Western societies, on pathogenic processes. According to Wolfgang[19] it also leads to a conflict between modern Western notions and traditional non-Western values which in turn create cultural confusion and symptom changes or appearance. Besides, the openness of the Arab society to the external world on one hand and the opposing force pulling towards a more conservative and restrictive position on the other hand had made the Arab world a subject to further turmoil and change to fit in what is known as "a society in flux"[40], which may have affected the results of our study. Although this research has several methodological strengths, including the employment of reliable and valid measures of QOL and symptom functioning, it also has its limitations. First, its cross-sectional nature precludes drawing causal relations between symptom functioning and QOL; second, the small size of the sample including a specific sector of OCD patients (chosen from private hospitals) and finally, the exclusion of co-morbid psychiatric disorders, especially depression and anxiety, that might have added to the understanding of the underlying psychopathology. Consideration of the previous points in future studies with bigger sample size can add more to the verification and clarification of the current study results.

CONCLUSION

Obsessive compulsive disorder has a negative impact on all domains of QOL in both Saudi and Egyptian patients. The presentation of the disorder is affected by sociocultural factors that are subject to rapid changes and instability in the current time.

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Corresponding Author:

Salwa Erfan
3 Yossef El-Degwy Street, Manial, Cairo.
Associate Professor of Psychiatry, Cairo University
E-mail: dr_salwaerfan@hotmail.com