

## Prevalence of Obsessive-Compulsive Disorder in Psychiatric Patients

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### Abstract

*To find the frequency of OCD and different types of obsessive and compulsive symptoms in psychiatric patients. A sample of 2608 psychiatric patients were approached through purposive sampling from two government and two private hospitals of Gujranwala and Gujrat cities during December, 2020 to May, 2021. A set of questionnaires was used for the study, comprising of Demographic Sheet; Screening Questionnaire; Diagnostic Questionnaire based on DSM-5 criteria of OCD; Yale Brown Obsessive Compulsive Scale and Yale Brown Obsessive Compulsive Symptom Checklist. Psychiatric patients were screened for OCD symptoms and later they were examined for diagnostic status, symptoms types and its severity. Results indicated that 6.1% patients screened as vulnerable for OCD and 2.9% were diagnosed as suffering from OCD in this targeted psychiatric population. Mostly patients reported severe level of OCD (55.1%). Further, results also highlighted highest ratio of obsession relate to sexual content (5.1%) and compulsions related to Order (76.9%) as compared to other types of obsessions and compulsions in OCD patients. In context of gender, men reported highest scores in obsessions of aggression; sexual; hoarding; religious; symmetry; somatic and hoarding compulsion, whereas, contamination obsessions; cleaning; counting; checking; repeating and ordering compulsions were reported to be higher in women. The frequency of OCD in psychiatric population in Gujrat and Gujranwala is almost the same as in the other places around the globe. However, the types of obsessions and compulsions vary in relation to the gender of patients. Systematic and controlled studies needed to explore the other correlates of OCD.*

**Keywords:** *Obsessive Compulsive Disorder, Prevalence, Structured Clinical Interview for Diagnosis, Symptom Checklist.*

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### 1. Introduction:

Obsessive Compulsive Disorder (OCD) is common psychiatric disorder which not only affects the physical and mental of patients but it also affects the quality of life of the patients and their families

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(Jaspers-Fayer et al., 2018). Diagnostic and Statistical Manual (DSM -5) defines “obsessions are recurrent and persistent thoughts, ideas, images or impulsive that are experienced as intrusive and inappropriate which cause anxiety or stress. Hence, compulsions are repetitive behaviors (washing, ordering, checking) or mental acts (counting, praying, repeating words silently) used by the patients to avoid distress (American Psychological Association, 2013). OCD burden estimated to be 2.5% globally and categorized OCD as the leading global non-fatal disease. Mehraban et al., (2014) described it as the 4<sup>th</sup> most prevalent mental disorder. The World Health Organization (WHO, 2001) has marked such mental diseases among 10<sup>th</sup> largest disability in the Worldwide. On the other hand, it has been 5<sup>th</sup> rank which causes disability between 15 to 44 years’ women (Gadit, 2012). Although, OCD is 2<sup>nd</sup> most frequent psychiatric disorder, but still taken too lightly all over the world. It is severe and distressing condition marked by obsessive thoughts and compulsive behavior which equally affected men and women, children and adults without any geographical boundaries.

The symptoms of OCD are categorized in obsessions and compulsions or both, however, different types of obsessions are common such as dirt, contamination, sexual thoughts, perfectionism, fear of insecurity, particular ordering of things; and common compulsions are excessive checking, cleaning, washing, arrangement, order and other related activities. There is empirical evidence which suggest different dimensions of OCD symptoms in different cultures. The most common compulsions were checking, washing and counting in fisherman community in Pakistan (Gadit, 2003).

The ratio prevalence of OCD may vary around the globe. The world population reported that the prevalence ratio of OCD ranged from 1-3% (Ruscio et al., 2010). The difference in the prevalence rate of OCD was reported in Western, non-western and Asians countries. The lifetime prevalence of OCD reported to be 1.6%, in American African (William et al., 2017). In Brazil, the prevalence ratio was 3.3% in the student sample (Vivan et al., 2014), however, the lifetime and 6-month prevalence ratios in the adult population were 3.0 & 1.1, respectively (Subramaniam et al., 2012). In Iran, the point prevalence of OCD with students is reported to be 29.9% & 1.8% (Yoldascan et al., 2009; Mohammadi et al., 2004). In Egypt, the prevalence of OCD found to be 2.2% (Rady et al., 2013). The point prevalence of OCD found to be 3.3% in India (Jaisoory et al., 2017), whereas, the seven-month prevalence ratio was reported to be 46% in non-clinical population (Akhtar et al., 2017); 4.08 % (Jabeen, 2008); 4.1% in the psychiatric population of Pakistan (Jabeen & Kausar, 2020).

Ruscio et al., (2010) reported the highest ratio of obsessive-compulsive symptoms was checking (15.4%) followed by hoarding (14.4%) and ordering (9.1%), respectively based on Diagnostic

Interview Schedule of nine populations' survey. Regarding gender differences, some researchers have reported the prevalence of OCD and its type with gender wise distribution in general and psychiatric populations with reference to Pakistan but literature does not suggest any significant difference in psychiatric population (Mathews et al., 2004). Some researchers have reported the prevalence of OCD and its type with gender wise distribution in general and psychiatric populations in Pakistan. Contamination, cleaning, washing, checking, arranging and harming compulsions were more prevailed in women as compared to men and men reported more sexual, religious, and symmetry/ exactness while the symptoms of compulsions were checking, ordering/ arranging and hoarding.

The objectives of the current study were to find the prevalence of OCD in psychiatric patients visiting private and government hospitals of Gujrat and Gujranwala cities. Furthermore, efforts were also made to see the frequencies of different types of obsessive and compulsive symptoms in relation to patients' gender.

## **2. Participants and Methods:**

An ex post facto research design was used to conduct the study in four different psychiatric settings (2 governments & 2 privates) of Gujranwala and Gujrat, Pakistan from December 2020 to May 2021. The study was conducted in three stages. At first stage, all psychiatric patients were screened for their vulnerability of OCD. At second stage, vulnerable patients were evaluated for diagnostic criteria of OCD. At third stage, patients diagnosed with OCD were examined for severity and different types of obsessive and compulsive symptoms. Through purposive sampling, a sample of 2608 psychiatric patients (6 to 65 years including children, men and women), visiting outdoor and admitted in psychiatric wards were approached. 59% sample was 18-35 years, 37% was of 36- 60 years; and 3.8% was over 60 years. While majority of the participants (51.5%) were married following unmarried (34.6%), widow/widower (9.0%), and divorced (1.3 %), respectively. Further the highest ratio (59.0%) of participants were living in a joint family system, whereas, 41.0% participants were living in nuclear family system. Further, the patients having some physical illness or disability with psychiatric symptoms were excluded from the sample.

The research questionnaire comprised of three parts. First part was related to demographic variables; second part contained screening questions about OCD and the third part was based on diagnostic questions. In diagnostic part, three questionnaires: SCID-5, YBOCS and YBOCS-SC. First two sections: Demographic and Screening questionnaires were administered to all the participants (N= 2608) but the third part of the questionnaire: Diagnostic Questionnaire (SCID-5) was administered to

those who showed vulnerability related to OCD. In addition, YBOCS and YBOCS-SC were administered to vulnerable participants of OCD to find out the severity of OCD symptoms.

However, willingness of the participants to be included in the study was taken through verbal consent before the administration of the questionnaires. For descriptive analysis, frequencies and percentages were computed. Mann- Whitney U test was used to compare different types of obsessive and compulsive symptoms on the basis of gender.

### 3. Results:

The total targeted population of present study was 2608 psychiatric patients from which 160 (6.1%) were screened for OCD, whereas out of 160 OCD screened sample, 78 (48.8%) were clinically diagnosed as OCD. Amongst these 78 diagnosed OCD patients, 5(6.4%) were having subclinical; 6 (7.7%) reported mild; 14 (17.9%) were having moderate; 43(55.1%) were severe; and 10 (12.8%) were having extreme symptoms (Table-1). Furthermore, the results showed that the sexual and somatic obsessions and ordering compulsion were highest in ratio 55.1%, 55.1% & 76.9 %, respectively (Table-2). Regarding gender differences, non-significant difference was found in the mean scores of men and women patients on Obsessive subscale; Compulsive subscale and total YBOCS; but significant difference was found in the types of obsessions and compulsions except miscellaneous category in men and women (Table-3).

Table-1

*Participants at Stage I, Stage II and Stage III (N=2608)*

Cases	<i>f</i>	%
<b>Stage I (Target Psychiatric Patients =2608)</b>		
Psychiatric patients	2448	93.9
Vulnerable cases for OCD	160	6.1
<b>Stage II (Vulnerable Cases =160)</b>		
No diagnosis	62	38.8
Diagnosed Cases	78	48.8
With another medical condition	5	3.1
With another mental disorder	5	3.1
With poor insight	6	3.8
Tic Related Disorder	4	2.5
<b>Stage III (Diagnosed Cases =78)</b>		

Obsessive Compulsive Disorder	78	2.9
<b>Severity Level in OCD Diagnosed cases</b>		
Subclinical (0-7)	5	6.4
Mild (8-15)	6	7.7
Moderate (16-23)	14	17.9
Severe (24-31)	43	55.1
Extreme (32-40)	10	12.8

Table 2

*Frequencies and Percentages of Types of Obsessive and Compulsive Symptoms in Diagnosed Cases (n=78)*

<b>Symptoms</b>	<b>f</b>	<b>%</b>
<b>Types of Obsessions</b>		
Aggression	38	48.7
Contaminations	19	24.4
Sexual	43	55.1
Hoarding	29	37.2
Religious	37	47.4
Symmetry	36	46.2
Somatic	43	55.1
Miscellaneous	38	48.7
<b>Types of Compulsions</b>		
Cleaning	48	61.5
Counting	55	70.5
Checking	44	56.4
Repeating	47	60.3
Ordering	60	76.9
Hoarding	30	38.5
Miscellaneous	29	37.2

Table 3

*Mean Differences in subscales of OCD and Types in relation to Gender of Diagnosed Cases (n=78)*

	<b>Men (N=34)</b>	<b>Women (N=44)</b>			
<b>Variables</b>	<b>Mean rank</b>	<b>Mean rank</b>	<b>Z</b>	<b>U</b>	<b>p</b>
Obsessive Subscale	44.59	35.57	-1.75	575.00	.080
Compulsive Subscale	42.54	37.15	-1.052	644.50	.293
Total YBOCS	44.37	35.74	-1.672	1572.5	0.95
<b>Obsessions</b>					
Aggression	58.35	24.93	-7.460	107.0	.000
Contamination	29.50	47.23	-4.608	408.0	.000
Sexual	51.68	30.09	-4.875	334.0	.000
Hoarding	53.24	28.89	-5.958	281.0	.000
Religious	58.85	24.55	-7.666	90.00	.000
Symmetry	34.12	43.66	-2.135	565.0	.000
Somatic	47.82	33.07	-3.310	465.0	.001
Miscellaneous	35.41	42.66	-1.618	609.0	.106
<b>Compulsions</b>					
Cleaning	21.24	53.61	-7.425	127.0	.000
Counting	32.65	44.80	-2.972	515.0	.003
Checking	27.82	48.52	-4.657	351.0	.000
Repeating	34.35	43.48	-2.080	573.0	.038
Ordering	34.35	43.48	-2.237	586.0	.025
Hoarding	48.59	32.48	-3.695	439.0	.000
Miscellaneous	38.76	40.07	-.301	723.0	.763

**4. Discussion:**

The present study was the first study of its nature in two targetted cities of Punjab: Gujranwala and Gujrat which explored frequency, gender-wise distribution as well as different types of obsessive and compulsive symptoms in psychiatric patients. The results are somehow similar with Jaisoory et al.,

(2017) who reported 3.3%-point prevalence of OCD in India. The present findings are also in line of WHO (2001) report in which 2.5 % prevalence ratio of OCD was documented. In present sample, 160 psychiatric patients out of 2608 were found to be vulnerable for OCD, 78 (2.9%) were diagnosed as OCD patients. Keeping in view the findings related to the prevalence of OCD in Lahore, Pakistan, Jabeen and Kausar (2020); Jabeen (2008) reported 4.1% to 4.8% prevalence of OCD on the basis of data taken from OPDs of five psychiatric settings of three years. In this context, present study was showing relatively lower prevalence rate of OCD in Gujranwala and Gujrat as compared to Lahore city. The difference could be due to different geographical, socio-cultural factors of the patients: education level, awareness level, availability of psychiatric service and other related economic conditions).

A point prevalence of different types of obsessions and compulsions is also indicated through results of present study as highest ratio in sexual and somatic obsessions (55.1%) and ordering compulsion (76.9%) were reported. The results are also supported by the findings of Shazad et al. (2020) as the prevalence of aggressive, religious, and sexual obsessions were high (50.5%). Further, these findings are also consistent with Saleem and Gul (2018) who reported that compulsive symptoms of washing, cleaning and ordering : 27% were reported to be the highest.

Another major finding of the study was related to gender differences – non significant gender differences were found in the scores of obsession subscales, compulsion subscales and total YBOCS. Results are consistent with the studies of Jabeen and Kausar (2020) and Akhtar et al. (2017) who reported non-significant gender difference in ratio of OCD in clinical population, Pakistan. Similarly, findings are also in line with empirical evidences of Mathes et al. (2019); Mathews et al. (2004) and Rana et al. (2001) who reported non-significant gender difference in OCD amongst psychiatric population.

However, the findings of the study showed statistically significant differences in types of obsessions: aggression, contamination, sexual, hoarding, religious, symmetry & somatic and compulsions: cleaning, counting, checking, repeating, ordering and hoarding except miscellaneous obsessions and compulsions. Men reported highest scores in aggression, sexual, hoarding, religious, symmetry, somatic obsessions and hoarding compulsions, whereas, contamination obsessions, cleaning, counting, checking, repeating and ordering compulsions were reported to be high in women. Asghar et al. (2020) and Ashraf et al. (2017) supported the notion that washing, counting and arranging compulsions were high in women in comparison to men in Pakistan. Hunt (2020) also confirmed the present findings by reporting that sexual obsessions are most common symptoms of OCD in men as compared to women.

Cherian et al. (2014) and Rady et al. (2013) also reported a significant gender difference in OCD symptoms and highest ratio were found in different categories: sexual, religious, pathological doubt, checking and repeating compulsions in men, whereas, fear of contamination is more prevalent in women. However, Butwika and Gmitrowicz (2010) reported non-significant gender difference in the symptoms of miscellaneous obsessions and compulsions.

The important strengths of current study are that it is the first study about frequency of OCD for Gujranwala and Gujrat Cities. Further, Structured Clinical Interview for Diagnosis (SCID-5) being a reliable tool was used to assess the symptoms of OCD is another strength of study but still the findings cannot be generalized unless psychiatric population of other cities is added.

The findings further highlight that mental health issues seem to be the neglected aspect and campaigns through print and electronic media to create public awareness would be beneficial. The community based programs would be helpful in detecting the subclinical cases of OCD with minor OCD symptoms in order to motivate them to seek treatment before the situation becomes worsed.

Future researches need to focus on developing indigenous tool in order to better understand the symptoms of psychopathology as well as OCD in the context of socio-religious perspective in Pakistani culture.

## **5. Conclusion:**

The 2.9%-point prevalence of OCD in psychiatric patients was found out which highlighted the need to organize awareness programs to understand the nature of OCD as well as to introduce the preventive strategies to reduce the burden of mental diseases in Gujrat and Gujranwala as well as other cities of Pakistan.

## **6. Acknowledgement:**

We appreciate the contribution and participation of the co-researchers. We are also grateful to all the participants whose voluntary participation made this research project successful. Further, we are also thankful to the administration of psychiatric settings of targeted hospitals.

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