Socio-Demographic Characteristics and Psychiatric Comorbidity in Patients with Obsessive-Compulsive Disorder

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ABSTRACT

BACKGROUND
Obsessive-compulsive Disorder (OCD) is a distressing anxiety disorder with prevalence of 0.6% in India. About half of the patients have onset in childhood and adolescence with males having earlier onset. Early onset and male cases have severe illness and poor prognosis. Most of them are unmarried and from middle or upper classes. Patients with poor insight and resistance and comorbidity especially psychosis generally had poor prognosis.

MATERIALS AND METHODS
Socio-demographic data of 50 consecutive patients with OCD diagnosed with ICD-10 criteria were collected and assessed on YBOCS and M.I.N.I.

RESULTS
46% patients were between the age group of 18-25 yrs, 56% were female, 62% were married, 60% were from rural background, 44% were educated up to secondary school, 62% were from middle income group, 70% had illness of more than 2 yrs and 42% had depression.

CONCLUSION
This study showed higher preponderance in females, rural patients, low and middle income group. Most common family history of psychiatric illness was affective disorder and depression was the most common comorbidity.

KEYWORDS
Obsessive-Compulsive Disorder; Comorbidity; Depression; Awareness.


INTRODUCTION
Obsessive-Compulsive Disorder (OCD) is the fourth most common mental disorder characterized by presence of two distinct phenomena: obsessions and compulsions. Patients of OCD find that obsessions and compulsive behaviours are irrational, but cannot suppress them. Prevalence rates of OCD in the range of 2 to 3 percent and is almost equally common in males and females. Prevalence in India is lower (0.6%).1 According to ICD-10, 1992 (International classification of diseases) for a definite diagnosis of OCD, obsessional symptoms, or compulsive acts or both must be present on most days for at least 2 successive weeks and be a source of distress or interference with activities.2

This study would try to look whether there is any changing trend with respect to comorbidity and demographic variables in OCD over the years.

MATERIALS AND METHODS/Aims of this Study were
1. To study socio-demographic variables of patients with OCD.
2. To study various comorbid psychiatric conditions occurring with OCD.

The study was conducted at the Outpatient Department of Vijayawada Institute of Mental Health and Neurosciences (VIMHANS), Vijayawada. The study population included all the patients visiting the outpatient department from January 2011 to January 2012. A total of 50 patients consecutively diagnosed as obsessive-compulsive disorder as per ICD-10 were taken in this study.

Inclusion Criteria
1. All cases diagnosed as per ICD-10 diagnostic guidelines for OCD.
2. Patients of the age group 18 to 65 years.
3. Patient agrees to participate in the study by providing written informed consent.

Exclusion Criteria
1. Patients with severe organic involvement of central nervous system or serious physical illness.
2. Uncooperative and agitated patients.
3. Patients having active substance abuse or intoxicated patients.

Tools for Assessment
1. Data Sheet: This included information regarding name, age, and sex; marital status, religion, education, and residence; family income, past history, family history, personal history, premorbid personality, current functional status, physical examination, differential
Thoughts described OCD in 1780 of psychosexual disorders, sexual obsessions, hoarding repeating rituals characterized by 30% of the patients exhibited symptoms of OCD and nearly ¾ of cases earlier age of onset than females. About one third to one half of adult cases North American studies. The only epidemiological study from India found a 3% rate reported in the European and Indian populations. The only epidemiological study from India found a rate comparable to 47% in dizygotic twins. 25% of first-degree relatives of children suffering from OCD had similar illness. 

Genetics/Other Clinical Characteristics
A study reported 87% concordance in monozygotic twins compared to 47% in dizygotic twins. 35% of first-degree relatives of children suffering from OCD had similar illness. 

Gender
While some researchers reported the female predominance, others found no evidence of a sex difference. Males and females were almost equally represented among compulsive checkers while women more often had compulsive washings 66% and avoidance 26% and greater comorbidity with eating and impulse-control disorders. Male patients are more likely to be single. They have chronic illness, greater social impairment, more sexual-religious and aggressive symptoms, and greater comorbidity with tic and substance use disorders. 

Religion
Religious obsessions have been reported in 6% of OCD cases. They also found that being brought up in strict religious background makes one suffer from religious, sexual, or aggressive obsessions. 

Marital Status
Higher percentage of bachelorhood/celibacy has been reported in OCD patients. 40% for men and 39.6% for women.6,7 But, others found no significant difference of marital status in OCD patients.7 Obsessional patients in India did not show high rates of celibacy and low fertility.22 Married patients were twice as likely to remit as unmarried ones.23 

Social Class/Intelligence
OCD has been reported to be prevalent among people from middle and upper classes.6,10 

Precipitating Factors
Sexual marital problems were the most common precipitants. Significant events happened in 56%-69% cases within six months to one year before onset.6,8 In India, contact with death or illness made up bulk of reactive factors.24 

Genetics/Other Clinical Characteristics
A study reported 87% concordance in monozygotic twins compared to 47% in dizygotic twins. 35% of first-degree relatives of children suffering from OCD had similar illness. 

Course and Prognosis
Studies seem to show that the prognosis of obsessional illness is worse than for other neurotic illnesses.5,6,11 Atypical obsessive compulsives have poor prognosis.7 One Indian study reported a favourable outcome in majority of the subjects.20 Another follow up study found that the long-term outcome of ‘Predominantly obsessive’ subjects did not differ from that of ‘mixed’ OCD.29 Patients with absent resistance and concomitant schizotypal personality disorder had high rate of treatment failure.30 

Insight into Obsessive-Compulsive Disorder
Traditionally, OCD is described as a condition in which patients have good insight into their symptoms. The DSM-IV field trial demonstrated a broad range of insight with 30% having poor insight.31 It appears that patients with poor insight don’t respond well to behavioural therapy. 

Comorbid Conditions
Most OCD studies reported at least 50% rate of comorbid axis I disorders and at least 40% have personality disorder.30,32,33 Three classes of comorbidity have been proposed namely OCD...
simplex class, OCD comorbid tic related class, and OCD comorbid affective related class.\textsuperscript{34}

About 1/3\textsuperscript{rd} adult OCD patients also have depression and 13\% for bipolar disorder.\textsuperscript{35,36} Comorbid Bipolar Disorder may herald an episodic course of OCD.\textsuperscript{37,38,39}

OCD is distinct from other anxiety disorders in that males and females have similar lifetime prevalence rate for OCD.\textsuperscript{38,40} Lifetime prevalence rate for panic disorder in primary OCD patients is between 12\% to 15\%.\textsuperscript{36,41} OCD with comorbid GAD was associated with higher rates of indecisiveness and pathological responsibility among adults.\textsuperscript{42} Anorexia and bulimia nervosa have high incidence of comorbid OCD.\textsuperscript{43} Lifetime prevalence rate for hypochondriasis in a sample of primary OCD patients to be 23\%.\textsuperscript{36}

About one third to one half of patients with Tourette’s disorder are afflicted with OCD.\textsuperscript{44} Also, high rate of OCD and tics were found in the first-degree relatives of children with OCD.\textsuperscript{45} Trichotillomania usually begins during adolescence and appears to occur much more frequently in females than males.\textsuperscript{46}

10-60\% of schizophrenics exhibit symptoms of OCD.\textsuperscript{47,48} This subgroup had earlier onset of schizophrenia, lower socioeconomic status, negative symptoms, and more severe schizophrenia.\textsuperscript{49}

After the introduction of DSM III, over 50\% of OCD patients met criteria for at least one personality disorder.\textsuperscript{50} Most common personality disorders were obsessive compulsive personality disorder (46\%) and avoidant (31\%).\textsuperscript{36}

RESULTS

<table>
<thead>
<tr>
<th>Age group (Years)</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 25</td>
<td>22</td>
<td>46</td>
</tr>
<tr>
<td>26 – 34</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>35 – 43</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>44 – 51</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>52 – 58</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1: Age Distribution of Patients

Table 1 shows the sample size in the present study, which was 50. Age of the patients ranged from 18-58 years with the mean of 30.5 years. There were 23 (46\%) patients between 18 to 25 years, 8 (16\%) between 26 to 34 years, 13 (26\%) between 35 to 43 years, 3 (6\%) each to 44-51 and 52 to 58 years of age.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2: Sex Distribution of Patients

Table 2 shows that among the patients 22 (44\%) were males and 28 (56\%) were females.

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Married</td>
<td>31</td>
<td>62</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3: Marital Status

Table 3 shows that 19 (38\%) of the patients were single and 31 (62\%) were married.

<table>
<thead>
<tr>
<th>Domicile</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Urban</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4: Domicile

Table 4 shows that patients from rural area were 30 (60\%) and from urban areas were 20 (40\%).

<table>
<thead>
<tr>
<th>Education</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Up to Secondary Education</td>
<td>42</td>
<td>54</td>
</tr>
<tr>
<td>Up to Graduation</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5: Educational Status

Table 5 shows that 15 of the total sample (30\%) were illiterate while 22 (44\%) had up to secondary schooling and 13 (26\%) had education up to graduation.

<table>
<thead>
<tr>
<th>Family Income</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-Income Group</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Middle-Income Group</td>
<td>31</td>
<td>62</td>
</tr>
<tr>
<td>High-Income Group</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 6: Family Income

Table 6 shows that 16 (32\%) of OCD patients belong to low income group whereas family income of 31 (62\%) and 3 (6\%) patients belong to middle income and high income group.

<table>
<thead>
<tr>
<th>Religion</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>47</td>
<td>94</td>
</tr>
<tr>
<td>Muslim</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 7: Religion

Table 7 shows that the sample consisted predominantly of Hindus. 47 (94\%) were Hindus while the rest 3 (6\%) were Muslims.

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absent</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>Affective</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Schizophrenic</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>OCD</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 8: Family History

Table 8 shows that there was no family history of mental illness in 35 (70\%) of cases. 11 (22\%) patients had family history of affective disorder, and 2 (4\%) each of schizophrenia and OCD respectively.

<table>
<thead>
<tr>
<th>Duration of Illness</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 2 years</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>&lt; 2 years</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 9: Duration of Illness

Table 9 shows that 15 (30\%) patients had duration of illness less than two years while the rest had illness of more than two years.


**Table 10: Comorbid Axis I Disorder**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Number (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>Depression</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Phobia</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Mania</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 10 shows that depression was most common comorbid disorder: 21 cases (42%) had depression. Phobia 4 cases (8%), Schizophrenia 1 case (2%), and mania 1 case (2%) were the other comorbid disorders. There were no comorbid disorders in 23 (46%) of cases.

**DISCUSSION**

The present study had a sample of 50 compared favourably with that of other authors. In the present study, ICD-10 criteria was used for the diagnosis of OCD and Y-BOCS checklist for study of phenomena of OCD. For comorbidity study, MINI 5.0 was used in present study. Previous studies have used ICD-9 and DSM III for diagnosis. Some studies used semi-structured personal interviews to arrive at the diagnosis. In these studies, obsessive compulsive and associated phenomena were collected from the patients’ case records using a checklist.

Age Distribution: As seen in Table 1, 46% of patients were between 19-25 yrs. of age and 16% were between 26-34 yrs. of age. This was comparable to the finding from other studies where over half of the patients exhibited symptoms of OCD. 35-43 yrs. (26%), 44-51 yrs (6%), and 52-58 yrs. (6%) made up the remaining patients.

Sex Distribution: The sex distribution of 50 patients included in the study was 44% males and 56% females as seen in Table 2. There was a slight female preponderance. The female predominance in OCD has been reported by various authors. One Indian study reported a lower rate of psychiatric help seeking among females in the developing country. But, the current study shows a higher rate of females seeking treatment than males.

**Marital Status**

Celibacy rate of 40-50% for men and 27-39% for women have been reported in OCD patients. In the present study, 19 (38%) subjects were single and 31 (62%) were married as seen in Table 3. 16 males and 3 females were single. Nearly all males were between 20-25 years of age and were students i.e. not having been considered for marriage by their families. Therefore, this could not be considered in celibacy rate. However, one previous study has mentioned various socio-cultural factors operating in this area, which lead to low celibacy rate in India as compared to western studies. One of such factor is strong pressure against bachelorhood in Indian families.

**Domicile**

40% of cases were from urban background and 60% were rural as seen in Table 4. The overall representation of rural patients in this study from the state like Andhra Pradesh seems to be a consequence of the fact that most of the psychiatric services in India are now reaching in rural areas and in areas in and around Vijayawada.

**Education**

Several studies suggest that obsessive compulsive patients are of above average social class and intelligence. In the present study, 20% were illiterates, 54% had up to secondary schooling, and only had 26% up to graduate as seen in Table 5. This possibly suggests a changing trend that even people with low education status are aware about OCD and are willing to take treatment.

**Family Income**

People from middle and upper classes were affected with OCD more commonly. But, in the present study, 32% patients were from low-income group, 62% were from middle-income group, and 6% were from upper-income group as seen in Table 6. The factors contributing again would be the awareness about psychiatric illness and affordability of medication and treatment.

**Religion**

The present study found 94% of the patients were Hindus and 6% consisted of Muslims as seen in Table 7. This may reflect the role of socio-cultural factor in OCD. The Indian population dominated by Hindus with the cultural emphasis on the value of cleanliness of the body as well as surroundings maybe an influencing factor. The Hindu code or ethnic provides a great variety of purification rituals. The scripture regards the human body as basically dirty and an object of disgust and need for repeated cleansing of one's body is over emphasized.

**Family History**

In the present study, it was found that 4% of the patients had family history of OCD, 22% had family history of affective disorder, and 4% had family history of schizophrenia. 70% had no family history of mental illness as seen in Table 8. In a study, 35% of first-degree relatives of OCD patients suffering from OCD. In another study, 35.5% relatives of OCD children had clinical or subclinical OCD. The lower percentage of family history of OCD in the present sample may be due to difficulty identifying subclinical syndrome from culturally sanctioned behaviours.

**Duration of Illness**

70% of the patients had OCD of more than two years and rest had duration of illness less than 2 years as seen in Table 9. The present study was based on one-time contact with the patients; therefore, the course of illness could not be compared with other studies.

**Comorbid Axis I Disorders**

The present study revealed presence of depression in 42% of the patients, phobia in 8% of cases, schizophrenia and mania in 2% cases each as seen in Table 10. The relationship between obsessions and depression has also been noted in previous studies. Very high rate of depression (42%) was also found in the index study as in another study in 45% of patients. A study described schizophrenia in 12% of OCD patients while another found 3.5% obsessional symptoms in schizophrenics.

The current study also found that 2% of patients satisfied criteria for schizophrenia. However, as found in other studies, only one patient had OCD symptoms with mania.
SUMMARY AND CONCLUSIONS

50 consecutive patients, both male and female took part in this study and they had satisfied the ICD-10 diagnostic guidelines for OCD. They were interviewed for socio-demographic data and the Y-BOCS checklist and M.I.N.I were administered. The data were observed and following conclusions were drawn.

1. Variables Sex, Gender, Education, and Socio-Economic Class have shown a gradual change like in: More female preponderance, higher awareness of the illness among the middle and lower economic class along with illiterates and undergraduates of people over the years. Most patients were between the age group of 18-25 yrs.

2. Rural and low and middle income patients are increasingly seeking treatment for OCD.

3. Most common family history of psychiatric illness found was affective disorders.

4. Most patients had a duration of illness of more than 2 yrs.

5. Depression as a syndrome was found to be the common comorbidity in OCD whose trend has remained the same over the years.

REFERENCES


