

## OBSESSIVE-COMPULSIVE DISORDER A STUDY ON CLINICAL PHENOMENOLOGY

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### Abstract

This observational study was conducted at two Military Hospitals (CMH) of Bangladesh over a period of two years. The aim of the study was to evaluate the clinical phenomenology of Obsessive-Compulsive Disorder (OCD). Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) was used to identify and group OCD symptoms and rate symptom severity. The age of the patients ranged from 16-45 years.

Out of 40 cases 18 were male. Positive family history of OCD ( $p=0.258$ ) was observed in 11.11% of male and 27.27% of female patients. Mean duration of the illness was  $3.25\pm 2.76$  years. The obsession of dirt and contamination was in 55% of the patients. Majority of the patients (70%) manifested obsessional thoughts. Mean time spent on obsession was  $5.18\pm 2.40$  hours per day. Half of the patients spent 3-8 hours on obsessions. Concomitant compulsions were observed in 90% of the patients. Cleaning/washing compulsions were present in 55% of the patients. Forty five percent patients spent 3-8 hours on compulsions per day with a mean of  $4.32\pm 2.29$  hours. Co-morbid psychiatric disorder was reported in 80% of the patients. This study reveals that patients with OCD suffer over a long period of time, spend a lot of time on their obsessions and compulsions impairing their social and occupational functioning and majority of them also suffer from co-morbid psychiatric disorders. Y-BOCS is helpful in documenting the phenomenology of OCD.

**Key words:** Obsessive compulsive disorder, phenomenology

### Introduction

The Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSM-IV) defines the obsessive-compulsive disorders (OCD) as recurrent obsessions or compulsions that are time consuming or cause marked distress or significant impairment in daily functions. The DSM-IV further states that the obsessions are recurrent and intrusive thoughts, ideas, images or impulses those cause marked anxiety and distress. Compulsions are defined as repetitive behaviours or mental acts that prevents or reduce anxiety caused by an obsession. These are often repeated a set number of the times<sup>1</sup>. Clinical obsessions include the fear of dirt/germ, a

yearning for symmetry/certainty, suspicion, sexuality and a fixation on religion. Thus compulsions often include rituals focused on cleaning/washing, controlling, arranging, counting, touching and collecting<sup>2</sup>. However, the symptoms of OCD are remarkably heterogeneous to the extent that two patients with this diagnosis can display completely non overlapping symptom patterns<sup>3</sup>. The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) categorizes the symptoms of OCD<sup>4</sup>. Patients with OCD recognize that their thoughts and behaviours are excessive and unreasonable and they struggle to resist them<sup>5</sup>. More than one-third of adults and about 40% of children diagnosed as OCD deny that their compulsions are driven by obsessive thoughts<sup>6,7</sup>. Around 30% of the adults constitute a sub group of adult onset OCD defined by a poorer prognosis and resistance to treatment<sup>8</sup>. OCD affects both male and female. In childhood boys are affected more than girls, the ratio is 2-3:1<sup>9</sup>. In adulthood the ratio reverses with a male female ratio of 1:1.35<sup>10</sup>. Life time prevalence of OCD in adult varies from 1.1% to 3.9%<sup>11,12</sup> and OCD presents itself in 2.7% of general population<sup>13</sup>. No difference in prevalence occurs across socioeconomic strata<sup>12</sup>. One study in Bangladesh found 0.5% population prevalence of OCD<sup>14</sup>. OCD is the fourth-most common mental disorder<sup>15</sup>. Although the disorder affects individuals of all ages, the period of greatest risk is from childhood to middle adulthood<sup>5</sup>. Median age of onset is 21 years; age of onset is generally lower in males than in females<sup>12</sup>. Patients experience a chronic or episodic course with exacerbations that can substantially impair social, occupational and academic functioning<sup>5</sup>. Obsessive compulsive events usually consume at least an hour of the sufferer's daytime period and cause embarrassment in social situations<sup>16</sup>.

Systematic research on OCD beginning in early 1980's was encouraged by the development of reliable diagnostic criteria<sup>17</sup>, clinical evidence of the seriously impairing nature of OCD<sup>18</sup> and early suggestions that OCD responded to both the serotonergic tricyclic antidepressant clomipramine<sup>19</sup> and to behaviour therapy<sup>20</sup>. Since then the important advances have led to improved understanding of the disorder. The development of standardized symptom severity rating was helpful to document the clinical phenomenology of OCD<sup>18</sup>. This study was conducted to identify the clinical

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phenomenology of OCD in Bangladeshi patients.

### Materials and Methods

This observational study was carried out at Combined Military Hospitals (CMHs) of Dhaka and Chittagong over a period extending from April 2008 to March 2010. Consecutive 40 cases with OCD were included in this study. Demographic data were recorded in a pre-designed format. Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) was used to identify and categorize the OCD symptoms and to rate the severity of OCD. Diagnosis of OCD was made on the basis of DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders-Text Revision)<sup>1</sup>. Detail history was taken and mental status examination was done to identify the co-morbid psychiatric disorders. Data were verified and analyzed manually and presented in tables. Fisher's exact test was done to measure the level of significance where applicable. The p value less than 0.05 was considered to be significant.

### Results

The age and sex distribution of 40 cases are shown in (Table-I). The age of the patients ranged from 12 to 45 years with a mean of  $27.5 \pm 8.8$  years. The mean age was slightly higher in males ( $28.33 \pm 7.96$ ) than in females ( $26.82 \pm 7.20$ ). Majority of the patients (55%) belonged to the age group 20-30 years. Eighteen (45%) patients were male and 22 (55%) were female; male female ratio being 1:1.2. Eleven percent of the male and 27.27% of the female patients had positive family history of OCD. (Table-II) shows the duration of the illness.

**Table-I:** Distribution of patients as per age group and sex (n=40).

| Age group (in years) | Sex         |             | Total Number (%) |
|----------------------|-------------|-------------|------------------|
|                      | Male        | Female      |                  |
| 11-20                | 02          | 04          | 06(15)           |
| 21-30                | 10          | 12          | 22(55)           |
| 31-40                | 04          | 04          | 08(20)           |
| 41-50                | 02          | 02          | 04(10)           |
| Total                | 18          | 22          | 40(100)          |
| Mean±SD              | 28.33± 7.96 | 26.82± 7.20 | 27.5±8.8         |

**Table-II:** Duration of illness (n=40).

| Year                          | Frequency | Percent |
|-------------------------------|-----------|---------|
| <1                            | 08        | 20      |
| 2-3                           | 10        | 25      |
| 4-5                           | 20        | 50      |
| >5                            | 02        | 05      |
| Mean ± SD = 3.25 ± 2.76 years |           |         |
| Range = 0.5-6.5 years         |           |         |

Table-III shows the distribution of the types of obsessions. Majority of the patients had obsessions of contamination (55%). Twenty eight patients had

obsessional thought. Obsessional doubt, slowness rumination, impulse, and phobia were present in 6, 6, 4, 4 and 2 patients respectively. More than one form of obsession was observed in 10 cases.

**Table-III:** Distribution of patient as per types of obsessions (n=40).

| Types                          | Frequency | Percent |
|--------------------------------|-----------|---------|
| Aggressions                    | 02        | 05      |
| Contamination                  | 22        | 55      |
| Sexual                         | 02        | 05      |
| Hoarding/Saving                | 00        | 00      |
| Religious                      | 12        | 30      |
| Need for symmetry or exactness | 04        | 10      |
| Somatic                        | 02        | 05      |
| Miscellaneous                  | 04        | 10      |
| Multiple responses present.    |           |         |

Half of the patients were found to spend 3 to 8 hours on obsession. Of the rests, 25%, 18% and 7% spent 1 to 3, >8 and up to 1 hour respectively. Mean time spent on obsession was  $5.18 \pm 2.40$  hours. Sixteen male patients of 18 (88.88%) and 20 female patients of 22 (90.90%) had concomitant compulsions. Statistics shows no significant sex variation ( $p=0.999$ ). Table-IV shows type of compulsions observed.

**Table-IV:** Distribution of patient as per types of compulsions (n=40).

| Types                | Frequency | Percent |
|----------------------|-----------|---------|
| Cleaning/washing     | 22        | 55      |
| Checking/repeating   | 08        | 20      |
| Counting             | 06        | 15      |
| Ordering/arranging   | 02        | 05      |
| Miscellaneous        | 02        | 05      |
| Hoarding /collecting | 00        | 00      |

**Table-V:** Severity rating of OCD (n=40).

| Severity (Score on Y-BOCS) | Frequency | Percent |
|----------------------------|-----------|---------|
| Sub-clinical (00-07)       | 00        | 00      |
| Mild (08-15)               | 06        | 15      |
| Moderate (16-23)           | 26        | 65      |
| Severe (24-31)             | 06        | 15      |
| Extreme (32-40)            | 02        | 05      |

Most of the patients spent 3 to 8 hours of time on compulsion. Thirty percent was observed to spend 1 to 3 hours time in that respect. Only 15% and 10% patients were observed to spend >8 and <1 hour time respectively. Mean time spent on compulsion was  $4.32 \pm 2.29$  hours per day. Severity following score on Y-BOCS is shown in (Table-V). Sixty percent of the patients had depression as co-morbid psychiatric

disorders. Anxiety disorders were observed with 15% of cases. Only in 20% cases no other psychiatric disorder was found.

### Discussion

Previously thought uncommon, recent studies show that OCD is the 10th leading cause of disability of all medical conditions<sup>21</sup>. OCD is equally common in man and women<sup>22</sup>. In this study, 45% patients were male and 55% were female, male female ratio being 1:1.2. Some studies found slight preponderance of females<sup>12,23-24</sup>. OCD may develop in childhood and adult life. In this study 55% of the patients belonged to the 21-31 year age group. Mean age of the patients was 27.5±8.8 years. Males (Mean age 28.33±7.96) were slightly older than females (Mean age 26.82±7.20) but the difference was not significant ( $p>0.05$ ). Age of onset of OCD is generally lower in males than in females<sup>9</sup> which is opposite to reported finding. This may be due to earlier treatment seeking by the female patients. Other studies found the age of onset was maximum between 20-25 years<sup>25</sup>. Two out of 18 males and 6 out of 22 female patients had positive family history of OCD. Of course, the difference was not statistically significant ( $p=0.258$ ). Pauls et al found that 10.3% of the first-degree relatives of OCD patients had OCD and 7.9% had sub threshold OCD<sup>26</sup>. Twin studies reported increased heritability link in child (45-65%) than in adult (27-47%) OCD<sup>27</sup>. OCD is a chronic and persistent illness<sup>28</sup>. Patients who develop OCD spent a mean of 8.9 years of life with the disorder<sup>25</sup>. In this study 50% of the patients were suffering for 4-5 years. Mean duration of the illness was 3.25±2.76 years. The difference was due to lower mean age of the patients in this study. Majority of the patients in this study had obsession of contamination (55%) and religion (30%), though more than one obsession were present in some patients. Seventy percent of the patients manifested obsession in the form of thought and 30% in more than one form. The patients spent a lot of time on obsessions. In this study 50% of patients spent 3-8 hours and 18% of patients more than 8 hours per day. Mean time spent was 5.18±2.40 hours per day. The National Comorbidity Survey Replication (NCS-R) data on time consumed by obsession shows mean of 5.9 hours per day which is almost close to findings of reported study<sup>29</sup>.

Eighty nine percent of the male and 90.9% of the female patients had concomitant compulsions in this study and the difference was not significant ( $p=0.999$ ). However OCD may manifest sometimes without overt compulsion<sup>30</sup>. In a study 55% of the patients were purely obsessive, 11% were purely compulsive and 34% were both obsessive and compulsive. The majority (55%) of the patients had compulsive cleaning followed by checking (20%), counting (15%) and ordering/arranging (5%). In western society the frequency of individual compulsions are little different. Checking (79.3%),

hoarding (62.3%) and ordering (9.1%) were the findings in a study done by Hoehn-Sarria<sup>30</sup>. The differences may be due to cross-cultural variations. Time spent on compulsion was also high in this study. Mean time spent on compulsion was 4.32±2.24 hours per day. Forty five percent of patients spent 5-8 hours and 15% spent more than 8 hours per day on compulsion. One study found a mean of 4.6 hours per day spent on compulsive acts, which is close to our study<sup>29</sup>. In this study majority of the patients (65%) had moderate OCD, only 5% had extreme OCD.

OCD often manifests along with other psychiatric disorders. In this study 80% had co-morbid psychiatric disorder, depression being present in 60% of the patients followed by anxiety disorder (15%). In a study in Northern California, 75% of the OCD patients were found to have one or more co-morbid psychiatric disorder<sup>31</sup>. Alfine found co-morbidity in 62% of patients with OCD, depressive episode in 37% and generalized anxiety disorder in 31% patients<sup>12</sup>.

### Conclusion

OCD is a chronic condition and is associated with significant suffering, leads to a great deal of morbidity and is associated with major economic costs. Many aspect of life are negatively impacted by OCD. Early recognition and treatment may alleviate the sufferings of the patients.

### References

1. American Psychiatric Association and American Psychiatric Association Task Force on DSM-IV. Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR. Washington DC, USA: American Psychiatric Association; 2000. p.943.
2. Karomustafalioglu KO. Obsessive compulsive disorder. Galenos Monthly Medical Journal 2006; 9: 53-66.
3. Mataix-Cols D, Condeelis do M, Comos R, Leckman JE. A multi-dimensional model of Obsessive-Compulsive Disorder. Am J Psychiatry 2005; 162: 228-238.
4. Goodman WK. The Yale-Brown Obsessive-Compulsive Scale 1 development, use and reliability. Arch Gen Psychiatry 1997; 46: 1006-1011.
5. Nestadt G, Samuels J, Ridde M, et al. A Family Study of Obsessive-Compulsive Disorder. Arch Gen Psychiatry 2010; 57: 358-363.
6. Karno M, Golding JM, Sorenson SB, Burnam MA. The epidemiology of obsessive-compulsive disorder in five US communities. Arch Gen Psychiatry 1988; 45: 1094-1099.
7. Swealo SR, Rapoport JC, Leonard H, Lenone M, Cheslow D. Obsessive-compulsive disorder in children and adolescents-clinical phenomenology of 70 consecutive cases. Arch Gen Psychiatry 1989; 46: 335-341.
8. Storch EA. Clinical features associated with treatment resistant paediatric obsessive-compulsive disorder. Comp Psychiatry 2008; 49: 35-42.
9. Leonard HL. Tics and Tourette' disorder: A 2 to 7 year follow-up of 54 obsessive-compulsive children. Am J Psychiatry 1992; 149: 1244-1251.
10. Castle DJ, Deale A and Marks IM. Gender difference in obsessive-compulsive disorder. Aus N Z Psychiatry 1995; 29: 114-117.
11. Robins L, Helzer J, Croughani, Ratliffe K. The NIMH Epidemiological Catchments Area Study. Arch Gen Psychiatry 1981; 38: 381-389.

12. Alfine R, Torres MD, Martin J, et al. Obsessive-Compulsive Disorder: Prevalence, Comorbidity, Impact and Help-seeking in the British National Psychiatric Morbidity Survey of 2000. *Am J Psychiatry* 2006; 163:1978-1985.
13. Merikangas KR. Clinical Features of Anxiety Disorders. In: Kaplan HI, Sadock BJ, editors. *Comprehensive Textbook of Psychiatry*, 8th ed. London: Lippincot Williams & Wilkins 2004. p.1104-1126.
14. Firoz AHM, Karim ME, Alam MF, Rahman AHMM, Zaman MM. Prevalence, Medical Care, Awareness and Attitude Towards Mental Illness in Bangladesh. *Bangladesh Journal of Psychiatry* 2006; 20(1): 9-36.
15. Hollander, Eric, Dan J, Stein. *Diagnosis and Assessment of Obsessive-Compulsive Disorder*. London: Informa Health Care; 1997. p.1.
16. Yoldascan E, Ozenli Y, Kulu O, Topal K, Bazlut AI. Prevalence of obsessive-compulsive disorder in Turkish university students and assessment of associated factors. *BMC Psychiatry* 2009; 9: 40.
17. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders Third Edition (DSM-III)*. Washington DC: American Psychiatric Association: 1980.
18. Rasmussen SA, Tsuang MT. Clinical characteristics and family history in DSM-III obsessive-compulsive disorder. *Am J Psychiatry* 1986; 143:317-322.
19. Fernandez, Cordoba E, Lopez I, Aliso J. Use of monoclomipramine in psychiatric patients who are resistant to other therapy. *Actus Luso Esp Neurol Psiquiatr* 1967; 26: 119-147.
20. Marks IM, Hodson R, Rachman J. Treatment of chronic obsessive-compulsive neurosis by in-vivo exposure. A two year follow-up and issues in treatment. *Br J Psychiatry* 1975; 127:149-364.
21. Murray CJL, Lopes AD. *The global burden of disease*. Boston (MA): Harvard University Press; 1996.
22. *The ICD-10 Classification of Mental and Behavioural Disorders: Clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization; 1992. p.142-144.
23. Firmen B, Lorin M, Koran MD, Jenus L, Leventhal MD, Jerobsen A. The Prevalence of Clinically Recognized Obsessive-Compulsive Disorder in a Large Health Maintenance Organization. *Am J Psychiatry* 2006; 201:1904-1910.
24. Samuels JF, Riddk MA, Greenber BD, et al. The OCD Collaborative Genetic Study: methods and sample description. *Am J Med Genet B Neuropsychiatric Genet* 2006; 141 (B): 201-207.
25. Karn M, Golding J. Obsessive-compulsive disorders. In: Robins LN, Regier DA, editors. *Psychiatric Disorders in America: The Epidemiological Catchments Area Study*. New york: The Free Press; 1990. p.204-219.
26. Pauls DL, Alsobrook JP (2nd), Goodman W, Rasmussen S, Leckman JF. A family study of obsessive-compulsive disorder. *Am J Psychiatry* 1995; 152: 76-82.
27. Stewert SE, Pauls DL. The Genetics of Obsessive-Compulsive Disorder. *Focus* 2010; 8(3): 76-84.
28. Eisen JL, Pinto A, Marcebo MC, Dyck IR, Orlando ME, Rasmussen SA. A 2 year prospective follow-up study of the course of obsessive-compulsive disorder. *J Clin Psychiatry* 2010; 71(8):1033-9.
29. Ruscio AM, Stein DJ, Chiu WT, Kessler RC. The Epidemiology of Obsessive-Compulsive Disorder in the National Comorbidity Survey Replication. *Mole Psychiatry* 2010; 15 (1): 53-63.
30. Hoehn-Saria R, Barks dale VC. Impulsiveness in obsessive-compulsive patients. *Br J Psychiatry* 1983; 143:177-182.
31. Steketee G, Eisen J, Dyck I, Warshen M, Rasmussen S. Predictors of course in obsessive-compulsive disorder. *Psychiatry Res* 1999; 89 (3): 229-238.