

Variation in obsessive-compulsive symptoms between children and adults

Sultana Algin, S. M. Yasir Arafat, Sayedul Ashraf Kushal, Sumaiya Nausheen Ahmed and Mohammad Waliul Hasnat Sajib

Article Info

Department of Psychiatry, Faculty of Medicine, Bangabandhu Sheikh Mujib Medical University, Shahbag, Dhaka, Bangladesh

For Correspondence:

Sultana Algin
algin28@gmail.com

Received: 29 April 2018
Accepted: 26 May 2018
Available Online: 28 May 2018

ISSN: 2224-7750 (Online)
2074-2908 (Print)

DOI: 10.3329/bsmmuj.v11i2.36510

Keyword: Obsessive-compulsive disorder

Cite this article:

Algin S, Arafat SMY, Kushal SA, Ahmed SN, Sajib MWH. Variation in obsessive-compulsive symptoms between children and adults. *Bangabandhu Sheikh Mujib Med Univ J.* 2018; 11: 130-133.

Copyright:

The copyright of this article is retained by the author(s) [Attribution CC-BY 4.0]

Available at:

www.banglajol.info

A Journal of Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh

Abstract

The complexity and diversity of clinical manifestations of obsessive-compulsive disorder have intrigued psychiatrists for a long time. Various differences have been noted in the presentation of obsessive-compulsive disorder of different age group. It was aimed to assess the variations of presentation of symptoms in children and adults in a tertiary level hospital. This study was done in an outpatient department from May 2015 to April 2017. Four hundred patients were included in the study consecutively after considering the inclusion and exclusion criteria. Respondents were interviewed with a semi-structured questionnaire which includes demographic variables, psychiatric diagnoses (DSM-IV-TR) and Y-BOCS symptom checklist. Obsessive-compulsive disorder started before adulthood in 41.5% of patients and onset after 18 years was found to be 58.5%. In this study, cases of obsessions, dirt and contamination was seen to predominate in both early- and late-onset obsessive compulsive disorder (68.3 and 71.4% respectively) and among the cases of compulsions, cleaning variety was found to be highest in both early- and late-onset (65.8 and 73.3% respectively). Age should be taken into account when evaluating obsessive compulsive disorder patients. The results suggest that more studies are necessary to determine whether in fact, it defines a homogeneous and particular group in obsessive-compulsive disorder.

Introduction

Obsessive-compulsive disorder is a chronic debilitating psychiatric disorder, which affects about 1-3% of the population worldwide. Among the adults, men and women are equally likely to be affected, but among the adolescents, the propensity is more among the boys.^{1,5} Epidemiological studies conducted in several countries reported the current prevalence around 1% and lifetime prevalence ranging from 2 to 3%.^{3,4} These figures make obsessive-compulsive the fourth most common psychiatric diagnosis after phobias, substance-related disorder and major depressive disorder. Epidemiological studies in Europe, Asia and Africa have confirmed these rates across the cultural boundaries.⁶

Obsessive-compulsive symptoms are remarkably diverse, and the clinical presentation can vary significantly.⁷ The age at onset of obsessive-compulsive disorder is an important factor in subtyping it. Early onset is associated with the predominance of symmetry/exactness and religious obsessions, and hoarding, repeating, counting and tapping kind of compulsions; a higher frequency of compulsions not preceded

by obsessions; a higher frequency of sensory phenomena; and greater severity of obsessive-compulsive disorder symptoms along with a chronic course.⁸⁻¹³ Presentation of symptoms can vary due to the age of the patient and different developmental phases. Previous studies that compared early- and late-onset obsessive-compulsive disorder had relatively smaller sample sizes.^{9,10,14} A large sample in this study would not only confirm the findings of previous studies but also help examine cross-cultural similarities and differences if any. Authors aimed to assess the variations of obsessive-compulsive disorder symptom presentation in children and adults in a referral level hospital in Dhaka city.

Materials and Methods

This study was conducted in obsessive-compulsive disorder clinic of the outpatient department from May 2015 to April 2017. The data set was composed of 400 consecutive patients with obsessive-compulsive disorder diagnosis according to DSM-IV criteria visiting the clinic. Patients who were excluded had either active psychotic disorder, active manic episode, orga-



Table I**Association between obsession and onset (n=400)**

	Onset of symptoms (%)		Total (n)
	Before 18 years	After 18 years	
Obsession			
Dirt and contamination	68.3	71.4	274
Religious	33.5	26.9	116
Aggression	16.5	18.9	70
Sexual	22.0	21.6	85
Symmetry	15.2	17.6	65
Somatic	0.6	2.6	7
Hoarding	0.6	0.9	3
Miscellaneous	18.9	15.0	65
Compulsions			
Cleaning	65.8	73.3	251
Counting	9.9	14.6	45
Checking	44.7	53.4	178
Repeating	26.3	28.2	98
Orderliness	29.6	30.6	108
Hoarding	5.3	1.5	11
Miscellaneous	3.9	1.9	10
Absent	2.0	1.0	5

nic brain syndrome, mental retardation and acute substance withdrawal.

Face-to-face interview was conducted with a semi-structured questionnaire which includes demographic variables, psychiatric diagnoses (DSM-IV-TR) and Y-BOCS symptom checklist. The age of onset of obsessive-compulsive disorder was defined as the earliest age that the patient remembered having obsessive-compulsive disorder. Whenever possible, a family member was also interviewed to confirm the patients' information about age of symptom onset.

Statistical analysis

Data were processed and analyzed by Statistical Package for Social Science (SPSS) version 16 and Microsoft Excel 2007.

Results

The result showed that, out of 400 patients with obsessive-compulsive disorder, 58.8% were males and 41.5% were females. The onset of obsessive-compulsive disorder before adulthood (18 years) was found in 41.5% of patients and onset after 18 years was found to be 58.5%. Among the clinical variables, the onset before 18 years was more in

males (45.5%) than females (35.8%).

In this study cases of obsessions, dirt and contamination were seen to predominate in both early- and late-onset obsessive-compulsive disorder (68.3 and 71.4% respectively). This was followed by religious and sexual obsession in both early- and late-onset obsessive-compulsive disorder (Table I).

Among the cases of compulsions, cleaning variety was found to be highest in both early- and late-onset (65.8 and 73.3% respectively). This was followed by compulsion in the form of checking and orderliness in both early- and late-onset obsessive-compulsive disorder. Dirt and contamination were found to be highest among the age group 31-40 years, religious obsession in 31-40 years and sexual obsession in 41-50 year age group (Table I).

Discussion

In our study, obsessive-compulsive disorder started before 18 years among 41.5% of patients and onset after 18 years was found to be 58.5%. It was also found in our study that, age of onset of male patients was early.

Previous studies revealed obsessive-compulsive disorder as a clinically as well as etiologically heterogeneous and early-onset can be considered as a different subgroup.^{15,16} Moreover, another study revealed about 50 to 80% of obsessive-compulsive disorder cases diagnosed before 18 years of age.¹⁷

In our study, cases of obsessions, dirt and contamination were seen to predominate in both early- and late-onset obsessive-compulsive disorder (68.3 and 71.4% respectively). This was followed by religious and sexual obsession in both early- and late-onset obsessive-compulsive disorder. The study didn't reveal any significant variations in the different age groups. Similar comparison in different age groups was not found to consider and compare. However, Chowdhury et al. (2016) found that the highest percentage of patients had contamination obsession (66.7%) followed by miscellaneous obsessions (56.7%) and the highest percentage of patients had washing/cleaning compulsion (65%) followed by checking compulsion (50%) among the under 18 years age group.³ The finding of this study is somewhat consistent to our present study. Furthermore, Mullick et al. (2017) found that contamination and religious (66.7%) obsessions were highest among the obsessions and washing/cleaning compulsion (70.5%) and checking compulsion (57.5%) were highest among compulsions in under 18 years age group.⁴ Among the distributions of these two studies differences in the distribution of obsessive-compulsive disorder symptoms were noticed in the child and adolescent age group.^{3,4} Algin et al. (2018)

reported distribution of symptoms based on the gender in the adult age group where variations were noticed in frequencies but symptom domain was the same.² Dirt and contamination were the highest among the obsessions and cleaning was the highest among the compulsions.² They have similar distribution of symptom domain with the current study. Another study in Bangladesh among the adult obsessive-compulsive disorder patients reported contamination as the highest obsession (55%) and cleaning (55%) was the highest among the compulsions.⁵ So, repeated studies revealed the variations in distribution of obsessive-compulsive disorder symptoms with persistence in the symptom domain in respect of age and gender distribution.²⁻⁵

However, factor-analytic studies have shown reduced obsessive-compulsive disorder symptoms to a few clinically meaningful dimensions such as contamination/cleaning, obsessions/checking, symmetry/ordering, and hoarding.¹⁸ In this clinically-ascertained, predominantly medication-free sample of children and adolescents with obsessive-compulsive disorder, the most common obsessions were fear of harm (coming to self or family members) and contamination, which was reported by 50.0 and 43.8% of patients, respectively. The most common compulsions were washing/cleaning (43.8%), repeating routine behavior (38.8%), and ordering/arranging (37.5%). Butwicka et al. (2010) reported that, adolescents presented with more sexual, religious, and miscellaneous obsessions than older-onset adults.¹⁹

Whenever possible, a family member was consulted about the age of obsessive-compulsive disorder onset in order to reduce the recall bias. Moreover, all patients were ascertained through specialized obsessive-compulsive disorder clinic, and they could be more likely to have comorbid conditions or more severe forms of obsessive-compulsive disorder. Therefore, the current findings may not apply to obsessive-compulsive disorder patients who are not in treatment (community samples) and it is also unclear how generalizable are our findings to other countries and cultures.

Conclusion

Dirt and contamination were seen as prominent obsessions in both age groups of obsessive-compulsive disorder patients with few variations. Similarly cleaning variety was found to be highest in the age groups with slight variation in percentages. Age is a relevant factor that should be taken into account when evaluating obsessive-compulsive disorder patients to determine the clinical presentation and course, and may be considered to define more homogeneous subgroups.

References

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed. Washington DC, American Psychiatric Association, 2000.
2. Algin S, Sajib MWH, Arafat SMY. Phenomenology of obsessive compulsive disorder in Bangladesh: A cross-sectional observation. *Asian J Psychiatr*. 2018; 34: 18-20.
3. Chowdhury, MHR, Mullick, MSI, Arafat SMY. Clinical profile and comorbidity of obsessive-compulsive disorder among children and adolescents: A cross-sectional observation in Bangladesh. *Psychiatry J*. 2016; 2016.
4. Mullick, MSI, Chowdhury, MHR, Arafat SMY. Phenomenology of obsessive compulsive disorder in children and adolescents: A cross-sectional observation in Bangladesh. *Jentashapir J. Health Res*. 2017; 8: e63414
5. Rahman MH, Kamal AHMKM. Obsessive-compulsive disorder: A study on clinical phenomenology. *JAFMC Bangladesh*. 2010; 6: 13-16.
6. Chintan S, Jaymin S, Parikh MN, Vankar GK. Gender differences in presentation and phenomenology in obsessive compulsive disorder. *Int J Adv Health Sci*. 2015; 2: 145-52.
7. Nestadt G, Samuels JF, Riddle MA, Bienvenu OJ, Liang KY, Grados MA, Cullen B. Obsessive-compulsive disorder: Defining the phenotype. *J Clin Psychiatr*. 2002; 63: 5-7.
8. Fontenelle LF, Mendlowicz MV, Marques C, Versiani M. Early- and late-onset obsessive-compulsive disorder in adult patients: An exploratory clinical and therapeutic study. *J Psychiatr Res* 2003;37:127-33.
9. Jaisoorya TS, Reddy YJ, Srinath S. Is juvenile obsessive-compulsive disorder a developmental subtype of the disorder? *Eur Child Adolesc Psychiatr*. 2003; 12: 290-97.
10. Tükel R, Ertekin E, Batmaz S, Alyanak F, Sözen A, Aslantaş B, Atlı H, Özyıldırım İ. Influence of age of onset on clinical features in obsessive-compulsive disorder. *Depress Anxiety*. 2005; 21: 112-17.
11. do Rosario-Campos MC, Leckman JF, Mercadante MT, Shavitt RG, Prado HD, Sada P, Zamignani D, Miguel EC. Adults with early-onset obsessive-compulsive disorder. *Am J Psychiatr*. 2001; 158: 1899-903.
12. Lomax CL, Oldfield VB, Salkovskis PM. Clinical and treatment comparisons between adults with early- and late-onset obsessive-compulsive disorder. *Behav Res Ther*. 2009;47:99-104.
13. Albert U, Picco C, Maina G, Forner F, Aguglia E, Bogetto F. Phenomenology of patients with early

- and adult onset obsessive-compulsive disorder. *Epidemiol Psychiatr Soc.* 2002; 11: 116-26.
14. Chabane N, Delorme R, Millet B, Mouren MC, Leboyer M, Pauls D. Early-onset obsessive-compulsive disorder: A subgroup with a specific clinical and familial pattern. *J Child Psychol Psychiatr.* 2005; 46: 881-87.
 15. Miguel EC, Leckman JF, Rauch S, do Rosario-Campos MC, Hounie AG, Mercadante MT, Chacon P, Pauls DL. Obsessive-compulsive disorder phenotypes: Implications for genetic studies. *Mol Psychiatr.* 2005; 10: 258-75.
 16. Leckman JF, Bloch MH, King RA. Symptom dimensions and subtypes of obsessive-compulsive disorder: A developmental perspective. *Dialogues Clin Neurosci.* 2009; 11: 21-33.
 17. Kessler RC, Berglund P, Demler O. Lifetime prevalence and age-of-onset distributions of DSMIV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatr.* 2005; 62: 593-602.
 18. Mataix-Cols D, Pertusa A, Leckman JF. Issues for DSM-V: How should obsessive-compulsive and related disorders be classified? *Am J Psychiatr.* 2007; 164: 1313-14.
 19. Butwicka A, Gmitrowicz. Symptoms clusters in obsessive-compulsive disorder influence of age and age of onset. *Eur Child Adolesc Psychiatr.* 2010; 19: 365-70.
-