Saudi Journal of Medical and Pharmaceutical Sciences **ISSN 2413-4929 (Print)**
Scholars Middle East Publishers **ISSN 2413-4910 (Online)**
Dubai, United Arab Emirates
Website: https://saudijournals.com/

Study of Sociodemographic Profile and Comorbidities of Obsessive-Compulsive and Related Disorders in Children Attending Child Guidance Clinic in a Tertiary Care Hospital

Dr. Dipak Kumar Patra[1], Dr. Saswati Nath[2*], Dr. Chandana Debnath[3], Dr. Sourav Kundu[4], Dr. Niladri Banerjee[4]
[1]Associate Professor, Department Of Paediatrics, Murshidabad Medical College, Murshidabad, West Bengal, India
[2]Associate Professor, Department Of Psychiatry, R.G Kar Medical College, Kolkata, West Bengal, India
[3]PhD Student, Department of Psychiatry, R.G Kar Medical College, Kolkata, West Bengal, India
[4]M.D PGT, Department of Community Medicine, R.G Kar Medical College, Kolkata, West Bengal, India

Original Research Article

***Corresponding author**
Dr. Saswati Nath

Article History
Received: 21.05.2018
Accepted: 05.06.2018
Published: 30.06.2018

DOI:
10.36348/sjmps.2018.v04i06.001

Abstract: DSM V has removed OCD from Anxiety disorder group and classified the disorders with similar clinical picture together under obsessive compulsive and related disorders (OCRD). The following disorders fall under this group. Obsessive compulsive disorder, Body dysmorphic disorder, Hoarding disorder, Trichotillomania, excoriation disorder, substance/ medication induced obsessive compulsive and related disorders. This study aims to assess sociodemographic factors, sex-specific occurrence of OCRD and psychiatric and neurodevelopmental comorbidities of OCRD in children attending a child guidance clinic of R.G Kar Medical college, Kolkata. The study has been done based on the register used to record the patient related data in the child guidance clinic. All cases aged up to 12 years of age, of both sexes, registered with any diagnosis under obsessive compulsive and related disorders from July, 2009 to June 2015 (6 years) were included in the study. Results and statistical analysis were done using SPSS 23. Total 684 cases attended the clinic. Of them number of children diagnosed with obsessive compulsive and related disorders was 48 (7.02%). Most patients were in the age group 8 – 12 years. In all age groups males were more in number than females. Among males most common disorder among Obsessive compulsive and related disorder was Tic Disorder (TD) and among female most common disorder was OCD (44.4%) and next was OCD with Tic disorder (33.3%). Most common comorbidity was Attention deficit hyperactivity disorder

Keywords: Obsessive-compulsive and related disorder, comorbidity, clinic-based study.

INTRODUCTION

Background

DSM-5 has created a new chapter for a cluster of disorders that involve obsessional thoughts and/or compulsive behaviors with the name, Obsessive compulsive and related disorders (OCRD) [1]. The following disorders fall under this group(OCRD). Obsessive compulsive disorder, Body dysmorphic disorder, Hoarding disorder, Trichotillomania, excoriation disorder, substance/ medication induced obsessive compulsive and related disorder.

Obsessive-compulsive disorder (OCD) is a chronic psychiatric condition that affects people throughout their lives. Obsessive compulsive disorder is the fourth most common psychiatric diagnosis after phobias, substance-related disorders, and major depressive disorder. It is twice as prevalent as schizophrenia and bipolar disorder [2]. Prevalence of OCD is fairly consistent, with a lifetime prevalence in the general population estimated at 2 to 3 percent. Some researchers have estimated that the disorder is found in 10 percent of outpatients in psychiatric clinics [2-4].

It is characterized by a diverse group of symptoms that include intrusive thoughts, rituals, preoccupations, and compulsions i.e. repetitive behaviour that aims to reduce the anxiety related to obsessions. These recurrent obsessions or compulsions are ego-dystonic and cause severe distress to the person. Incidence of obsessive-compulsive disorder (OCD) has been rising worldwide. Because the obsessive-compulsive thoughts and rituals are usually recognized by the child as nonsensical, they are often kept hidden as long as possible – from both parents and practitioners. One-half to one-third of adult subjects had their onset in childhood or adolescence [3].

Body dysmorphic disorder is characterized by preoccupation with one or more perceived defect or flaws in physical appearance that are not observable or appear only slight to others associated with repetitive

behavior like mirror checking, skin pricking or mental acts [3]. Hoarding disorder is characterized by persistent difficulty in discarding or parting with the possessions regardless of their actual value and distress following discarding them.

Trichotillomania (hair pulling disorder) is characterized by recurrent pulling out of one's hair resulting in hair loss, and repeated attempts to decrease or stop hair pulling.

These childhood obsessive compulsive disorders are comorbid with many psychiatric and neurodevelopmental disorders. DSM5 has newly classified Obsessive Compulsive and related disorders together and till now there are very few studies in this area. This study aims to explore this cluster of disorders in a child guidance clinic.

AIMS AND OBJECTIVES

- To study the burden of obsessive compulsive and related disorder in a child guidance clinic.
- To study the demographic characters of children with obsessive compulsive and related disorders.
- To study the relative occurrence of different disorders under obsessive compulsive and related disorder among children.
- To study the comorbidities of obsessive compulsive and related disorders.

MATERIALS AND METHODS

The study has been done based on the register used to record the patient related data in the child guidance clinic of R.G Kar Medical College and Hospital. All cases aged up to 12 years of age, of both sexes, registered with any diagnosis under obsessive compulsive and related disorders from July, 2009 to June 2015 (6 years) were included in the study. In this clinic all cases were diagnosed using Child symptom inventory (CSI) and DSM IV TR. Results and statistical analysis were done using SPSS 23.

RESULTS

Total 684 cases attended the clinic from July, 2009 to June 2015 (6 years). Of them number of children with OC and related disorders was 48 (7.02%).

Table-1 and figure-1 show that most patients were in the age group 8 – 12 years. In all age groups males are more in number than females.

Table -1: Distribution of Cases in Age Groups And Gender

AGE GROUP (YEARS)	GENDER		TOTAL
	MALE	FEMALE	
>0 - 4	2 (66.7%)	1 (33.3%)	3 (100%)
>4 - 8	13 (81.3)	3 (18.8)	16 (100)
>8 -12	24 (82.8)	5 (17.2)	29 (100)
TOTAL	39 (81.3)	9 (18.8)	48 (100)

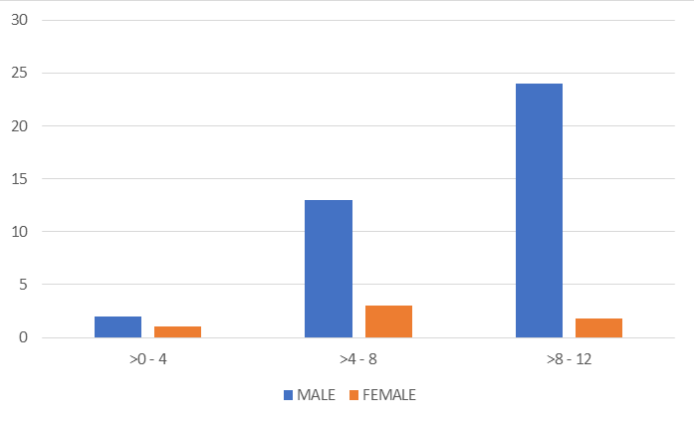

Fig-1: Distribution of Cases in Age Groups And Gender

Table-2: Other Demographic Features

DEMOGRAPHIC FACTORS		NUMBER (%)
RELIGION	HINDU	35(72.9)
	MUSLIM	13(27.1)
DWELLING	URBAN	29 (60.4)
	RURAL	19 (39.6)
FAMILY TYPE	NUCLEAR	20(41.7)
	EXTENDED NUCLEAR	6 (12.5)
	JOINT	8(16.7)
FATHER'S EDUCATION	ILLETERATE	4(8.3)
	PRIMARY	3(6.3)
	UPPER PRIMARY	9(18.8)
	SECONDARY	14(29.2)
	H. S	4(8.3%)
	GRADUATE	4(8.3%)
	POST GRADUATE	0(0%)
MOTHER'S EDUCATION	ILLETERATE	3(6.3)
	PRIMARY	6(12.5)
	UPPER PRIMARY	13(27.1)
	SECONDARY	11(22.9)
	H. S	2(4.2)
	GRADUATE	3(6.3)
FATHER'S OCCUPATION	UNEMPLOYED	3(6.3%)
	UNSKILLED WORKER	4(8.3%)
	SKILLED WORKER	13(27.1%)
	FARMER	3(6.3%)
	BUSINESS	11(22.9%)
	SERVICE	5(10.4%)
MOTHER'S OCCUPATION	HOME MAKER	31(64.6%)
	UNSKILLED WORKER	3(6.3%)
	SKILLED WORKER	2(4.2%)
	BUSINESS	1(2.1%)
	SERVICE	2(4.2%)

Table-2 shows that most patients were Hindus (72.9%) came from urban area and from nuclear family. Both parents were educated up to upper primary or secondary level. Fathers were mostly skilled workers and mothers home makers.

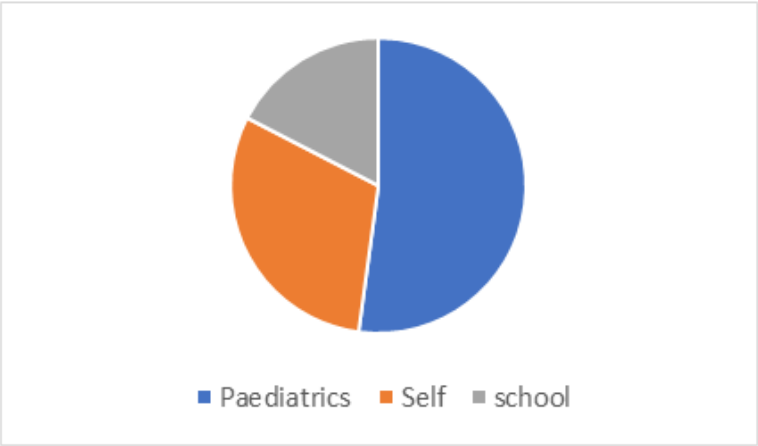

Fig-2: Referral Pattern

Figure 2 shows that, most patients (50%) were referred from Paediatrics department of RG Kar medical college. 14 patients (29.2%) came on their own and 8 patients (16.7%) were referred from school.

Table-3: Gender Based Distribution of Disorders under OCRD

GENDER	OBSESSIVE COMPULSIVE AND RELATED DISORDERS				
	OCD	TD	OCD+TD	OCD+ TRICHOTILLIMANIA	TOTAL
MALE	12(30.8%)	21(53.8%)	5(12.8%)	1 (2.6%)	39(100%)
FEMALE	4(44.4%)	2(47.9%)	3(33.3%)	0 (0%)	9 (100%)
TOTAL	16(33.3%)	23(47.9)	8(16.7%)	1 (2.1%)	48 (100%)

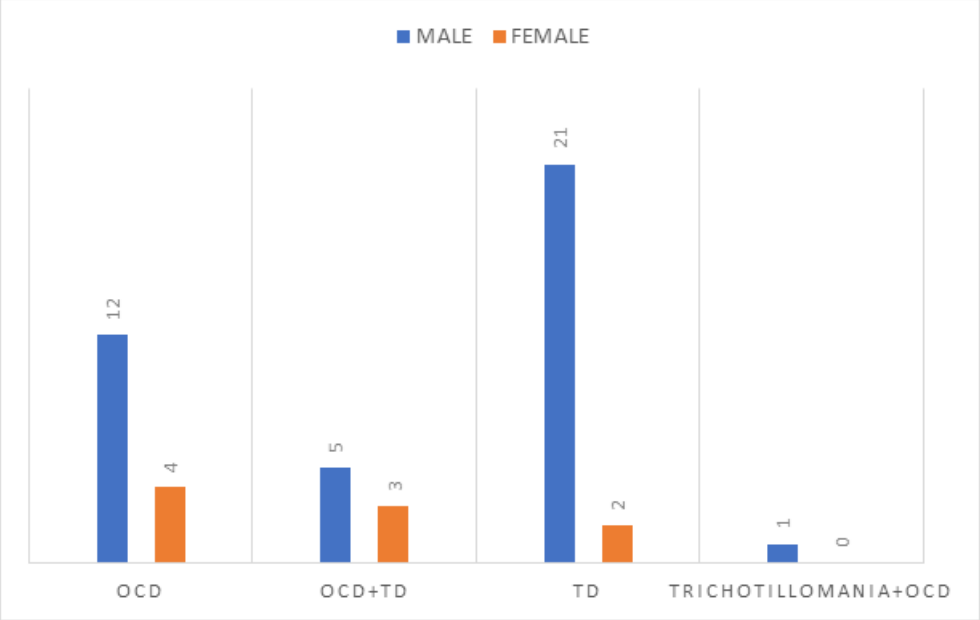

Fig-4: Gender based distribution of disorders under OCRD

In Table-3 and figure 3 we see that among males most common disorder among Obsessive compulsive and related disorder (OCRD) was Tic Disorder (TD) and among females most common disorder was OCD (44.4%) and next is OCD with Tic disorder (33.3%). Trichotillomania was found in one boy only.

Table-4: Comorbidities

GENDER	COMORBIDITY					
	ADHD N (%)	PSYCHOSIS N (%)	ADHD+DBD N (%)	ID N (%)	DEPRESSION N (%)	TOTAL N (%)
MALE	7 (50)	0 (0)	5 (35.7)	1 (7.1)	1 (7.1)	14 (100)
FEMALE	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	1 (0)
TOTAL	7 (46.7)	1(6.7)	5 (6.7)	1(6.7)	1 (6.7)	15 (100)

Table-4 shows that commonest comorbidity was Attention deficit hyperactivity disorder with or without disruptive behavior disorder.

DISCUSSION

Transient obsessions and compulsions or few ritualistic behaviors without apparent obsession are common in children which mostly disappear with increase in age. If these symptoms persist and become time consuming, cause significant distress and functional impairment then the diagnosis of OCD is made. Similar repetitive thoughts and actions are seen in other disorders under Obsessive compulsive and related disorder (OCRD). In all these disorders irrationality of the behavior is understood by the child (depends on child's age). Comorbidity with neurodevelopmental disorders and depression and anxiety are very common with OCRD. This study was done based on the register used in the child guidance clinic of R.G Kar medical college, Kolkata.

From July, 2009 to June 2015 (6 years) total 684 new cases attended the clinic from July, 2009 to June 2015 (6 years). Of them number of children with Obsessive compulsive and related disorders was 48

(7.02%). This is very close to the findings of previous researchers [2].

Table-1 and figure1 show that there were very few patients below 4 years of age. Most patients were in the age group 8 – 12 years. In all age groups males were more in number than females. Male-female ratio is 4-5:1 in all age groups above 4years. This is slightly more than previous study reports about OCD and TICS [4-6]. This is probably because in this study all disorders clustered under OCRD were taken together.

Table-2 and figure shows that most patients were Hindus (72.9%) came from urban area (60.4%) and from nuclear family (41.7%). Both parents were educated up to upper primary or secondary level. Fathers were mostly skilled workers (27.1%) and mothers home makers (64.6%).

Most patients, (50%) were referred from Paediatrics department of RG Kar medical college. 14 patients (29.2%) came on their own and 8 patients (16.7%) were referred from school. This is at par with previous study reports [7, 8].

Among males most common disorder among Obsessive compulsive and related disorder (OCRD) was Tic Disorder (TD) and among females most common disorder was OCD (44.4%) and next was OCD with Tic disorder (33.3%). Trichotillomania was found in one boy only (table 2 and figure 4). Previous study reports also have showed similar findings [3, 4, 9, 10].

Comorbidities are very common with OCRD. In our study commonest comorbidity among males was Attention deficit hyperactivity disorder (50%) and then ADHD with disruptive behavior disorder (35.7%). One girl had comorbid psychosis. Previous study reports have shown comorbid externalizing disorders to be commoner in boys and internalizing disorders commoner in girls. Cause of this discrepancy among girls is probably small sample size in our study [11, 12].

CONCLUSIONS

- 7.02% children of child guidance clinic had Obsessive Compulsive and Related disorders.
- It is more common in boys than in girls.
- Among boys most common disorder among Obsessive compulsive and related disorder was Tic Disorder (TD) and among female most common disorder was OCD.
- Most common comorbidity was Attention deficit hyperactivity disorder.

REFERENCES

1. Edition, F. (2013). *Diagnostic and statistical manual of mental disorders*. American Psychiatric Publishing, Arlington, VA.
2. Goodman, R., Heyman, I., Fombonne, E., Simmons, H., Ford, T., & Meltzer, H. Prevalence of obsessive—compulsive disorder in the British.
3. Jung, J. W., & Lee, S. (2014). Anxiolytic Effects of Quercetin: Involvement of GABAergic System. *Journal of Life Science*, *24*(3), 290-296.
4. Rintala, H., Chudal, R., Leppämäki, S., Leivonen, S., Hinkka-Yli-Salomäki, S., & Sourander, A. (2017). Register-based study of the incidence, comorbidities and demographics of obsessive-compulsive disorder in specialist healthcare. *BMC psychiatry*, *17*(1), 64.
5. Ganos, C., Martino, D., & Pringsheim, T. (2017). Tics in the pediatric population: pragmatic management. *Movement disorders clinical practice*, *4*(2), 160-172.
6. Groth, C. (2018). Tourette syndrome in a longitudinal perspective. Clinical course of tics and comorbidities, coexisting psychopathologies, phenotypes and predictors. *Danish medical journal*, *65*(4).
7. Chaudhury, S., Prasad, P. L., Zacharias, R., Madhusudan, T., & Saini, R. (2007). Psychiatric morbidity pattern in a child guidance clinic. *Medical Journal Armed Forces India*, *63*(2), 144-146.
8. Chapagai M, Dangol KM, Tulachan P. A study of psychiatric morbidty amongst children attending a child guidance clinic at a tertiary level teaching hospital in Nepal. Journal of Nobel Medical College. 2013 Mar 3;2(1):55-63.
9. Sheppard, B., Chavira, D., Azzam, A., Grados, M. A., Umaña, P., Garrido, H., & Mathews, C. A. (2010). ADHD prevalence and association with hoarding behaviors in childhood-onset OCD. *Depression and anxiety*, *27*(7), 667-674.
10. Greenberg, E., Grant, J. E., Curley, E. E., Lochner, C., Woods, D. W., Tung, E. S., ... & Keuthen, N. J. (2017). Prevalence and predictors of hair pulling disorder and excoriation disorder in Tourette syndrome. *Comprehensive psychiatry*, *78*, 1-8.
11. Peris, T. S., Rozenman, M., Bergman, R. L., Chang, S., O'Neill, J., & Piacentini, J. (2017). Developmental and clinical predictors of comorbidity for youth with obsessive compulsive disorder. *Journal of psychiatric research*, *93*, 72-78.
12. Ganos, C., & Martino, D. (2015). Tics and Tourette syndrome. *Neurologic clinics*, *33*(1), 115-136.