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Original Article PSYCHIATRY

Relationship between insight level and clinical and familial features in pediatric obsessive-compulsive disorder

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ABSTRACT

OBJECTIVE: The aim of this study was to explore the relationship between insight level and clinical and familial psychiatric features of children with obsessive-compulsive disorder (OCD).

METHODS: Children's Yale-Brown Obsessive-Compulsive Scale-Symptom Checklist, 11th item of the Children's Yale-Brown Obsessive-Compulsive Scale, Wechsler Intelligence Scale for Children Revised Form, Affective Disorders and Schizophrenia for School Aged Children Present and Lifetime Version 1.0, and Structured Diagnostic Interview for Diagnostic and Statistical Manual of Mental Disorders-IV Axis I Disorders were applied to 92 pediatric OCD patients.

RESULTS: In this study, the prevalence of OCD in the first children of the family was high (41.3%), and low insight was significantly related with concomitant intellectual disability (p=0.003). The level of insight was high in patients with comorbid OCD spectrum disorders (p<0.001). Attention deficit and hyperactivity disorder (ADHD) was the most common psychiatric diagnosis accompanying OCD (19.5%). Among the obsession–compulsion subscales, the symmetry/hoarding was higher in males (p=0.046). OCD patients with a family history of major depressive disorder (MDD) had high ADHD comorbidity rates (p=0.038). In OCD patients, whose family had psychiatric disorders besides MDD and anxiety disorders, the diagnosis rate of intellectual disability was higher than other diagnoses (p<0.001).

CONCLUSION: The sociodemographic, clinical, and familial features of pediatric OCD patients cannot be adequately clarified if the patient has limited insight. Therefore, the insight of children with OCD should be considered a range or continuity.

Keywords: Adolescent; children; family; obsessive-compulsive disorder.

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Obsessive–compulsive disorder (OCD), a neuropsychiatric disorder characterized by obsessions and compulsions, is seen in approximately 0.25%–4% of children and adolescents [1]. Although some studies have reported that frequency of OCD and the age of onset are similar in girls and boys, there are also studies showing that childhood-onset OCD is more common in boys [1–3]. Pediatric OCD is usually seen in the first child of the family [4].

In children and adolescents, the most common obsession is contamination (49%), whereas the most common compulsion is cleaning (68%). Often in children,

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obsessions and compulsions are not limited to a single area but can be of a wide variety [5]. In childhood-onset OCD, mostly children do not feel uncomfortable with their obsessions and/or compulsions due to their limited comprehension and insight of the matter. The absence of such insight can be related to the severity of the disease, its resistance to treatment, and can be a sign of worse prognosis [6]. While childhood-onset OCD is mostly associated with Attention deficit and hyperactivity disorder (ADHD) and tic disorders; OCD, which starts at or after adolescence, as in adulthood, is most frequently associated with depression and anxiety disorders [7]. However, trichotillomania, skin picking, hoarding, and body dysmorphic disorders, all of which are included in the category of obsessive–compulsive spectrum disorders in the Diagnostic and Statistical Manual of Mental Disorders (DSM 5), are thought to have high rates of comorbidity with OCD due to possible common pathophysiology [8]. OCD has a strong genetic transmission. The incidence of OCD, subclinical OCD, and obsessive personality traits in first-degree relatives of OCD cases is higher than in the general population [9]. In addition, the presence of any of the diagnoses of OCD, mood disorder, anxiety disorders, and tic disorder in first-degree relatives has shown to increase the risk of OCD [3].

Unless evaluated by child psychiatrist, childhood OCD continues to be frequently overlooked due to children and adolescents hiding their obsessions and compulsions for various reasons, having limited insight, and because their familial characteristics were not considered in the foreground. These reasons are also why the number of pediatric OCD studies is limited too. In this study, we aimed to evaluate the relationship between insight level and clinical features, additional psychiatric diagnoses, and familial psychiatric features of children and adolescents with OCD. We also aimed to compare obsession–compulsion distributions according to gender and age groups.

Highlight key points

- Obsessive-compulsive disorder (OCD) is a heterogeneous condition with evidence of familiality in a considerable proportion of patients.
- The level of insight in OCD is related to other OCD spectrum disorders and intelligence level.
- The level of insight and familial psychiatric characteristics of OCD affect the clinical features of OCD.

MATERIAL AND METHODS

Participants and Procedure

The prospective descriptive study was conducted by Dicle University in Turkiye. A total of 92 patients, aged between 6 and 18 years, who were diagnosed with OCD according to DSM 5 diagnostic criteria at their first examination conducted between March 2017 and December 2019 at the Child Psychiatry Outpatient Clinic of Dicle University were included in the study. The inclusion criteria of the study were primary diagnosis of OCD and age between 6 and 18 years. Patients with chronic systemic diseases (i.e., epilepsy and diabetes), visual and hearing impairments, and those with serious psychiatric disorders such as psychosis, those with active suicidal ideation, and those who have used psychiatric drugs for the past 3 months were excluded from the study.

Sociodemographic Data Form

All participants were asked to fill out a sociodemographic data form, which provided information regarding individual, family, and disease-related characteristics.

The Affective Disorders and Schizophrenia for School-Aged Children Present and Lifetime Version 1.0 (KSADS-PL)

KSADS-PL, which is a semi-structured diagnostic interview scale, was used to identify any past and present mental disorders [10]. Validity and reliability study of KSADS-PL and its translation into Turkish was done by Gokler et al. [11].

Children's Yale-Brown Obsessive-compulsive Scale-Symptom Checklist

Children's Yale-Brown Obsessive–Compulsive Scale (CY-BOCS)-Symptom Checklist, whose validity and reliability study for Turkish population was conducted by Karamustafalioglu et al., was used to assess OCD symptom types. Participants' OCD symptom groups were assessed according to OCD-factors (e.g., harmful/sexual, symmetry/hoarding, and contamination/cleaning) that were previously described by Højgaard et al. [12–14].

Children's Yale-Brown Obsessive-compulsive Scale

The CY-BOCS measures the severity of OCD. Insight level was evaluated by using the 11th item of the CY-BOCS. The Turkish reliability and validity study of the

scale was conducted by Karamustafalioglu et al. and the Cronbach alpha coefficient was found to be 0.81. The insight is scored between 0 and 4, where 0 is perfect insight, whereas 4 is absence of insight. Therefore, low scores represent a good insight [13, 14].

The Wechsler Intelligence Scale for Children-revised

WISC-R was used to determine the intelligence levels of children. Its Turkish standardization was carried out by Savasir and Sahin [15, 16].

The Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders-IV

SCID-I was applied by trained professionals to first-degree relatives (mother, father, and sibling [s]) to evaluate the presence of psychiatric diagnoses in the family [17]. SCID-I was adapted to Turkish by Corapcioglu et al. [18].

Data Analysis

SPSS version 17.0 (SPSS Inc., Chicago, Ill, USA) program was used in the analysis of the data. Mean, standard deviation (SD), median, interquartile range, and minimum–maximum values were used when presenting descriptive analyses. The normality of distribution was checked using the Kolmogorov–Smirnov test and histograms. Normally distributed continuous variables are reported as mean±SD, nonnormally distributed variables as median (interquartile range) or median (min–max), and categorical variables as counts (%). Differences in non-normally distributed variables between two independent groups were assessed using the non-parametric Mann–Whitney U-test. Nominal variables were compared between each other with Pearson Chi-square and Fisher's Exact Tests. The results where the p-value was below 0.05 were accepted as statistically significant.

RESULTS

A total of 92 patients with OCD (49 (53.3%) females and 43 (46.7%) males) volunteered to participate in the study. The female/male ratio was found to be 1.13. The mean age of the participants was 13.6 5±3.19 years (range: 6–18). The mean onset age of the disease was 11.70±3.13 years (range: 6–16). The patients had 3.13±1.73 siblings on average (minimum: 1 and maximum 10 siblings). Thirty-eight patients (41.3%) were the first child of the family, whereas 27 (29.3%) were the second child. The sociodemographic information of the participants is presented in Table 1.

Table 1. Patient's sociodemographic characteristic's

Variables	Mean±SD	Median (min.–max.)
Age (years)	13.65±3.19	14 (6–18)
Gender (male/female)*	43/49	46.7%/53.3%
OCD age of onset (years)	11.70±3.13	12 (6–16)
First child*	38	41.3%
Second child*	27	29.3%
Third child or later*	27	29.3%
Sibling order	3.13±1.73	2 (1–10)

*: n instead of mean±SD and % instead of median. OCD: Obsessive-compulsive disorder; SD: Standard deviation; Min: Minimum; Max: Maximum.

Table 2. Obsession-compulsion distributions according to age at onset and gender

Obsession types	Male %	Female %	p#
Harm/sexual*	14.0	20.4	0.898
Symmetry/hoarding*	9.3	2.0	0.046
Contamination/cleaning*	20.9	38.8	0.271
Multiple†	55.8	38.8	0.102
Obsession types	**≤10 ages n (%)**	**>10 ages n (%)**	**p#**
Harm/sexual*	20.0	15.8	0.910
Symmetry/hoarding*	5.7	5.3	0.816
Contamination/cleaning*	37.1	26.3	0.804
Multiple†	37.1	52.6	0.148

*: Comparing to other obsession types; †: Comparing to single obsession types; #: Compared by pearson's Chi-square test.

Multiple obsessions–compulsions were present in 43 (46.7%) of 92 OCD patients. The examination of obsession–compulsion distributions of patients according to gender and age groups showed that symmetry/hoarding subscale was significantly higher in males (9.3%) (p=0.046). No significant relationship was found between gender and other obsession–compulsion types as well as between OCD symptom distribution and early-onset OCD, which was accepted as age of <10 years (p>0.05 for all) (Table 2).

Table 3. Psychiatric diagnosis distributions of obsessive-compulsive disorder patients and their families

Clinical variables	%
Psychiatric comorbidities	
Anxiety disorders	8.7
ADHD	19.5
MDD	17.4
Intellectual disability	2.2
Tic disorders	4.4
Family history of OCD	33.7
Family history of psychiatric disorder	28.3
Anxiety	9.8
Bipolar affective disorder	3.3
MDD	13.0
Intellectual disability	1.1
Schizophrenia	1.1
Comorbid OCD spectrum disorders	
Skin picking disorder	1.1
Hoarding	4.3
Skin picking disorder+hoarding	1.1
Trichotillomania	1.1
Total n (%)	92 (100.0)

ADHD: Attention deficit and hyperactivity disorder; MDD: Major depressive disorder; OCD: Obsessive-compulsive disorder.

Forty-eight patients (52.2%) had concomitant psychiatric diagnoses. Eighteen of those patients (19.5%) had ADHD, 16 (17.4%) had major depressive disorder (MDD), 8 (8.79%) had anxiety disorders (generalized anxiety disorder (n=4), separation anxiety disorder (n=4), 4 (4.4%) had tic disorder, and 2 (2.20%) had intellectual disability. Comorbid OCD spectrum disorder was detected in 7 (7.6%) patients: 4 (4.3%) had hoarding, 1 (1.1%) had skin picking disorder+hoarding disorder, 1 (1.1%) had skin picking disorder, and 1 (1.1%) had trichotillomania. In addition, 31 patients (33.7%) had OCD and other psychiatric diseases in their 1st degree relatives. Twelve patients (13%) had MDD and 9 (9.8%) had anxiety disorders in the family. Of those 9 family members with anxiety disorders, 5 were panic disorder and 4 were generalized anxiety disorder. The patients' concomitant psychiatric diseases, comorbid OCD spectrum disorders, and familial psychiatric distribution are presented in Table 3.

According to the results of 11th item of the CY-BOCS-SC, 75 patients (81.5%) had good/moderate insight, whereas 17 (18.4%) had poor/no insight. There was no significant relationship between the level of insight and factors such as demographic characteristics of patients, family history of OCD and non-OCD psychiatric disease, early onset, OCD symptom distribution, and single/multiple obsession–compulsion sub-scales. Moreover, all patients with intellectual disabilities had poor/no insight, which was significantly higher compared to comorbidities (p=0.003). In addition, patients with comorbid OCD spectrum disorders (100.0% for all) had significantly higher rates of good/moderate insight compared to the ones that did not (p<0.001) (Table 4).

ADHD accompanying OCD (41.7%) was found to be significantly higher in patients with a family history of MDD. In addition, the diagnosis of intellectual disability was significantly higher in patients with family history of psychiatric diseases other than anxiety disorders and MDD (40.0%) (p<0.001) (Table 5).

There was no significant relationship between comorbid OCD spectrum disorders and concomitant psychiatric diseases in patients with OCD (p>0.05) (Table 6).

DISCUSSION

In this study, we evaluated the level of insight, clinical features, concomitant psychiatric diagnoses, and familial psychiatric characteristics of pediatric patients with OCD. We also compared obsession–compulsion distributions of patients by sex and age groups.

In our study, the onset of OCD, female/male ratio, and birth order of OCD patients were similar to the literature [2, 19, 20]. Thus, 41.3% of our patients were the first child of the family, whereas 29.3% were the second child. This result was also in line with the literature, where it is stated that children and adolescents diagnosed with OCD are often the first children of families. Sulloway (1996, 2001) reported that family relationships play a greater role in shaping the personality of the first child in the family and that the first children are more compliant with authority and rules [20, 21].

In our study, 43 patients (46.7%) had multiple obsessions–compulsions. Children often find it difficult to understand the nature of their symptoms. Detailed psychiatric evaluations have shown that, in children, obsessions and compulsions usually come from multiple sources rather than from a single origin [5]. The most common obsession in patients with OCD is fear of contamination, whereas the most common compulsion is cleaning [22, 23]. In our study, evaluation of distribution of obsessions and compulsions showed that multiple obsessions and compulsions were the most common, followed by contamination/cleaning subscale.

Table 4. Clinical and family features of insight level and obsessive-compulsive disorder

Clinical variables	Median (IQR)		p¥
	Poor/no insight	Good/moderate insight	
Age (years)	13 (11–16)	15 (11–17)	0.186
OCD age of onset (years)	11 (10–12)	13 (9–15)	0.167
Sibling order	2 (1–3)	2 (1–3)	0.890
Clinical and family features	**Poor/no insight n (%)**	**Good/moderate insight n (%)**	**p#**
Gender			
Male	9 (20.9)	34 (79.1)	0.570
Female	8 (16.3)	41 (83.7)	
Family history of OCD			
Absent	11 (18.0)	50 (82.0)	0.877
Present	6 (19.4)	25 (80.6)	
Family history of psychiatric disorder			
Absent	11 (16.7)	55 (83.3)	0.476
Present	6 (23.1)	20 (76.9)	
Family history of MDD	4 (33.3)	8 (66.7)	0.155
Family history of anxiety disorders	0	9 (100.0)	0.133
Family history of other psychiatric disorder	2 (40.0)	3 (60.0)	0.202
Concomitant psychiatric disorders			
ADHD	4 (22.2)	14 (77.8)	0.648
Anxiety disorder	1 (12.5)	7 (87.5)	0.648
MDD	4 (25.0)	12 (75.0)	0.460
Tic disorder	2 (50.0)	2 (50.0)	0.097
Intellectual disability	2 (100.0)	0	0.003
Comorbid OCD-spectrum disorder			
Absent	17 (20.0)	68 (80.0)	<0.001
Skin picking disorder	0	1 (100.0)	
Hoarding	0	4 (100.0)	
Skin picking+hoarding	0	1 (100.0)	
Trichotillomania	0	1 (100.0)	
OCS age of onset (years)			
≤10	8 (22.9)	27 (77.1)	0.396
>10	9 (15.8)	48 (84.2)	
CY-BOCS			
Harm/sexual*	4 (25.0)	12 (75.0)	0.919
Symmetry/hoarding*	0	5 (100.0)	0.274
Contamination/cleaning*	5 (17.9)	23 (82.1)	0.460
Multiple†	8 (18.6)	35 (81.4)	0.977

*: Comparing to other obsession types; †: Comparing to single obsession types; ¥: Compared by Mann–Whitney U-test; #: Compared by Chi-square test; ADHD: Attention deficit and hyperactivity disorder; MDD: Major depressive disorder; OCD: Obsessive-compulsive disorder; CY-BOCS: Children's Yale-Brown Obsessive-Compulsive Scale; IQR: Interquartile range; OCS: Obsessive-compulsive symptoms; MDD: Major depressive disorder.

Table 5. The relationship between concomitant psychiatric diagnosis distribution and familial psychiatric disease

Concomitant psychiatric diagnoses	OCD		Family history of MDD		Anxiety		Other psychiatric disorders	
	n	%	n	%	n	%	n	%
ADHD	4	12.9	5	41.7	2	22.2	1	20.0
Anxiety	3	9.7	2	16.7	1	11.1	0	0
MDD	7	22.6	0	0	2	22.2	0	0
Tic	1	3.2	1	8.3	0	0	0	0
Intellectual disability	0	0	0	0	0	0	2	40.0
P#	0.288		0.038		0.687		<0.001	

#: Compared by Chi-square test; ADHD: Attention deficit and hyperactivity disorder; MDD: Major depressive disorder; OCD: Obsessive-compulsive disorder.

Table 6. The relationship between patient's comorbid obsessive-compulsive disorder spectrum disorders and concomitant psychiatric disorders

OCD patients	Comorbid OCD disorders present		Comorbid OCD disorders absent		p#
	n	%	n	%	
Concomitant diagnosis					
Absent	46	54.1	3	42.9	0.566
Present	39	45.9	4	57.1	
Concomitant psychiatric disorder					
Anxiety disorders	8	9.4	0	0	0.396
ADHD	16	18.8	2	0.0	0.532
MDD	13	15.3	3	42.9	0.064
Intellectual disability	2	2.4	0	0	0.180
Tic disorder	3	3.5	1	14.3	0.682

#: Compared by Chi-square test; ADHD: Attention deficit and hyperactivity disorder; MDD: Major depressive disorder; OCD: Obsessive-compulsive disorder.

When evaluated by gender, only the symmetry/hoarding subscale was found significantly higher in boys. In a study involving OCD with onset of <12 years, the most common symptoms in boys were the order/symmetry, whereas in females, it was contamination/washing [24, 25]. Moreover, the hoarding subscale was also significantly higher in boys. Contrary to our study, Ivanov et al.'s [26] study with a 15-year-old adolescent reported that females had a higher rate of hoarding. This may be due to small sample size and the difference in the mean age and sociocultural factors. Studies have shown that the OCD symptom profile can change with the development of the child, and clinical experiences can lead to differences in obsession and compulsion content, symptom severity, and type [27]. However, in our study, where early-onset OCD was accepted as <10 years old, no significant relationship was found between onset age and OCD symptom distribution. This can be explained by the fact that we had many patients with multiple obsessions and compulsions and we were not able to categorize the symptoms individually.

In our study, ADHD was the most frequently seen concomitant psychiatric diagnosis (19.5%). In childhood-onset OCD, depression or ADHD is the most frequently seen comorbid psychiatric diagnoses, while depression and anxiety disorders are in the forefront in adolescents and adults [7]. Family studies suggest that OCD and ADHD may cosegregate in families. Reported prevalence rates of ADHD among individ-

uals with OCD have varied widely, ranging from 0% to 51% [28, 29]. MDD and anxiety disorders were the next most frequently seen concomitant psychiatric diagnoses in our study. The fact that our patients' mean age of onset of OCD was 11.70±3.13 years, which falls into childhood more than adolescence, might explain the higher rate of ADHD comorbidity.

Comorbid OCD spectrum disorder was detected in 7.6% of the participants, and the most common disorder was hoarding (4.3%). Since hoarding disorder has possible common pathophysiology with OCD, it was not surprising to see it as a comorbidity [8]. Avoidance of discarding may be similar to compulsive behaviors in OCD [30].

The rate of OCD in first-degree relatives of patients with OCD was reported as high as 35% [3]. Similarly, in our study, the OCD rate in first degree relatives was found to be 33.7%. Van Grootheest et al. [9] found that there was 45%–65% relationship between genetic factors and OCD. Twin studies examining obsessive–compulsive disorders in the general population estimated its heritability to be around 40% [31]. In addition, any of the OCD, mood disorder, anxiety disorders, and tic disorder diagnoses in first-degree relatives has shown to increase the risk of OCD in the child [3]. Similarly, in our study, the most common disorders diagnosed in first-degree relatives were MDD and anxiety disorders; however, the frequency of these disorders was not found to be higher than expected in the general population. The risk of developing MDD in their lifetime ranges between 5% and 12% in men and 10%–25% in women, whereas this risk of developing anxiety disorders was found 19.2% in men and 30.5% in women [32].

Unlike adult-onset OCD, children with early-onset OCD may not have adequate insight. Some children define their compelling thoughts and feelings with vague feelings such as disgust, feeling uncomfortable, or something not being complete rather than anxiety [33]. Grados and Riddle state that children are unaware that their OCD symptoms are excessive and meaningless, due to their low insight, strong desire to eliminate rituals, and their inability to identify and report existing symptoms [22]. Limited insight in OCD has been associated with more severe symptoms and worse prognosis [6]. In our study, there was no significant relationship between the level of insight and factors such as demographic characteristics of patients, family history of OCD and non-OCD psychiatric disease, early onset, OCD symptom distribution, and single/multiple obsession-compulsion sub-scales. However, concomitant diagnosis of intellectual disability was significantly higher in patients with poor/no insight level (100%) ($p=0.003$). The fact that loss of insight is a symptom that can also be expressed with neurocognitive insufficiency may explain the poor or no of insight in patients with intellectual disability [34, 35]. Although it has not yet been conclusively explained that OCD patients with poor insight have worse cognitive performance, there is strong evidence in this direction [36]. In addition, patients with comorbid OCD spectrum disorders (100.0% for all) had significantly higher rates of good/moderate insight compared to the ones that did not (80%) ($p<0.001$) (Table 4). Hoarding disorder was the most common comorbid OCD spectrum disorder. One study found that OCD patients with hoarding disorder comorbidity had longer disease duration, poor functionality, and insight than OCD patients without hoarding symptoms [37, 38]. In our study, on the contrary, patients with hoarding disorder had better insight. Although hoarding behavior has been universally accepted in the literature, most of these studies have been conducted in English-speaking countries and with study population consisting of predominantly white subjects. The clinical features of the hoarding disorder may vary in developing countries, those with advanced industries, individual cultures, communal cultures, urban communities, and rural communities [37]. Similarly, we think that this disorder has a cultural aspect, perhaps is considered normal and not perceived as a problem in the geography where we conducted our study.

Patients with early-onset OCD have longer disease duration and lower insight [39]. In a follow-up study on adult patients, OCD patients with poor insight showed a greater severity of obsessive–compulsive symptom and an earlier age of onset [40]. In our study, there was no significant relationship between insight and early onset, which might be because the number of patients with early-onset (≤10 years) was lower than late-onset cases, and the sample size was relatively small. Several studies have reported lower level of insight in patients with symmetry obsessions and cleaning compulsions [41]. In our study, there was no significant relationship between level of insight and OCD symptom distribution. We think that, considering OCD symptoms as a dimension and not considering multiple subscales individually and accepting them as a multiple symptom set affected this result.

Evaluation of the relationship of the participants' concomitant non-OCD psychiatric diagnoses with their familial psychiatric profile showed that the rate of ADHD (41.7%) was higher in patients with a family history of MDD. One study reported that MDD, alcohol addiction, and obsessive conditions were the most common diagnoses in parents of children with OCD [42]. In one study, half of the relatives of individuals with OCD who had OCD symptoms had at least one anxiety disorder diagnosis other than OCD [43]. Moreover, children with depressed parents have a higher risk of developing ADHD with depression and anxiety disorders [44, 45]. In our study, the reason for this high rate may be the environmental or familial factors that may lead to the development of OCD+ADHD in the child, or it may be a familial response to coping with a child that has both the OCD and ADHD. Intellectual disability was significantly higher in OCD patients, whose family had a psychiatric diagnosis other than MDD and anxiety disorders. Other diagnoses in the family were bipolar affective disorder and schizophrenia. Morgan et al. [46] reported that children of mothers with bipolar disorder were more likely to have a mental disability. Cognitive impairments, especially intellectual disability, have been shown to cause an increased risk of schizophrenia-spectrum disorders [47]. Therefore, the high rate of intellectual disability in patients with family history of schizophrenia and intellectual disability is not surprising. There was no significant relationship between the participants' comorbid OCD spectrum disorder diagnoses and non-OCD psychiatric disorder diagnoses, which may be explained by small sample size and the relatively low number of patients with comorbid OCD spectrum disorders. However, in our study, all patients with hoarding disorder comorbidity were also diagnosed with ADHD. In a study investigating the association of OCD and ADHD in children, a strong relationship was found between hoarding behavior and ADHD [48].

Limitations of the Study

The study was carried out on a small sample of individuals seeking treatment and applying to a health-care institution, therefore it does not fully reflect social diversity of local population. Another limitation of our study is the methodological differences with other studies. Finally, the lack of evaluation of OCD clinical symptom severity is another limitation.

Conclusion

This study examined the relationship between insight level and clinical and family characteristics, psychiatric disorders accompanying OCD, and the effects of age and gender on obsession–compulsion symptom distributions in children with OCD. Childhood OCD has a heterogeneous nature and can be associated with other psychiatric diagnoses. Moreover, families of children diagnosed with OCD are also in a risk group for OCD and other psychiatric disorders, therefore recognizing affected parents and treating them is also important.

Further prospective studies are needed to evaluate the OCD in children and adolescents with larger sample groups in different sections of the society.

Ethics Committee Approval: The Dicle University Non-Interventional Clinical Research Ethics Committee granted approval for this study (date: 13.03.2017, number: 86).

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