

Research article Ερευνητική εργασία

Comorbid psychopathology and clinical symptomatology in children and adolescents with obsessive-compulsive disorder

D.C. Anagnostopoulos,^{1,2} S. Korlou,² K. Sakellariou,¹ V. Kondyli,² J. Sarafidou,³
E. Tsakanikos,⁴ G. Giannakopoulos,² M. Liakopoulou²

¹*1st Department of Psychiatry, Athens University Medical School, Athens,*

²*Department of Child Psychiatry, Athens University Medical School, "Aghia Sophia" Children's Hospital, Athens,*

³*Department of Primary Education, University of Thessaly, Volos, Greece,*

⁴*Department of Psychology, Roehampton University, London, UK*

Psychiatriki 2016, 27:27–36

Comorbid psychopathology in children and adolescents with obsessive-compulsive disorder (OCD) has been investigated in a number of studies over the last twenty years. The aim of the present study was to investigate the phenomenology of illness and broader psychopathology in a group of Greek children and adolescents with OCD. The investigation of parental psychopathology in children and adolescents with OCD was a secondary aim of the present study. We studied 31 children and adolescents with OCD (n=31, age range 8–15 years) and their parents (n=62, age range 43–48 years) and compared to children and adolescents with specific reading and written expression learning disorders (n=30, age range 7–16 years) and their parents (n=58, age range 40–46 years). Appropriate testing showed specific reading and learning disorders, which were of mild to moderate severity for the 85% of this latter group. The diagnosis of learning disorder of reading and written expression was made through the use of standardized reading material, appropriate for ages 10–15 years. Reading comprehension and narration were tested. The written expression (spelling, syntax, content) was examined by a written text, in which the subject developed a certain theme from the reading material. Based on their level of education and occupation, the index families were classified as high (29%), average (45%) and low (26%) socioeconomic status, whereas 6.7% of control families belonged to high, 63.3% to average, and 30% to low status. In order to investigate psychopathology, the Schedule for Affective Disorders and Schizophrenia for School Aged Children, Present and Life-time version was administered to children and their parents, as well as the Child Behavior Checklist 4/18 (CBCL) to both parents and adolescents (Youth Self-Report). Also the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) was rated for both children and parents. Moreover, the children were given the Children's Depression Inventory (CDI) and the Revised Children's Manifest

Anxiety Scale (RCMAS). In the OCD group, 48% had contamination obsessions, 42% aggressive obsessions and 52% had washing and cleaning compulsions. Moreover, 32% had one additional disorder and 16.1% had two additional disorders. In comparison, only 17.2% of the control group children had one comorbid disorder. The OCD proband group had higher Total Problems score, as well as higher Anxiety/Depression, Thought Problems and Externalizing scores on the CBCL. When proband parents and control parents (29 mothers and 21 fathers) were compared, the percentage of fathers in the clinical range was significantly higher in the study group (Fisher's exact test: $p=0.011$, two tailed), whereas for mothers the difference did not attain significance (Fisher's exact test: $p=0.106$, two tailed). The fathers and mothers of children with OCD were more clinically affected than those of controls. Mothers of probands differed from controls in compulsions, compared to fathers, who differed in both obsessions and compulsions. Comorbidity rate was higher to children and adolescents with OCD. A considerable number of children and adolescents with OCD had higher symptomatology of anxiety and depression than controls, as well as higher rates of thought problems. Children and adolescents with OCD also exhibited higher rates of externalizing problems. This latter finding is considered as important and needs to be highlighted in terms of case management and treatment. Moreover, the parents of children and adolescents with OCD had more OCD symptomatology than the parents of children and adolescents with learning disorders. The symptomatology of the parents may create difficulties in interactions within the family and become burdensome for a vulnerable child. In turn, the child's symptomatology may create or increase some of the symptoms in the parents i.e. anxiety and depression. These findings suggest that at least for a percentage of children and adolescents with OCD, parental and especially paternal influence may contribute to the development and severity of their symptoms, not only through hereditary factors but also through the control exerted and the anxiety created in the family context.

Key words: Aggressive behaviour, externalizing problems, children and adolescents, comorbidity, obsessive compulsive disorder.

Introduction

Comorbid psychopathology in children and adolescents with OCD has been investigated in a number of studies over the last twenty years. The Child Behavior Checklist 4/18 (CBCL)¹ has been used in some of these studies. Riddle et al² found that Total behavioral problems (expressed by the T score) were almost two standard deviations above the norm. Hanna³ found that Internalizing scale scores were two standard deviations above the norm and higher than Externalizing scale scores. Mean T scores for "anxiety-depression" and "thought problems" subscales were also two standard deviations above the norm, while "withdrawal", "attention", "social problems", and "somatic complaints" subscales T-scores were found to be one standard deviation above the norm. Children with OCD and a comorbid Disruptive Behavior Disorder (DBD) had higher Internalizing and Externalizing T-scores than those without DBD. Moreover, Black et al⁴ studied children whose parents had OCD and found that most of them had OCD or broad spectrum OCD as well.

These children had significantly different scores than controls on the "somatic complaints" and "anxious-depressed" subscales of the CBCL. Their Total scores and Internalizing scores were also significantly higher than those of controls.

Other disorders, such as affective or anxiety disorders and DBD, are often comorbid with OCD as well as Attention-Deficit/Hyperactivity Disorder (ADHD), and tics or Tourette's syndrome (TS).⁵⁻⁹ Moreover, obsessions of contamination and of aggressive content, as well as washing, cleaning, ordering and arranging compulsions appear to be the most prominent and frequent in children with OCD.^{2,3,5,8,9}

According to our knowledge there is a lack of studies concerning Greece. Given information from previous studies, such as those presented above, the aim of the present study was to investigate the phenomenology of illness and broader psychopathology in a group of Greek children and adolescents with OCD. The investigation of parental psychopathology in children and adolescents with OCD was a secondary aim of the present study.

Material and method

Subjects

Thirty-one children and adolescents of Caucasian origin with OCD, aged 8–15 years (mean age 12.4 ± 1.6), 9 girls and 22 boys, who came as outpatients at the department of Child and Adolescent Psychiatry at a general children's hospital and a community Child and Adolescent Psychiatry clinic, were examined on a consecutive basis. The children were not pre-selected. The children and adolescents were given the diagnosis of OCD when they came to our hospital and clinic. Their symptoms had appeared several months before their first examination by us. Their socioeconomic background was relatively similar, but more children treated at the hospital had greater intensity of OCD symptoms than those in the community. Their parents ($n=62$) were also examined. The mean age of mothers was 42.9 ± 5.7 years and of fathers 47.8 ± 5.9 years. We administered medication for the disorder in 25 of the children and adolescents with OCD. Children and adolescents with learning disorders of reading and written expression ($n=30$, 13 girls and 17 boys, aged 7–16 years, mean age 11.6 ± 2.0) who came for remediation help at the previously noted community psychiatric clinic and their parents ($n=58$) were used as controls. The mean age of mothers was 40.6 ± 2.8 years and of fathers, 44.6 ± 1.4 years. Appropriate testing showed specific reading and learning disorders, which were of mild to moderate severity for the 85% of the children. Based on their level of education and occupation, the index families were classified as high (29%), average (45%) and low (26%) socioeconomic status,¹⁰ whereas 6.7% of control families belonged to high, 63.3% to average and 30% to low status. The protocol was approved by the institutional review board.

Measures

Schedule for Affective Disorders and Schizophrenia for School-Age Children, Present and Lifetime version (Kiddie-SADS-PL/K-SADS-PL).¹¹ This well-known semi-structured interview was administered to both subjects and controls. Parents of patients and controls were also interviewed. Interviewers diagnosed children utilizing their best clinical judgment in reference to parental and child reports. At the begin-

ning of the study a group of probands ($n=16$) were interviewed by two trained interviewers (DA, SK), who rated them independently. Inter-rater agreement rate was 0.76 ($K=0.76$).

Child Behaviour Checklist 4/18 (CBCL).¹ The CBCL categorizes children's behavior into two broad-band factors: the Externalizing and Internalizing. The Externalizing factor comprises aggressive and rule-breaking behavior (e.g. temper tantrums or hot temper, destroys things belonging to others). The Internalizing factor comprises somatic complaints, withdrawn, and anxious/depressed behavior (e.g. nervous, high-strung or tense, unhappy, sad or depressed). Responses are scored on a 3-point scale (0, not true, to 2, very true or often true). Age and gender standardized scores of 60 or higher on the CBCL are indicative of clinically significant problem behaviours. Adolescents who were 11 years and older completed the Youth Self-Report,¹ which generates externalizing and internalizing subscale scores that correspond to those from the CBCL.

The Children's Yale-Brown Obsessive Compulsive Scale (C-Y-BOCS)¹² is the children's version of the Y-BOCS, a clinician rated instrument, merging data from clinical observation and parents' and children's reports. All diagnoses were based on the same procedures.

The Revised Children's Manifest Anxiety Scale (RCMAS)¹³ is a 37-item self-report questionnaire and measures chronic manifestations of trait anxiety in children and adolescents. The RCMAS has been standardized by age and gender. The total score consists of 24 items and is regarded as an index of general anxiety.

The Children's Depression Inventory (CDI)¹⁴ is a widely used, 27-item self-report of depressive symptoms for children and adolescents. Raw scores range from 0 to 54, a score of 13 was used as a threshold for depression in this study, as is indicated by the author. However, the specificity of the CDI for the diagnosis of depression has been questioned and some investigators have suggested that it measures emotional distress in a general sense.¹⁵

The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) was given to the parents. Y-BOCS is a 10-item, clinician-rated, semi-structured instrument, designed to assess the symptom severity of

OCD over the past week.¹⁶ Each item is rated from 0 (no symptoms) to 4 (extreme symptoms). Y-BOCS consists of the obsession and compulsion subscale, and produces a total score (total range of 0–40). A total score under 16 is considered mild and a score under 7 is considered subclinical.¹⁷ We used the cut off point of 16 and above, to signify symptoms of considerable severity. The interviewers were aware of the parents' group status. A considerable body of data attests to the reliability, validity and sensitivity of this instrument.¹⁷ Each parent was interviewed separately.

The diagnosis of learning disorder of reading and written expression was made through the use of standardized reading material, appropriate for ages 10–15 years. Reading comprehension and narration were tested. The written expression (spelling, syntax, content) was examined by a written text, in which the subject developed a certain theme from the reading material.¹⁸ We chose the group with mild and moderate reading and writing disability (RWD) as representing a group closest to the general population. Only RWD and no other psychopathology¹⁹ have been reported for the parents of children with RD. Since 10–60% of children²⁰ with RD suffer from ADHD, anxiety disorders²¹ and depression,²² we might hypothesize that a percentage of their parents suffers or suffered from similar disorders, although we did not find pertinent literature support.

Statistical analysis

Differences between the proband and control group were tested utilizing the chi-square test or Fisher's exact test when categorical variables were compared. Normality of distributions for the quantitative measures was examined by the Kolmogorov-Smirnov test. A t-test or the equivalent non parametric test (Mann-Whitney) was used for comparisons between groups. In case of unequal variances, t values and degrees of freedom were adjusted to account for lack of homogeneity. For comparing subscales of the same inventory, multivariate analysis of variance was employed, followed by univariate tests, in case of significant results. The significance level was set at 0.05 while in case of post-hoc multiple comparisons it was appropriately adjusted after Bonferroni correction.

Results

Phenomenology of illness and child psychopathology

Of the probands, 48% had obsessions of contamination, 42% of aggression, 22.5% obsessions of sexual context, 52% washing and cleaning compulsions and 32% rituals (table 1). The rate of male to female was 2.4:1. Furthermore, 32% of the children with OCD had one additional disorder and 16.1% had two, according to Kiddie-SADS-PL/K-SADS-PL. Comorbid disorders present were: depressive disorder (26%), anxiety disorders (29%) i.e. generalised anxiety, separation anxiety, social phobia, agoraphobia and disorders like tics (16%), ADHD (19%), oppositional disorder (30%), enuresis (3%) and encopresis (3%). Only 17.2% of the controls had one comorbid disorder i.e. separation anxiety, enuresis or ADHD and none had more than one. The difference regarding comorbidity was statistically significant ($\chi^2(1) = 6.54, p=0.01$).

The probands' group had significantly higher Total Problems scores on the CBCL than the control group (probands: mean 51.7, SD 22.9, controls: mean 32.8, SD 21.5, $p=0.004$, two tailed test). Multivariate comparisons of the Internalizing and Externalizing Problems subscale indicated a significant difference (Wilk's $\lambda=0.722, F(2, 47)=6.940, p=0.002$) and univariate tests revealed that probands had higher scores on both scales in comparison to controls, although only the Externalizing Problems scale differed significantly after Bonferroni adjustment. Also, multivariate analysis of the 8 problem subscales revealed statistically significant differences between

Table 1. C-Y-BOCS scales and Symptom categories of children and adolescents with OCD (n=31).

C-Y-BOCS scales and Symptom categories	Mean±SD	(%)
Obsessions	11.61±5.16	
Contamination		48%
Aggression		42%
Sexual		22.5%
Compulsions	12.77±2.67	
Washing and cleaning		52%
Rituals		32%
Total	24.39±5.68	

probands and the control group (Wilk's $\lambda=0.591$, $F(8, 41)=3.552$, $p=0.003$). The differences were due to the following syndromes: "anxiety-depression" and "thought problems", after Bonferroni adjustment (table 2). Large effect sizes were found for Total problems ($d=0.87$), for the Externalizing problems scale ($d=1.09$), the subscales of anxiety-depression ($d=1.29$) and thought problems ($d=1.53$), whereas for the Internalizing problems scale and the aggression subscale the effect size was medium ($d=0.62$ and $d=0.77$ respectively).

No differences were found between the two groups studied (18 probands and 21 controls), on Total Problems ($t(37)=1.41$, $p=0.167$) or on the Externalizing and Internalizing Problems scales of the Youth Self-Report (Wilks $\lambda=0.951$, $F(2, 36)=0.919$, $p=0.408$). However, multivariate analysis of the 8 problem subscales for the study group and the control group gave statistically significant results (Wilks $\lambda=0.612$, $F(7, 31)=2.805$, $p=0.022$). The difference was due to the "problems of thought" subscale, where probands scored higher than controls (mean \pm SD=9.56 \pm 3.84 vs 5.49 \pm 2.71, $t(37)=3.86$, $p<0.001$).

No statistically significant differences were found between probands and controls on depression (CDI) (mean \pm SD: 10.63 \pm 8.25 vs 13.08 \pm 7.99, $t(50)=-1.086$, $p=0.283$). Children with OCD did not differ from controls on anxiety (RCMAS). Multivariate comparison of the two subscales gave a marginally non significant result (Wilk's $\lambda=0.902$, $F(2, 52)=2.814$, $p=0.069$), even

though the average scores were higher in probands for both manifest anxiety and lie scales.

For the C-Y-BOCS for the probands group ($n=31$), means and SDs for Total score Obsessions and Compulsions subtotals were respectively: 24.39 \pm 5.68, 11.61 \pm 5.16, 12.77 \pm 2.67. In addition, obsessions and/or compulsions common to both parents had 7 children, common to one parent 8 children and 10 children had different obsessions and/or compulsions from their parents. The parents of the remaining 6 children did not report OC symptomatology.

Parents OCD symptomatology

The Y-BOCS was answered by both parents of 25 of the 31 probands (27 mothers and 25 fathers). For 36% of these 25 children ($n=9$), at least one parent had scores within the clinical range, that is 28% of fathers ($n=7$) and 11% of mothers ($n=3$), whereas no parent in the control group was within the clinical range. When proband parents and control parents (29 mothers and 21 fathers) were compared, the percentage of fathers in the clinical range was significantly higher in the study group (Fisher's exact test: $p=0.011$, two tailed), whereas for mothers the difference did not attain significance (Fisher's exact test: $p=0.106$, two tailed). The fathers and mothers of children with OCD were more clinically affected than those of controls. Mothers of probands differed from controls in compulsions, compared to fathers, who differed in both obsessions and compulsions (table 3).

Table 2. CBCL scores for children with OCD and controls.

	Probands ($n=22$)		Controls ($n=28$)		Significance of difference		
	Mean	SD	Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
Anxiety/Depression	10.48	5.01	4.56	4.44	4.424	48	<.001
Withdrawal/Depression	4.06	2.94	2.36	2.56	2.189	48	0.033
Somatic problems	3.47	3.30	1.84	2.27	1.982	35.769	0.055
Social problems	5.05	4.11	3.50	3.48	1.439	48	0.157
Thought problems	8.02	4.33	3.69	2.40	4.215	30.948	<.001
Attention problems	4.86	3.42	4.71	2.38	.188	48	0.852
Rule breaking behavior	2.64	1.68	2.44	2.35	.335	48	0.739
Aggressive behavior	8.74	5.25	5.21	4.20	2.649	48	0.011
Externalizing problems	18.01	9.34	8.76	8.08	3.754	48	<0.001
Internalizing problems	11.38	6.37	7.65	6.02	2.124	48	0.039
Total problems	51.70	22.90	32.80	21.51	2.996	48	0.004

Table 3. Obsessive-Compulsive symptomatology (Y-BOCS): parents.

	Study group			Control group			Asymp. Sig. (2-tailed)*
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>	
Mothers (total)	27	6.26	6.18	29	2.07	2.46	0.006
Obsessions	26	2.77	3.02	29	1.17	1.23	0.078
Compulsions	26	3.73	3.89	29	0.90	1.50	0.001
Fathers (total)	25	9.28	8.37	21	1.29	1.59	0.001
Obsessions	21	4.38	4.28	21	0.62	0.86	0.002
Compulsions	21	3.71	3.77	21	0.67	0.86	0.011

*Mann-Whitney test

Discussion

The children with OCD in our study had a high level of emotional and behavioral problems, particularly in the dimensions of thought, depression, and anxiety, which was similar to what other investigators have found.^{2,23} They also presented with considerable rates of comorbid depressive disorder (26%) comparable (29–33%) to those of other studies.^{2,3,5,6} In those same studies, a rate of anxiety disorders ranging from 17% to 48% was found. In our study, the rate was 29%. Tics were present in 16% of the index children, a rate smaller than in other studies (20–27%).^{2,5} Regarding obsessions of contamination, aggression and compulsions of washing and cleaning, our findings resemble those of other studies.²³ As in the studies of children from Denmark,⁸ Spain,⁹ Poland,²⁴ and the U.S.,² compulsions of cleaning (52% in our sample) were the most prominent ones. Obsessions of contamination were the most frequent, followed by obsessions of aggression, as in previous studies.^{2,3,8} However, a recent English study²⁵ found obsessions of aggression to be the most frequent followed by those of contamination. The ratio of male to female (2.4:1) was similar to that of other studies.^{5,6} No differences were found between our probands and controls on the CDI and the RCMAS, which were used to measure depression and anxiety respectively. Children and adolescents with specific disorders of learning of which the control group was comprised also experience anxiety and depression, which may explain the absence of difference between the two groups.²⁶ It is important to note, though, that the average scores of probands on manifest anxiety and lie

scales were higher, even though the comparison was marginally not significant.

The probands in our study were significantly different than controls on Externalizing scale of the CBCL, the Total Problems scale and on the subscales of “anxiety-depression”, and “thought problems”. It is of interest that the mean scores for the sub-scale of “aggression” were the highest, following those of “anxiety-depression” and “thought” and that the score of Externalizing problems was higher than the Internalizing scale. We found oppositional disorder, a disorder of the DBD spectrum,²⁷ at the rate of 30% in our children. Similarly, Geller et al⁵ found DBD in his probands to be approximately 43%, March⁷ mentions DBD among the main comorbid disorders of OCD, while Flament²³ mentions that in those subjects with OCD and comorbid DBD, usually boys,²⁸ both Internalizing and Externalizing scores were higher. In addition, other authors note that children with OCD “may become irascible, defiant, demanding or assaultive in their need to perform their compulsions”.¹¹ Therefore, the high scores on the aggression subscale and on the Externalizing problems scale in our study demonstrate this aggressive and oppositional aspect of a subgroup of children with OCD. A large effect size was found in our study for the Externalizing but not for the Internalizing problems, in contrast to the higher mean T scores of the Internalizing compared to the Externalizing scale found by others.^{2,13} This result might be explained by considering the high aggression mean score on the CBCL, and the fact that most of the children with OCD in this study came into the hospital during an acute crisis period. In other words, this crisis

may be expressed by increased aggression and the higher Externalizing scores. Toro et al⁹ note that withdrawal from peers (65%) is very frequent and, in accordance to this finding, there is a high score on the withdrawal subscale of the CBCL in our study. Also, in agreement to the study by Black et al,⁴ the "Anxiety-Depression" subscale's mean scores in the CBCL were high.

The parents of children with OCD had more OCD symptomatology than the parents of children with learning disorders. The symptomatology of the parents may create difficulties in interactions within the family and become burdensome for a vulnerable child. In turn, the child's symptomatology may create or increase some of the symptoms in the parents i.e. anxiety and depression. Compared to controls, more fathers of probands had severity of obsessions and compulsions in the clinical range. Severe compulsions had only a smaller percentage of probands' mothers. The findings show that at least for a percentage of children with OCD, parental and especially paternal influence may contribute to the development and severity of their symptoms, not only through hereditary factors but also through the control, exerted and the anxiety created in the family context.

Calvo et al²⁹ found an increase in psychopathology, specifically of adjustment disorders, depression, anxiety and personality disorders, including OCD, in parents of children with OCD compared to parents of controls with pediatric ailments. Black et al⁴ examined data from the viewpoint of parents with OCD whose children developed "broadly defined OCD" during the follow-up period and found that these parents suffered more than controls from lifetime major depression, panic disorder and special phobia. Of the parents of children with OCD in our study, 36% had OC symptomatology, a rate comparable to that found by Lenane et al³⁰ but higher than the one given for first degree relatives by Pauls et al³¹ (18% for OCD and OCS), although these investigators note that the rate was twice as high among the relatives of the probands with earlier onset.

In agreement with Lenane et al,³⁰ we found increased OC symptomatology in probands' fathers compared to mothers and controls. Thomsen and Mikkelsen³² found that fathers of probands were

more likely to have clinical OCD but mothers to have sub-clinical symptomatology. In contrast, Calvo et al²⁹ found a higher rate of diagnosis of OCD in mothers than fathers of probands. Also, Black et al⁴ found that female gender of the parent with OCD, along with family dysfunction and high symptom levels were predictive of "broadly defined OCD" in the child after two years of follow-up. In contrast, Black et al³³ in another study did not find an increase of OCD spectrum disturbance among the first-degree relatives of adult probands, but found an increased prevalence of anxiety disorders. The morbid risk for broadly defined OCD (OCD plus sub-syndromal OCD) was higher among the parents of probands, in particular among mothers, but not at a statistically significant level. A study with larger numbers is required to determine if indeed fathers do show more OC symptomatology. Despite the fact that more control families than probands' belonged to the average and low socioeconomic status, we did not find more psychopathology in this group, as would be expected, regarding the children's parents. As noted, the families of controls were well organized, working families. Studies give varying results in terms of the social class background of children with OCD, starting from a high social status³⁴ to lower socioeconomic status.³⁵ Others note that there is cultural homogeneity in OCD across cultures³⁶ and that caucasians have the greater symptom severity and comorbidity.³⁷ In our study, most of the OCD children came from a high and average social status.

This study presents some limitations. The sample size is small, mainly due to the difficulty of collecting data because of the relatively uncommon prevalence of the disorder. The same problem characterizes other studies.^{2,4,29,31,32} Larger studies are needed in order to have smaller probability of type-II error and clarify the differences regarding the psychopathology of fathers and mothers, particularly differences in prevalence of OCD. Further, the parents were not examined through formal diagnostic interviews. Although the Y-BOCS is not a diagnostic tool, more fathers had OC symptoms in the clinical range (a score of 16 or greater) than mothers. Furthermore, a significant difference of fathers compared to mothers and controls with regard to OC symptomatology emerges from the subscale for obsessions and com-

pulsions of the SCL-90-R. Another limitation is the control group we have chosen. We thought a group other than one with anxiety disorders or depressive disorder might be pertinent, since it is known that, in clinical settings, there is around 8–10% comorbidity with panic disorders and that in adolescents and adults with OCD comorbidity includes depressive disorders. Since the one-year prevalence of OCD is 1.5–2.1% and in our study, out of 52 parents, 7 fathers and 3 mothers presented with OC symptomatology, whereas from the 50 control parents, none, we may think that the control group is closer to the general population. Also, comparison of SCL-90-R and STAI scores between the control group and Greek general population supports the use of this group as

controls.^{38,39} Nevertheless, a replication of the study after inclusion of a control group with depressive disorders and/or non-clinical participants would be methodologically desirable.

In conclusion, our study showed that a considerable number of children and adolescents with OCD are presented with externalizing problems, similar to that described in other countries. This aspect of children and adolescents with OCD is important to be recognized when considering case management and treatment. Finally, there is a confirmation through our study, that the CBCL is a valuable tool, which can point towards the detection of important aspects of the psychopathology of these children and adolescents.

Συννοσηρή ψυχοπαθολογία και κλινική συμπτωματολογία σε παιδιά και εφήβους με ιδεοψυχαναγκαστική διαταραχή

Δ.Κ. Αναγνωστόπουλος,^{1,2} Σ. Κορλού,² Κ. Σακελλαρίου,¹ Β. Κονδύλη,²
Γ. Σαραφίδου,³ Ε. Τσακανίκος,⁴ Γ. Γιαννακόπουλος,² Μ. Λιακοπούλου²

¹Α΄ Ψυχιατρική Κλινική, Ιατρική Σχολή Πανεπιστημίου Αθηνών, Αθήνα,

²Παιδοψυχιατρική Κλινική, Ιατρική Σχολή Πανεπιστημίου Αθηνών, Νοσοκομείο Παίδων «Η Αγία Σοφία», Αθήνα,

³Παιδαγωγικό Τμήμα Δημοτικής Εκπαίδευσης, Πανεπιστημίου Θεσσαλίας, Βόλος,

⁴Department of Psychology, Roehampton University, London, UK

Ψυχιατρική 2016, 27:27–36

Η συννοσηρή ψυχοπαθολογία των παιδιών και εφήβων με ιδεοψυχαναγκαστική διαταραχή (ΙΔΨ) έχει διερευνηθεί σε πλήθος μελετών την τελευταία εικοσαετία. Ο σκοπός της παρούσας μελέτης ήταν να διερευνηθεί τη φαινομενολογία της ασθένειας και την ευρύτερη ψυχοπαθολογία σε μία ομάδα παιδιών και εφήβων με ΙΔΨ στην Ελλάδα. Η διερεύνηση της γονικής ψυχοπαθολογίας στα παιδιά και εφήβους με ΙΔΨ ήταν ένας δευτερεύων σκοπός της παρούσας μελέτης. Μελετήσαμε 31 παιδιά και εφήβους με ΙΔΨ (n=31, ηλικιακό εύρος 8–15 έτη) και τους γονείς τους (n=62, ηλικιακό εύρος 43–48 έτη) και διενεργήσαμε συγκρίσεις με παιδιά και εφήβους με ειδικές μαθησιακές διαταραχές της ανάγνωσης και της γραπτής έκφρασης (n=30, ηλικιακό εύρος 7–16 έτη) και τους γονείς τους (n=58, ηλικιακό εύρος 40–46 έτη). Κατάλληλες δοκιμασίες έδειξαν ειδικές μαθησιακές διαταραχές της ανάγνωσης και της γραπτής έκφρασης, οι οποίες ήταν ήπιες έως μέτριες βαρύτητας για το 85% αυτής της δεύτερης ομάδας. Η διάγνωση μαθησιακής διαταραχής της ανάγνωσης και της γραπτής έκφρασης διενεργήθηκε μέσω της χρήσης σταθμισμένου αναγνωστικού υλικού, κατάλληλου για ηλικίες 10–15 ετών. Ελέγχθηκαν η αναγνωστική κατανόηση και αφήγηση. Η γραπτή έκφραση (ορθογραφία, συντακτικό, περιεχόμενο) εξετάστηκε μέσω ενός γραπτού κειμένου, στο οποίο το υποκείμενο ανέπτυξε ένα συ-

γκεκριμένο θέμα από το αναγνωστικό υλικό. Με βάση το επίπεδο εκπαίδευσης και επαγγέλματος, οι οικογένειες των παιδιών και εφήβων με ΙΔΨ κατηγοριοποιήθηκαν ως υψηλής (29%), μέσης (45%) και χαμηλής (26%) κοινωνικοοικονομικής κατάστασης, ενώ το 6,7% των οικογενειών στην ομάδα μαρτύρων ανήκε στην υψηλή, το 63,3% στη μέση και το 30% στη χαμηλή κοινωνικοοικονομική κατάσταση. Προκειμένου να διερευνηθεί η ψυχοπαθολογία, χορηγήθηκε στα παιδιά και τους γονείς τους η συνέντευξη Schedule for Affective Disorders and Schizophrenia for School Aged Children, Present and Life-time version, καθώς το ερωτηματολόγιο Child Behavior Checklist 4/18 (CBCL) στους δύο γονείς και τους εφήβους (Youth Self-Report). Επίσης, βαθμολογήθηκε η κλίμακα Yale-Brown Obsessive Compulsive Scale (Y-BOCS) για τα παιδιά και τους γονείς τους. Επιπλέον, στα παιδιά χορηγήθηκαν τα ερωτηματολόγια Children's Depression Inventory (CDI) και Revised Children's Manifest Anxiety Scale (RCMAS). Στην ομάδα των παιδιών και εφήβων με ΙΔΨ, 48% είχε ιδεοληψίες μόλυνσης, 42% επιθετικές ιδεοληψίες, και 52% είχε ψυχαναγκασμούς πλυσίματος και καθαρισμού. Επιπλέον, το 32% είχε μία επιπρόσθετη διαταραχή και το 16,1% είχε δύο επιπρόσθετες διαταραχές. Συγκριτικά, μόνο το 17,2% της ομάδας μαρτύρων είχε μία συννοσηρή διαταραχή. Η ομάδα των παιδιών και εφήβων με ΙΔΨ είχαν υψηλότερη βαθμολογία Συνολικών Προβλημάτων, καθώς και υψηλότερη βαθμολογία Άγχους/Κατάθλιψης, Προβλημάτων Σκέψης και Εξωτερικευόμενων Προβλημάτων στο CBCL. Όταν συγκρίθηκαν οι γονείς των παιδιών και εφήβων με ΙΔΨ και οι γονείς των μαρτύρων (29 μητέρες και 21 πατέρες), το ποσοστό των πατέρων στο κλινικό εύρος ήταν σημαντικά μεγαλύτερο στην ομάδα με ΙΔΨ (Fisher's exact test: $p=0,011$, two tailed), ενώ για τις μητέρες η διαφορά δεν ήταν στατιστικά σημαντική (Fisher's exact test: $p=0,106$, two tailed). Οι πατέρες και οι μητέρες των παιδιών και εφήβων με ΙΔΨ ήταν περισσότερο κλινικά επιβαρυνμένοι συγκριτικά με τους γονείς των μαρτύρων. Οι μητέρες των παιδιών και εφήβων με ΙΔΨ διέφεραν από την ομάδα των μαρτύρων ως προς τους ψυχαναγκασμούς, συγκριτικά με τους πατέρες, οι οποίοι διέφεραν και στις ιδεοληψίες και στους ψυχαναγκασμούς. Το ποσοστό συννόσησης ήταν υψηλότερο στα παιδιά και εφήβους με ΙΔΨ. Ένας σημαντικός αριθμός παιδιών με ΙΔΨ είχε υψηλότερη συμπτωματολογία άγχους και κατάθλιψης από τους μάρτυρες, καθώς και υψηλότερα ποσοστά προβλημάτων σκέψης. Τα παιδιά και οι έφηβοι με ΙΔΨ εκδήλωναν, επίσης, υψηλότερα ποσοστά εξωτερικευόμενων προβλημάτων. Αυτό το εύρημα θεωρείται σημαντικό και χρειάζεται να τονιστεί αναφορικά με τη διαχείριση και τη θεραπευτική αντιμετώπιση αυτών των περιπτώσεων. Επιπλέον, οι γονείς των παιδιών και εφήβων με ΙΔΨ είχαν υψηλότερη συμπτωματολογία ΙΔΨ από τους γονείς των παιδιών και εφήβων με μαθησιακές διαταραχές. Η συμπτωματολογία των γονέων ενδεχομένως δημιουργεί δυσκολίες στις αλληλεπιδράσεις εντός της οικογένειας και μπορεί να επιβαρύνει ένα ευάλωτο παιδί. Από την άλλη πλευρά, η συμπτωματολογία του παιδιού ενδεχομένως δημιουργεί ή αυξάνει ορισμένα από τα συμπτώματα των γονέων, όπως άγχος και κατάθλιψη. Αυτά τα ευρήματα υποστηρίζουν την άποψη ότι τουλάχιστον για ένα ποσοστό παιδιών και εφήβων με ΙΔΨ, η γονική και ιδιαίτερη η πατρική επιρροή μπορεί να συμβάλει στην εμφάνιση και τη βαρύτητα των συμπτωμάτων τους, όχι μόνο μέσω κληρονομούμενων παραγόντων αλλά και μέσω του ελέγχου που ασκείται και του άγχους που δημιουργείται στο οικογενειακό πλαίσιο.

Λέξεις ευρητηρίου: Επιθετική συμπεριφορά, εξωτερικευόμενα προβλήματα, παιδιά και έφηβοι, συννόσηση, ιδεοψυχαναγκαστική διαταραχή.

References

1. Achenbach TM, Rescorla LA. Manual for the ASEBA School-Age Forms and Profiles. Burlington VT: University of Vermont, Research Centre for Children, 2001
2. Riddle MA, Schahill L, King R, Hardin MT, Towbin KE, Ort SI et al. Obsessive compulsive disorder in children and adolescents: phenomenology and family history. *J Am Acad Child Adolesc Psychiatry* 1990, 29:766-772
3. Hanna GL. Demographic and clinical features of obsessive-compulsive disorder in children and adolescents. *J Am Acad Child Adolesc Psychiatry* 1995, 34:19-27
4. Black DW, Gaffney GR, Schlosser S, Gabel J. Children of parents with obsessive-compulsive disorder-a 2-year follow-up study. *Acta Psychiatr Scand* 2003, 107:305-313
5. Krebs G, Heyman I. Obsessive-compulsive disorder in children and adolescents. *Arch Dis Child* 2015, 100:495-499
6. Masi G, Millepiedi S, Perugi G, Pfanner C, Berloffia S, Pari C et al. A naturalistic exploratory study of the impact of demographic, phenotypic and comorbid features in pediatric obsessive-compulsive disorder. *Psychopathology* 2010, 43:69-78

7. March JS, Leonard HL. Obsessive-compulsive disorder in children and adolescents: A review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 1996, 35:1265–1273
8. Thomsen PH. Obsessive compulsive disorder in children and adolescents: a study of phenomenology and family functioning in 20 consecutive Danish cases. *Eur Child Adolesc Psychiatry* 1994, 3:29–36
9. Toro J, Cervera M, Osejo E, Salamero M. Obsessive-compulsive disorder in childhood and adolescence—a clinical study. *J Child Psychol Psychiatry* 1992, 33:1025–1037
10. Madianos M. Society and Mental Health. Athens, Kastaniotis Publications, 1998
11. Kaufman J, Birmaher B, Brent D, Rao V, Flynn C, Moreci P et al. Schedule for Affective Disorders and Schizophrenia for School Aged Children. Present and Lifetime Version (K-SADS-PL). Initial reliability and validity data. *J Am Acad Child Adolesc Psychiatry* 1997, 36:980–988
12. Scahill L, Riddle MA, McSwiggin-Hardin M, Ort S, King R, Goodman WK et al. Children's Yale-Brown Obsessive-Compulsive Scale: Reliability and validity. *J Am Acad Child Adolesc Psychiatry* 1997, 36:6:844–852
13. Reynolds CR, Richmond BO. Revised Children's Manifest Anxiety Scale: Manual. Los Angeles, Weston Psychological Services, 1985
14. Kovacs M. The Children's Depression Inventory (CDI) *Psychopharmacol Bull* 1985, 21:995–998
15. Costello EJ, Angold A. Scales to assess child and adolescent depression: checklists, screens and nets. *J Am Acad Child Adolesc Psychiatry* 1998, 27:726–737
16. Goodman WK, Price LH, Rasmussen SA, Mazure C, Fleischman RL, Hill CL et al. The Yale-Brown Obsessive Compulsive Scale I. Development, use and reliability. *Arch Gen Psychiatry* 1989, 46:1006–1011
17. Koran ML. Obsessive-compulsive and related disorders in adults. A comprehensive clinical guide. Cambridge, Cambridge University Press, 1999
18. Ellis AW. Reading, writing and dyslexia. A cognitive analysis. East Sussex, Lawrence Erlbaum Associates Ltd, 1993
19. Snowling MJ, Muter V, Carroll J. Children at family risk for dyslexia: a follow-up in early adolescence. *J Child Psychol Psychiatry* 2007, 48:609–618
20. Beitchman HJ, Jourg RA. Learning disorders with a special emphasis on reading disorders: A review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 1997, 36:1020–1032
21. Carroll JM, Maughan B, Goodman R, Meltzer H. Literary difficulties and psychiatric disorders. Evidence for comorbidity. *J Child Psychol Psychiatry* 2005, 46:524–532
22. Practice Parameters for the Assessment and Treatment of children and adolescents with language and learning disorders. *J Am Acad Child Adolesc Psychiatry* 1998, (10 Suppl):46S–62S
23. Flament MF, Koby E, Rapoport JL, Berg CJ, Than T, Cox C. Childhood obsessive-compulsive disorder: a prospective follow-up study. *J Child Psychol Psychiatry* 1990, 31:363–380
24. Brynska A, Wolanczyk T. Epidemiology and phenomenology of obsessive-compulsive disorder in non-referred young adolescents. A Polish perspective. *Eur Child Adolesc Psychiatry* 2005, 14:319–326
25. Mataix-Cols D, Nakatani E, Micoli D, Heyman I. Structure of obsessive-compulsive symptoms in pediatric obsessive-compulsive disorder. *J Am Acad Child Adolesc Psychiatry* 2008, 47:773–778
26. Silver LB. Developmental learning disorders. In: Lewis M (ed) *Child and Adolescent Psychiatry*. 3rd ed. Philadelphia PA. Lippincott, Williams and Wilkins, 2002
27. Diagnostic and Statistical Manual of Mental Disorders. 4th ed. Washington DC, American Psychiatric Association, 2005
28. Practice parameters for the assessment and treatment of children and adolescents with obsessive-compulsive disorder. *J Am Acad Child Adolesc Psychiatry* 2012, 51:98–113
29. Calvo R, Lazaro L, Castro J, Morer A, Toro J. Parental psychopathology in child and adolescent obsessive-compulsive disorder. *Soc Psychiatry Psychiatr Epidemiol* 2007, 42:647–655
30. Lenane MC, Swedo SE, Leonard H, Pauls DL, Sceery W, Rapoport JL. Psychiatric disorders in first degree relatives of children and adolescents with obsessive compulsive disorder. *J Am Acad Child Adolesc Psychiatry* 1990, 29:407–412
31. Pauls DL, Alsobrook JP II, Goodman W, Rasmussen S, Leckman JF. A family study of obsessive-compulsive disorder. *Am J Psychiatry* 1995, 152:76–84
32. Thomsen PH, Mikkelsen HU. Course of obsessive-compulsive disorder in children and adolescents: A prospective follow-up study of 23 Danish cases. *J Am Acad Child Adolesc Psychiatry* 1995, 34:1432–1440
33. Black DW, Noyes RJr, Goldstein RB, Blum N. A family study of obsessive-compulsive disorder. *Arch Gen Psychiatry* 1992, 49:362–368
34. Thomsen PH. Children and adolescents with obsessive-compulsive disorder. An analysis of sociodemographic background: A case control study. *Psychopathology* 1994, 27:303–311
35. Heyman I, Fombonne E, Simmons H, Ford T, Meltzer H, Goodman R. Prevalence of obsessive-compulsive disorder in the British nationwide survey of Child Mental Health. *Br J Psych* 2001, 179:324–329
36. Matsunaga H, Seedat S. Obsessive-compulsive disorder: cross national and ethnic issues. *CNS Spectr* 2007, 12:5:392–400
37. Chavira DA, Carrido H, Baguarello M, Azzam A, Reus VI, Mathews CA. A comparative study of obsessive-compulsive disorder in Costa Rica and the United States. *Depress Anxiety* 2008, 25:609–619
38. Donias S, Karastergiou A, Manos N. Validity of the Greek version of the Symptom Checklist-90-R for the Greek population. *Psychiatriki* 1992, 2:42–48
39. Liakos A, Gianitsi S. The reliability and validity of the Greek version of Spielberg's State-Trait anxiety inventory. *Encephalos* 1984, 21:71–76

Corresponding author: D.C. Anagnostopoulos MD, PhD, Associate Professor of Child and Adolescent Psychiatry, Department of Child Psychiatry, Athens University Medical School, "Aghia Sophia" Children's Hospital, Athens, Greece, Thivon & Papadiamantopoulou street, GR-115 27 Athens, Greece
 Tel: (+30) 2132 013 392, Fax: (+30) 2132 013 225
 e-mail: danagnost@med.uoa.gr