

Survey of Mood and Behavioral-Emotional Disorders in Siblings of Children with ADHD

Hossein Jenaabadi

Associate Professor, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, University of Sistan and Baluchestan, Zahedan, Iran.

Correspondence: Hossein Jenaabadi, Associate Professor, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, University of Sistan and Baluchestan, Zahedan, Iran. E-mail: hjenaabadi@ped.usb.ac.ir

ABSTRACT

Objective: Since siblings of children with ADHD have more behavioral, mood, and anxiety disorders and suffer from semi-clinical disorders, present research aim is to specification and evaluate mood and behavioral-emotional disorders in siblings of children with ADHD. **Method:** In this descriptive research, 28 children with ADHD who refer to work-therapy mental centers, children and adolescent neurologists, and child psychiatrists were examined. Data collection tools was Achenbach's children behavioral and emotional disorders check list (1991). **Result:** Research findings show that effects depending on gender, birth order, and number of children is different; acceptance of the patient's older brothers were suitable but the intellectual problems, introverted behavior, and mood disorders were high; in younger brothers social problems, attention problems, abnormal behavior, aggression, defiance, and pertinacity were high. Their younger sisters were common in isolation-depression behavior, somatization, physical, and communicate problems and in the older sisters of the patients anxiety-depression, extroverted behavior, mood disorders, and anxiety problems were high. **Conclusion:** Research findings show that troubled behaviors of siblings are somewhat related to families.

Keywords: Mood Disorders, Depression, Anxiety, Emotional and Behavioral Disorders, Attention Deficit Hyperactivity Disorder.

Introduction

Psychological disorders not only result in psychiatric deficiencies of patients, but also affect their families severely and disturb their functions. This effectiveness can be seen in different aspects like mental health and social-economical functions. It totally decreases family welfare and impose so much pressure on them [1]. When one of the family members suffers from a mental disorder, all family members are somewhat involved in the disease and its consequences. It also imposes a great pressure on families [2]; presence in a family who has someone with mental disorder, imposes mental and perceived pressure on other members of the family (especially those who undertake care role) [3]. As said care for a sick child has a serious impact on families [4-6], however, this effect varies according to the nature of the disorder in children and some family variables. Sudden disorders that have an acute beginning, compared with chronic diseases have different effects on family life. In addition, maybe a disorder in different periods have different challenges for families [7], for example, when the child

grows older, her/his behavior will be challenging more and when she/he enters into adolescence, she/he will has new issues in the field of social communications [8]. Not only parents of children with mental disorder have problems with care for sick child, but also they have to care of siblings of sick child who have more disorders or sub-threshold disorders toward others [1]. Lainhart (1999) studied mental problems in siblings of sick children; he stated that the families are at increased risk of mental problems caused by the stress and pressure due to caring [9]. When there is a child with mental disorder in a family, the siblings may be in trouble too [7]. There will be problems such as higher levels of anxiety, feelings of rejection or trying to deal with sibling's behavior [10]. Fostering children with attention deficit-hyperactivity disorder impose a huge burden on family members, these burdens include issues related to the interactions between parents, children, and siblings, and also marital incompatibility [4]. Hyperactive children can have increasing effects on depressed mood of the parents; siblings are also at increased risk of the disease symptoms [11]. According to reports, in first-degree relatives of people who are suffering from ADHD, the disease is 68% higher than the control group [12]. Genetic studies indicate that siblings of children with ADHD, have behavioral, mood, and anxiety disorders to a greater extent [12]; and compared to healthy children's siblings are more likely to suffer from semi-clinical disorders [13]. Parents are not only faced with the problem of patient care, but also they must care of sick child's siblings that suffer from disorder or sub-threshold disorders to a greater extent. Symptoms of inattention, impulsivity, and hyperactivity of

Access this article online

Website: www.japer.in

E-ISSN: 2249-3379

How to cite this article: Hossein Jenaabadi, Survey of Mood and Behavioral-Emotional Disorders in Siblings of Children with ADHD. J Adv Pharm Edu Res 2018;8(S2):110-113.

Source of Support: Nil, Conflict of Interest: None declared.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

siblings, will lead to a dissimilarity in the organization of family life [14].

Robertson (2002) and Stan (2000) studies showed that siblings of this children report less warmth, intimacy, and satisfaction in their relationships [15, 16]. In addition, the siblings experience problems such as higher levels of anxiety, growing concern about the future [17], lower self-esteem [18], and feelings of rejection towards their parents [19]; they are more likely to have behavioral problems [20], that is because of anxiety, feelings of rejection or trying to deal with their sibling behavior [21]. Although it seems faulty behavior of siblings is somewhat related to the family environment, in some cases maybe they have inherited some parts of symptoms of their siblings. As a result, the interactions of the genetic and environmental factors will vulnerable them in social, academic, and emotional problems [22]. The effects vary depending on gender and birth order of siblings. Moreover, it seems that the patient is experiencing problems in relation to her/his counterparts and this increases in the absence of normal siblings. Siblings may feel embarrassed or ashamed, and this may lead them attempt to hide their sibling problems from their friends and thereby avoid abuse and ridicule in school. Nevertheless, many siblings of this children also report positive aspects of their relationships [23]. In addition, some studies show positive perception of parents toward children's relationships is less than positive perception of siblings about their relationships [15, 16]. It seems that mother's efforts have indirect relationship with reduction of conduct problems in children with ADHD [19]. Despite the many accomplished studies in the world on the families of patients with ADHD, still mood and behavioral-emotional condition in siblings with ADHD has not been fully investigated in Iran. This study was administered to determine and assess mood and behavioral-emotional disorders in the siblings of children with ADHD.

Method

Twenty-eight siblings with ADHD who refer to work-therapy mental centers, children and adolescent neurologists, and child psychiatrists were examined. The sample group was randomly selected from patients referred. All participants had to having healthy siblings aged 6 to 18 years. To collect data, we used children behavioral-emotional check list. This questionnaire was written by Achenbach for behavioral-emotional disorders among children 6 to 18 years old [24]. The questionnaire consists of 20 items related to child compatibility and evaluates the child's level of participation and social activities compatibility according to judgments of the parents. These activities include participation in recreations, entertainments, sports, professions, playing in groups and social activities. They consist of three subgroups that measure child's ability in 3 areas of activities, social interactions, and school. The combination of these grades creates the social function of the child. The higher the score, the greater the social participation of children [25]. The second part of the questionnaire consisted of 113 questions about behavior and emotional problems over the past six months. It consists of eight behavioral subgroup that include rejection, physical complaints, anxiety/depression problems, social problems, thought problems, attention problems, abnormal behaviors, and aggressive behaviors. Also, three combined grades include introversion and extroversion problems and also general problems. Higher scores indicate more problems [26].

To enter data and statistical analysis, SPSS software was used. We displayed quantitative data using mean; standard deviation and qualitative data based on percentage.

Results

The average age of participants in the study was $11/8 \pm 2/9$ years. All of them were elementary school children.

Table 1: Demographic characteristics of the study sample

	Variables	Frequency (percent)
Gender	Girl	14 (%50)
	Boy	14 (%50)
Number of Children	2 child	5 (45/45)
	3 child	6 (54/55)
	Secondary school or lower	3 (27/27)
Father's Education	Diploma	4 (36/36)
	Associates Degree	2 (18/18)
	Bachelor's Degree or higher	2 (18/18)
Mother's Education	Secondary School or lower	3 (27/27)
	Diploma	3 (27/27)
	Associates Degree	1 (9/9)
	Bachelor's Degree or higher	4 (36/36)
Father's Job	Employee	4 (36/36)
	Free Jobs	7 (63/63)
Mother's Job	House keeper	9 (81/81)
	Employed	2 (18/18)
Sick child birth order	First	6 (21/43)
	Second	9 (32/14)
	Third	13 (46/42)

Table 1 shows that the study group consisted of 28 children (14 girls and 14 boys) which are from 11 families who have the siblings of children with ADHD and were aged 6 to 18 years old. Six boys were older; 8 boys were younger than patient; 5 girls were older; and 9 girls were younger than patient. Number of children in most families were 3 child. The highest level of their father's education was diploma and the highest level of their mother's education was bachelor. Most fathers had free jobs and most mothers were housekeeper. The most birth order of children with ADHD's was 3.

Table 2: Emotional and behavioral disorders study sample score

	Younger boy	Older boy	Younger girl	Older girl
Activity	4/35	6/53	5/52	5/46
Social communications	1	1	1	1
Performance at school	29/23	25/38	33/74	18/02
General performance	24/48	22/63	19/75	20/68
Depressed/Anxious	29/73	34/48	31/73	52/26
Dissociable/Depressed	19/64	33/64	73/52	41/77
Physical Complaints	42/89	39/74	69/52	37/86
Social Complaints	64/26	27/58	50/57	24/64
Thought problems	43/75	70/25	42/56	59/74
Attention problems	69/73	29/46	53/45	53/74

Abnormal behavior	71/25	41/85	46/58	29/30
Aggressive behavior	64/73	21/77	38/37	26/66
Introversion behaviors	21/64	63/73	18/45	45/76
Extraversion behaviors	23/95	32/75	26/65	74/47
Mood problems	67/75	57/34	50/34	67/91
Anxiety problems	26/85	47/47	31/47	71/74
Physical problems	34/76	41/59	69/85	45/86
ADHD problems	59/48	23/57	51/86	45/64
Defiance and Pertinacity problems	58/95	21/64	67/53	38/64
Communication problems	63/54	45/66	71/48	36/58

Contents of table 2 shows there are disorders in school functions, group activities, and social communications. The overall adequacy of the participants were impaired too. Nonetheless, the social problems, attention problems, abnormal behaviors, aggressive behaviors, defiance, and pertinacity scores were high in younger brothers of the patient; the scores of older brothers were high in thought problems, introversion behaviors, and mood problems. The younger sisters of patients were high in dissociable-depressed behaviors, physical complaints, physical problems, and communications scores; in older sisters anxious-depressed problems, extraversion behaviors, mood problems, and anxiety disorders scores were high. In the older siblings of patients, mood problems were more than younger siblings.

Discussion

In this descriptive study, the emotional-behavioral status of the siblings of children with ADHD were examined. The children under study were different depending on gender, birth order, and number of children. Mood disorders were common among the children older than patients with ADHD. Behavioral problems could be seen in all of the children differently. As Barlow study (2002) revealed, the existence of a member with mental health, often imposes a major objective and subjective pressure on other members of the family; this pressure can have bad effects on the mental health of care providers or peoples who live with the patients^[3]. This effect varies according to the nature of the child disorder and some of the family variables. Sudden disorders with acute beginning have different effect on family life compared with chronic disorders^[8]. As the child grows older, the disease intensifies; and his/her behavior becomes more challenging. So when the child enters into adolescence, there will be new problems in his/her social communications^[8], it will create problems such as higher level of anxiety, feelings of rejection and trying to cope with the problems in their families^[10]. The result of the study is consistent with the Rutter & colleagues study (1999) that the siblings of children with ADHD have behavioral, mood, and anxiety disorders to a greater extent^[12]; and they suffer from semi-clinical disorders more likely compared to the siblings of healthy children^[13]. But so far none of the studies have examined the amount of effect severity of the disease in younger and older siblings. Other studies showed that the siblings of patients experience problems such as higher levels of anxiety, growing concern about the future^[17], lower self-esteem^[18] and the feelings of rejection towards their parents^[19]; they were more likely to have behavioral problems^[20]. Kendall (1999) conducted a qualitative study on children with ADHD and realized some of the siblings have positive feelings due to taking care of their sick brothers and sisters and are

proud helping them. This was more obvious in siblings older than patients. Howlin (1988), McHale, Solan & Simeonsson (1986) studies showed that siblings of the sick child, are more mature and responsible compared to their peers; and naturally have more sympathy and tolerance due to living with the patient^[24, 27]. Like other studies, this study had some limitations. First, this study lacked a control group, so that the results can be compared with each other. Second, the questionnaire had not lie detector that can detect incorrect answers from real answers. Third, the study sample was small, so it is recommended to investigate larger groups and various families with different classes.

Conclusion

This study showed that the effects are different depending on gender, birth order, and the numbers of children; and siblings faulty behaviors can be attributed partly to the family environment.

Acknowledgements

Thanks so much to all of the families that helped us in this study

References

- Zamani N, Habibi M. compare the influence of both dialectic and cognitive behavior therapies to maintain mothers' mental health whose children with Special needs. *Journal of Research & Health Social Development & Health Promotion Research Center*. 2013;123. T.27984.
- Kogel RL. Consistent stress Profile in mothers of children with autism. *Autism and Dev Des*. 1992; 22 (2): 205-216.
- Barlow DH, Durand VM. *Abnormal psychology* (Third ed) and Belmont: Wadsworth; 2002.
- Dowdell EB. Caregiver burden: grandmothers raising their high risk grandchildren. *J psychology. Nurs. Ment. Health Serv*. 1995; 33: 27-30.
- Hankin CS. ADT-ID and its impact on the family. *Drug Benefits Trends*. 2001; 13: 15-16.
- Sanders JL, Morgan SM. Family stress and adjustment as perceived by parents of children with autism or Down syndrome: Implications for intervention child. *Pam. Behav. Then* 1997; 19: 15-32.
- Sartorius N, Leff J, Lopez J, Ibor L, Maj M, Okasha A. *Family & Mental Disorders*. RC, translated by Borjali A, AjilChi B, Salimi M; 2012.
- Sartorius N, Leff J, Lopez J, Ibor L, Maj M, Okasha A. *Family & Mental Disorders*. RC, 2009.
- Lainhart JE. Psychiatric problems in individuals with autism, their parents and siblings. *Int. Rev. Psychiatry*. 1999; 11: 278-198.
- Hames A. Do the younger siblings of learning disabled children see them as similar or different? *Child Care Health Develop*. 2003; 24: 157-168.

11. Sadock BJ, Sadock VA. Comprehensive textbook of psychiatry. York, USA: Lippincott Williams & Wilkins; 2007.
12. Rutter M, Silberg J, Oconnor T, Simonoff E. Genetics and child psychiatry 1: Advance in quantitative and molecular genetics. I. Child psycho. Psychiatry. 1999; 40: 3-18.
13. Faraone SV, Biederman J, Lechman BK, Spencer T, Norman D, Seidman LJ, Kraus I. Intellectual performance and school failure in children with ADHD and in their siblings. J. Abnorm. Psychol. 1993; 102: 616-623.
14. Weiss M, Hechtman L, Weis G. ADHD in parents. J. Am. Acad. Child Adult. Psychiatry. 2000; 39: 1059-1061.
15. Robertson K. Relationship between boys with autism and their siblings. Dissertation Abstracts International. 2002; 63(3-A).
16. Stone KL. An investigation of sibling relationship of children with ADHD and their older siblings. Dissertation Abstracts International. 2000; 60(8-B).
17. Bagenholm A, Gillberg C. Psychosocial effects on sibling of children with ADHD, autism and mental retardation: a population-based study. I. Ment. Dific. Res. 1991; 35: 29307.
18. Prystalski SM. The effects of ADHD, autism on sibling relationship. Dissertation Abstracts International. 1998; 58(8-B).
19. Kendall J. Sibling accounts of ADHD. Fam. Process. 1999; 38: 117-136.
20. Hastigs RP. Behavioral adjustment of sibling of children with autism. J. Autism Develop. Disord. 2003; 33: 99-104.
21. Hames A. Do the younger sibling of learning disabled children see them as similar or different? Child Care Health Develop. 1998; 24: 157-168.
22. Bauminger N, Yirmiya N. The functioning and wellbeing of sibling of children with autism. Lawrence Erlbaum Associates, Mahwah, NJ; 2001.
23. Coleby M. The school aged siblings of children with disabilities. Develop. Med. Child neurol. 1995; 37: 415-426.
24. Howlin P. Living with impairment: the effects on children of having an autistic sibling. Child care health Develop. 1988; 14: 395-408.
25. Achenbach TM, Rescorla L. Manual for the ASEBA preschool forms and profiles: an integrated system of multi-informant assessment. Burlington, VT: ASEBA; 2000.
26. Nazari S, Shafiee A, Sadeghi Koupaei MT. Evaluation of behavioral and emotional problems among children with leukemia receiving chemotherapy. Pejouhandeh. 2014; 18 (6):320-324.
27. McHale S, Solan J, Simeonsson R. Relationship of children with autistic, mentally retard and non-handicapped brothers and sister. I. Autistic Develop. Disord. 1986; 16: 399-415.