



INVESTIGATE DIFFERENCE BETWEEN GIRLS AND BOYS AGED 6-12 WITH EPILEPSY IN RESPECT TO SYMPTOM

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ABSTRACT

The present research aimed to study mental disorder is those who had epilepsy between boys & girls and also to assess relationship of it with age at children. It was a cross-sectional study as 48 children who had Epilepsy that had referred to Iran association of epilepsy in Tehran city, Iran, 2012. This study was approved by Islamic Azad University, Rodehen branch and Ethics Committee (IAU/R-405-2012). All subjects (26 boys and 22 girls) among 6-12 years old has selected by simple random sampling, then if parents of children were happy to participate of their children in this study, then that we request them to sign consent form & field up the standard questionnaires (CSI-4). Data has entered & analyzed by SPSS (version 17), and using that of person correlation coefficient and independent t-test. In this study has shown that where was not a significant difference between girls & boys with epilepsy in respect to mental disorders and there was negative significant between age and mental disorder only in I factor (social phobia), these fore symptoms of I factor was more in lower age of children with epilepsy. Physicians and psychologists should not pay attention to age and gender of children with epilepsy as a predispose factor of mental disorders.

Key Words:- Epilepsy, children, boys & girls, mental disorder.

INTRODUCTION

Epilepsy and its mental factors have particular importance in psychiatry domain. Because the major psychological factors play important role in its genesis and find the causes and prevention and control of predisposing mental factors for epilepsy have always been a health priority. Epilepsy is a sudden incidence abnormal electrical discharge of brain cells which is causes the repeated seizures (Pugh & *et al.*, 2011). Epilepsy after stroke is the second cause of central nervous system diseases and about 5/0 to 1% of the world's people are infected with the disease. Also in Iran 2/4 of every 1,000 school-age children are with epilepsy and 65% of patients

with epilepsy in children and adolescents form (Kaheni *et al.*, 1390). The fact that mental disorders are associated with epilepsy, so that prevalence of mental disorders in non-hurt epileptic patients according to (Medergo *et al.*, 2002): is hypochondriasis 33%. Depression 55%, Hysteria 41%, Paranoid 14%, Obsessive compulsive disorder 28%, Schizophrenia 57% and Mania 11%, and there wasn't find antisocial personality disorder, in any of epilepsy patients. (Matsuras, 2001) showed the 42% prevalence of mental disorders in epilepsy patients were suffering from mental retardation and prevalence of mental disorders were high in them and it is about 37.8%. (Strine, 2005) also in study of mental and physical disorders in youth with seizures, believe that mental disorders in epilepsy people have highly prevalent. But they are often unknown and without treatment in these patients. (Monaco *et al.*, 2003) Were studied obsessive compulsive disorder in temporal lobe of epilepsy patients. The results showed 14.5% of patients

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had obsessive compulsive disorder.(Cramer, Branden, 2005) showed with depression and anxiety in partial epilepsy patients that 52% of subjects were without anxiety, 25% minor anxiety, 16% moderate anxiety and 7% ere have major anxiety, and also 26% of subjects were without depression, 20% minor depression, 14% moderate depression and 40% had major depression. (Kokkonen *et al.*, 1997) Believed that there are special features of cognitive behavioral therapy in children with epilepsy. That has enormous effect on the academic performance of these children and decreased academic performance of these children. Also, children who were exposed to sudden seizures were compared with children who were less vulnerable to such attacks were more encountered with educational problems. On the other hand, epilepsy has great effect as a chronic disease on many aspects of psychological, social, career and academic life of the person with epilepsy and the people around him and in some cases the treatment has been too long and a lifetime and in some cases, despite, conventional medical therapy epileptic attack continue. So it is important to pay attention to certain mental aspects of these patients. Especially about the children because most epilepsy attacks occurring in childhood. As mentioned above, several studies have shown symptoms in children with epilepsy that some of them were pointed. Considering the above issues as well as the prevalence and onset of epilepsy in childhood and educational outcomes, academic and personality development during illness in this study, we sought to answer the question that are there any significant difference between boys and girls with epilepsy in respect to symptom? And whether the incidence of this disorder is associated with age with epilepsy?

MATERIALS AND METHODS

It was a cross-sectional study as 48 children who had Epilepsy that had referred to Iran association of epilepsy in Tehran city, Iran, 2012. This study was approved by Islamic Azad University, Rodehen branch and Ethics Committee (IAU/R-405-2012). All subjects (26 boys and 22 girls) among 6-12 years old has selected by

simple random sampling, then if parents of children were happy to participate of their children in this study, then that we request them to sign consent form & field up the standard questionnaires (CSI-4). Data has entered & analyzed by SPSS (version 17), and using that of person correlation coefficient and independent t-test. *Tool:* In this research the Children Symptom Inventory (CSI-4) was used. Children Symptom Inventory is tool mode on DSM diagnostic criteria basis. This inventory investigate 11 group of symptoms that marked from A to L. these 11 group contain 21 certain symptoms that consist of : attention deficit / Hyperactivity (lack of focus type) (A), attention deficit / Hyperactivity (ADHD) type (A), attention deficit / Hyperactivity (combined type) (A), oppositional defiance (B), conduct (C), Generalized anxiety (D), specific phobia (E), obsessive disorder (E), compulsive disorder (E), post traumatic stress (E), Motor tic (E), Vocal tic (E), Schizophrenia (F), Major depression (G), Minor depression (G), Autism (H), Asperger (H), Social phobia (I), Separation anxiety (J), Enuresis (L), Encopresis (L).

The characters of this questionnaire are unable to obtain clinical information about symptoms of psychiatric disorders of children from parents or teachers. This questionnaire is made to separate form for parent and teachers, parent form used in the present study. In the present study, reliability of the questionnaire is obtained by Cronbach's alpha 0/72.

RESULTS

In this study results has shown that there was no significant difference between epileptic boys and girls in any of the subscales of the questionnaire symptom (table 1).

List of factors1 in this study has shown as below in Table 2: among 11 variables, a negative and significant correlation ($P < 0/05$) exists between age and symptoms in children with epilepsy only in the factor I.

Table 1. results of independent T-test

Factors	Group	Average	Standard deviation	DF	t	Significant level
Factor A	Girl	7/27	5/22	46	0/722	0/474
	boy	6/20	4/95			
Factor B	Girl	2/77	2/77	46	-./355	0/724
	boy	3/03	2/40			
Factor C	Girl	0/954	1/32	46	0/893	0/377
	boy	0/615	1/29			
Factor D	Girl	1/22	1/34	46	-1 /137	0/261
	boy	1/76	1/86			
Factor E	Girl	0/272	0/702	46	-1 /245	0/219
	boy	0/576	0/945			

Factor F	Girl boy	0/136 0/500	0/639 1/392	36/327	-1/191	0/241
Factor G	Girl boy	5/36 5/76	0/726 1/365	39/296	-1/311	0/197
Factor H	Girl boy	2/27 2/65	2/94 3/69	46	-/390	0/699
Factor I	Girl boy	1/36 1/42	0/902 1/02	46	-0/211	0/834
Factor J	Girl boy	1/22 1/92	1/82 2/65	46	-1/039	0/304
Factor L	Girl boy	2/72 3/15	2/22 3/64	46	- 0/478	0/635

Table 2. Results of Pearson's correlation between age and symptoms

Variables	R	N	Significant level
Age & Factor A	-0/009	48	0/950
Age & Factor B	0/231	48	0/115
Age & Factor C	0/131	48	0/375
Age & Factor D	0/136	48	0/356
Age & Factor E	0/143	48	0/331
Age & Factor F	- 0/019	48	0/899
Age & Factor G	0/067	48	0/651
Age & Factor H	-0/105	48	0/310
Age & Factor I	- 0/324	48	0/025
Age & Factor J	- 0/240	48	0/101
Age & Factor L	- 0/047	48	0/753

DISCUSSION AND CONCLUSION

The results of this study have shown that there is no significant difference, with 95% confidence between boys and girls those who had epilepsy in terms of symptoms. In the texts were studied, research that has investigated this relationship was not found. There are factors in relationship with epileptic children such as the disease effect on focus process, Memory, sleep, relationships with peers and teachers and educational process, having a lot of overlap and continuity with mental- emotional disorders of childhood, rejection by family and peers, certain limitations that occur in children with epilepsy, Antiepileptic Drugs, Prolongation of the disease and specific physiologic factors which are cusses symptoms in these children. Does not seem about these factors there is Considerable difference between boys and girls with epilepsy, so it seems logical that in respect to the symptoms there is no difference between boys and girls with epilepsy. Also about the relationship between age and symptoms in the children with epilepsy there is a negative and significant correlation ($P < 0/05$) only in the factor I (social phobia), it means that the younger children more

likely to show symptoms of social phobia. In the texts were studied, research that has investigated this relationship was not found. One reason of the negative correlation could be that with age increased in children with epilepsy Parents coping with their disease is increased too. Studies have also shown that the effective compliance of parents is cusses child sick to adapt with his chronic condition (Scheepers & kerr 2004). Thus, the adaptation of parents can reduce fear and anxiety of children with epilepsy than seizures, and can eventually lead to reduced social phobia in children. Due to the prevalence of epilepsy in the general population and the prevalence of psychiatric disorders and considering that these disorders are often ignored or are not recognized or after the diagnosis the treatment will not be enough, therefore the diagnosis of psychiatric disorders and their treatment is of great importance. But factors Such as sex and age cannot be a strong predictor of a specific psychiatric disorder in order to diagnosis in child with epilepsy. It has done a few research related to our study for this reason we had limited studies.

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