

Incidence of Mental Disorders in Epileptic Children between 6 to 12 Years Old

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ABSTRACT: The purpose of this study was to assess mental disorder in children with epilepsy. The research population included all 6-12 years old children with epilepsy referred to Iran association of epilepsy. These are based on random sampling of 48 children (26 boys and 22 girls) were selected and they were studied by using Children Symptom Inventory (CSI-4). Data were studied and analyzed by descriptive and statistics methods. Results of research showed that 6-12 years old children with epilepsy respectively in Oppositional Defiant disorders, Enuresis, Attention deficit/hyperactivity (lack of focus type), Encopresis, attention deficit/hyperactivity (ADHD type) scored higher than disorders of Specific phobia, Motor and Vocal tic, Obsessive Compulsive, Separation anxiety, Post traumatic stress, Attention deficit/hyperactivity (combined type) and Conduct. And there wasn't observed any case of disorders of Schizophrenia, Major and Minor depression, Autistic and Asperger. Therefore, physicians should be considering the significant role of mental and emotional factors in addition to physical and tangible issues of patients, too. and by screening and diagnosis and treatment of disorders and also assure the patients with psychiatric intervention and attracting their cooperation in accepting and continuing treatment regimen and reduce their problems which will follow by positive effects of personal, familial, social and economic.

Key words: Epilepsy, Symptoms, Psychiatric Disorders

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 (Shirzadi et al., 1998). Epilepsy is the most common chronic neurological disease in general population, and its prevalence is 2 to 3 percent in children (Santilli, 1996) and diagnosis and treatment of psychiatric disorders with it, is a top priority (Soltanzadeh, 1995). 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 et al. (2003) 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 et al. (2005) 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 had obsessive compulsive disorder. Cramer (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% have major anxiety, and also 26% of subjects were without depression, 20% minor depression, 14% moderate depression and 40% had major depression. Kokkonen (1999) 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. Keming et al. (1999), show that the quality of life in children with epilepsy is much lower than their healthy counterparts. Karamad (2004) with studying of anxiety disorders and depression in patient with epilepsy aged 10-50 showed that the prevalence of depression and some of anxiety disorders (obsessive-compulsive disorder, generalized anxiety and phobia) is significantly high in patient with epilepsy. So many problems can be associated with epilepsy, but what is important is that there is a close relationship between the

psychiatric disorders with decline in personal-social-career performance that is constant finding in different cultural-social-economic levels. Therefore necessity of attention to of psychiatric disorders and their diagnosis and treatment can be valuable and effective steps to control the disease (Soltanzadeh, 1995). 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. According to above and prevalence rate and onset of epilepsy in childhood and educational outcomes, academic and personality development during illness and even after recovery, study of psychological characteristics in children with epilepsy is important. Mental disorders is often remain unrecognized and without treatment, therefore, the results of this study shows the mental profile of mental disorders in patients with epilepsy to gain an accurate diagnosis of disease and parallel to its appropriate treatment strategies.

METHODS AND MATERIALS

The statistical population of his study has consisted of all 6-12 children boy and girl (n=93) with epilepsy referred to Iran association of epilepsy in 2008. After the sample size was estimated 48 children with epilepsy (26 boys and 22 girls) were selected with sampling method. 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 contains 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 (K), Encopresis (K). 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. Gadow and Sprafkin (1994) have confirmed convergent validity of it too.

RESULTS

The frequency distribution of subjects for separation sexes: The number of boys 22 (54.2%) and the number of girls are 26 (45%) and the minimum age for subject has been 5 and Maximum has been 12 and Average has been 9.6 and Standard deviation 2.23. Table 1 show various measures of central tendency and dispersion of subjects' scores in 11-fold factors are related to symptoms.

Table 1: Summary statistical indices of subjects in the Children Symptom Inventory

Factors	Average	Standard deviation	Min.	Max.
Factor A	6.79	5.04	0	18
Factor B	2.85	2.56	0	8
Factor C	0.75	1.29	0	6
Factor D	1.51	1.63	0	7
Factor E	0.42	0.84	0	4
Factor F	0.32	1.10	0	5
Factor G	5.57	1.11	5	10
Factor H	2.48	3.31	0	15
Factor I	1.38	0.953	0	4
Factor J	1.57	2.30	0	10
Factor k	2.91	3.03	0	15

Table 2: The frequency of epileptic children in symptom based on diagnostic criteria

Factor	N	Freq.	Percent
Attention deficit/ hyperactivity (lack of focus)	48	14	29.16
Attention deficit /hyperactivity (ADHD type)	48	11	22.91
Attention deficit /hyperactivity (combined type)	48	4	8.33
Conduct	48	2	4.16
Oppositional defiance	48	17	35.41
Generalized anxiety	48	1	2.08
Separation anxiety	48	5	10.41
Specific phobia	48	8	16.66
Social phobia	48	1	2.08
Post-traumatic stress	48	5	10.41
Motor tic	48	6	12.51
Vocal tic	48	6	0
Major depression	48	0*	0
Minor depression	48	0*	0
Autism	48	0*	0
Asperger	48	0*	2.08
Obsessive disorder	48	1	2.08
Compulsive disorder	48	6	12.5
Schizophrenia	48	0*	0
Enuresis	48	15	31.25
Encopresis.	48	13	27.08

There wasn't seen case of schizophrenia, major and minor depression, autism and Asperger disorders.

DISCUSSION

The results of this study showed that in 6-12 years old children with epilepsy respectively prevalence of oppositional defiant, Enuresis, attention /hyperactivity (lack of focus), Encopresis, attention deficit /hyperactivity (ADHD type) were more than specific phobia, Motor and Vocal tic, Obsessive compulsive, Separation anxiety, Post traumatic stress, attention deficit/hyperactivity (combined type) and Conduct disorders and there wasn't seen a case of schizophrenia, Major and Minor depression, Autism and Asperger disorders that be in same context with results of study like Monaco et al (2003); May (1999); Shirzadi et al. (1998); Milanifar (2003); Zarie et al. (1997) and was inconsistent with research of Moderego et al.(2002) and Dizji (2005) . According to results 26.16 of children with epilepsy were suffered by lake focus type, 91.22 Hyperactivity,33.08 combined type of attention deficit/hyperactivity disorders that is consistent whit previous studies' result like Shirzadi et al. (1998) and Kerishman (2001) . Some of antiepileptic drugs, especially phenytoin, Valporic Acid, Carbamazepine, are will cause asthenia or excitation in children with epilepsy. According to the results it can be stated that in children with epilepsy oppositional defiant disorder has highest prevalence. The 35.41% of children with epilepsy were suffering of oppositional defiant disorders. Patients with epilepsy cannot show appropriate response to external stimulation and circumstances because of prolonged disease of their personality changes and excitability. And they get angry abnormally and have uncontrollable movements. Rejection from family and peers brings unfavorable reactions in children with epilepsy. Also, certain limitation is caused in children with epilepsy that brings specific aggressive and disagreeable behaviors by child (Zarie et al., 1997). All these cases may have reactions that have been mentioned as characteristics of oppositional defiant disorder by parents of children with epilepsy. According to the results obtained, Enuresis has high prevalence too, that is consistent with finding of researchers such as shirzadi et al. (1998) which are saying in their phase of large seizure attack pressure on the bladder may be 6 times. And bladder empty in this phase or next phase and or enuresis or encopresis occurred because of stomach cramps and pressure on the bladder or colon. According to prevalence of epilepsy in the general population, and prevalence of psychiatric disorders and according to that these disorders often ignored or not diagnosed or treatments aren't enough after diagnosis while in case psychiatric disorder is diagnosed effective treatments are available. Use of a simple screening method may help to the diagnosis of psychiatric disorders and solve the problems. Most of psychiatric disorders are treatable, therefore, It Can useful

to identified a method that can help to diagnosis disorders quickly and with low costs to complete treatment. Also, Due to the coincidence of some psychiatric disorders with medical disease and lack of sufficient time and attention from doctor is recommended to do a complete diagnostic psychiatric interview in patients with epilepsy.

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