

PARENTAL KNOWLEDGE AND MENTAL HEALTH IN PARENTS OF CHILDREN WITH EPILEPSY

Behrouzian F¹, Neamatpour S²

ABSTRACT

Objective: To investigate the level of knowledge about epilepsy and its relationship with mental health in parents whose children had epilepsy.

Methodology: This is a cross sectional study which assessed 35 parents (27 mothers-8 fathers) of children who had been diagnosed for epilepsy by convenience sampling at Golestan Hospital in Ahwaz. Parents were given epilepsy knowledge questionnaire and GHQ-28.

Results: About 65.7% of parents were considered to have psychological problems. In 91.4% of parents, the level of knowledge about epilepsy was poor and incorrect. Significant correlation was found between level of parental knowledge and mental health ($p<0.01$).

Conclusion: The findings of this study suggest parents with epileptic children need more information and education about epilepsy for decreasing psychological problems. So psychosocial assessment and greater access to mental health services in order to provide appropriate intervention may be beneficial.

KEY WORD: Epilepsy, Knowledge, Epileptic child, Parents, Mental health.

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INTRODUCTION

Epilepsy is the most common neurological disorder in childhood.¹⁻³ It is an important health problem in developing countries, where its prevalence reaches as high as 57%.² It is well known from research outside the field of epilepsy that caring for a person with a chronic

illness may be emotionally demanding.⁴ However, understanding of the impact of epilepsy on family members and other informal carers has so far attracted remarkably little research.^{4,5} The unpredictable nature and course of epilepsy may have a significant impact on both the physical and psychological functioning of the child and the family.⁶⁻⁸ The emotional impact of epilepsy on family members is a neglected topic, with the majority of studies confined to patient with epilepsy.⁶ It is well documented that knowledge is a vital factor in the ability to cope successfully with epilepsy. Misconception and deficit in knowledge have implications, not only for Psychosocial Well-being but also for medical compliance.⁹

Parental beliefs and attitudes concerning epilepsy significantly impact adjustment and quality of life for both the child and family.¹⁰ The Social Attitude, the stigma and the

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1. Behrouzian F, MD,
Psychiatrist,
 2. Neamatpour S, MA,
Clinical Psychologist,
- 1-2: Ahwaz Jundishapur University of Medical Science,
Psychiatry Department,
Golestan Hospital,
P.O.Box173,
Ahwaz, Iran.

Correspondence

Forouzan Behrouzian
E-mail: fbehrouzian@gmail.com

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discrimination against epileptic are often more devastating and harmful than the disease itself.¹¹ On the other hand, parents with positive attitudes toward their children's epilepsy use more positive coping behaviors than parents with less positive attitudes.¹² Additionally, previous finding suggest that parental anxiety may be more likely to perceive higher risks for their children and misinterpret information about their child's condition which may result in restriction of activities.¹⁰ Therefore, in this study, we attempted to identify the knowledge of parents with epileptic children and its association with their mental health.

METHODOLOGY

This is a cross sectional study which included 35 parents of children who had been diagnosed and treated for epilepsy between the ages of 0/5 and 15 years (mean=5.8 years), who were seen in the Department of pediatric of Golestan hospital of Ahwaz Jundishapur university of Medical sciences, Iran. Parents selected convenience sampling. Children who had cerebral palsy or mental retardation were excluded from the study.

The mean time since diagnosis was 2.6 year (range 30-60 month). During the child's pediatric clinic visit, demographic information's were collected. We administered two questionnaire including knowledge of epilepsy questionnaire and General Health Questionnaire (GHQ-28). The knowledge epilepsy questionnaire consists of 21 true/false question. The responses are scored 0 to 1 with a range of score from 0 to 21. The reliability coefficient for the use of the tool in this study was 0.87. The knowledge questionnaire was designed to measure important medical and social aspects of epilepsy derived from the medical literature and from experts in the field. The questionnaire covered eight main areas: parent's knowledge, attitude toward epilepsy, view on treatment and effect of epilepsy on social life, employment, driving, diet, intelligence and any restriction. Our composite questionnaire also included the GHQ-28 is the most widely used screening instrument for detecting minor psychiatric disorder in

community samples.¹³ It is rated on four point rating scales one to four. Data were analyzed using SPSS.

RESULTS

A total of 35 completed questionnaires were collected. The demographic characteristics of parents and children are summarized in the Table-I.

Among the parents, 91.4% had low and medium knowledge about epilepsy. The source of information was physician in 74.3%; Television in 8.6%, relative in 5.7% and other sources in 11.4%. Results showed 65.7% of parents suffered from psychological problems. The Pearson correlation indicated a negative correlation existed between parental knowledge and their mental health ($p<0.001$). Results suggested that level of knowledge of parents was significantly associated with their educational level ($p<0.001$). Also, Spearman correlation showed a negative correlation between parents mental health and their educational level ($p=0.046$). Additionally,

Table-I: Demographic characteristic of the samples

Gender	N	%
Male	8	22.9
Female	27	77.1
Age range	22-46	
<i>Education level</i>		
Elementary	9	25.7
Junior high school	3	8.6
High school	17	48.6
College	6	17.1
<i>Employment</i>		
Yes	11	31.4
No	24	68.6
<i>Source of information</i>		
Physician	26	74.3
Television	3	8.6
Relatives	2	5.7
Others	4	11.4

significant positive correlation were found between disease duration and parental mental health ($p=0/004$). Parental mental health was also positively related to child's age ($0=0/003$).

DISCUSSION

Like previous studies, we found that the majority (91.4%) of parental epileptic children had low or medium knowledge about epilepsy.^{7,14} In this study, only 74.3% of parents had reported that the source of information were physician. It is well known that children and their parents need more than just medical support to get an acceptable quality of life.¹⁵ Therefore, epileptological approach should be integrated with doctor-patients dialogues planned to prevent no- justified restrictions in day life, fears and negative reaction and to ameliorate intra familial relation and compliance toward drug intake.¹⁶

Study results suggest that the majority (65.7%) of parents had GHQ scores higher the cut off point which means they have psychological problems. Baki & et al, reported, the prevalence of symptoms of depression and anxiety was increased in mothers of patients with epilepsy which is agreement with our findings.⁶ Consistent with finding of previous studies^{7,10} we found that lower level of knowledge about epilepsy in parents, was associated with loss of mental health in them. Supporting our findings in the majority of studies^{7,10,17} a significant positive correlation was found between parental knowledge and educational level. Furthermore, parent mental health was also positively related to the educational level. It seems parental educational level represents a knowledge base and affects their ability to adapt to change educational level. In consistence with our findings, Mu et al found the mothers with lower educational level had significantly higher depression score.¹⁷ In our study, older age of child at onset of epilepsy and longer duration of epilepsy, were found to be significantly correlated with decreased mental health of parents, which is in contrast with Mu et al study.¹⁷ Several large studies have shown the rate of psychological

problems in patient and their families' in chronic disorder is higher at the onset of disease than the late onset; that is in contrast with our findings. However, parental belief and attitudes concerning epilepsy as a chronic disease, considerable emotional strain, fears of stigmatization, social rejection and also behavioral problems of children, may affect the adjustment of parent's children with epilepsy.

This study showed that parental understanding of epilepsy was generally poor and incorrect and it was correlated with the decreased general mental health. So respite care, parent support group, increased education about nature of seizure, and its risk, psychological development and greater access to mental health service may be beneficial. Targeted intervention and support may be critical for these families.

Limitations of the study: The limitations of our results were small sample size and absence of a matched control group.

REFERENCES

1. Rodernburg R, Meijer AM, Dekovi M, Aldenkam AP. Family factors and psychopathology in children with epilepsy: A literature review. *Epilepsy & Behavior* 2005;6:488-503.
2. Abiodum OA, Saheed B. Impact of psychiatric morbidity on parent- rated quality of life in Nigerian adolescents with epilepsy. *Epilepsy & Behavior* 2005;7:497-501.
3. Cowan LD. The epidemiology of the epilepsies in children. *Ment Retard Dev Disabil Res Rev* 2002;8:71-81.
4. Mc Ewart L, Taylor J, Casswell M, Entwistle R, Gacoby K, Gorry A, et al. Knowledge of and attitudes expressed toward epilepsy by carers of people with epilepsy: A U K perspective. *Epilepsy & Behavior* 2007;11:13-19.
5. Thompson P, Upton D. The impact of chronic epilepsy on the family. *Seizure* 1992;1(1):43-48.
6. Baki O, Erdogan A, Katarci O, Akisik G, Kayaalp L, Yalcinkaya C. Anxiety and depression in children with epilepsy and their mothers. *Epilepsy & Behavior* 2004;5(6):958-964.
7. Lee Mmk, Lee Tm c, Ng ph k k, Hung AT.F, Au.A M.L, Wongvc.N. Psychosocial Well-Being of carers of people with epilepsy in Hong Kong. *Epilepsy & Behavior* 2002;3:147-157.

8. Ellis N, Upton D, Thompson P. Epilepsy and the family: A review of current literature. *Seizure* 2000;9(1):22-30.
9. Galletti F, Gabriella SM. Counseling children and parents about epilepsy. *Patient Education and Counseling* 2004;55(3):422-5.
10. Austin JK, Mc Dermott N. Parental attitude and coping behaviors in families of children with epilepsy. *J Amer Neuroscience Nurses* 1988;20(3):174-9.
11. Anup KT, Anand MV, Ram JI, Prolima T, Pragya M. Knowledge awareness and attitude about epilepsy among schoolteachers in India. *Seizure* 2008;4:1-7.
12. Williams J, Steel CH, Sharp GB, Delosreyes E, Phillips T, Bates S, et al. Parental anxiety and quality of life in children with epilepsy. *Epilepsy & Behavior* 2003;4(5):483-86.
13. Ploubidis GB, Abbott RA, Huppert FA, Kuh D, Wadsworth MEJ, Croudace TJ. Improvements in social functioning by a birth cohort in mid-adult life: A person-centered analysis of GHQ-28 social dysfunction items using latent class analysis. *Personality and Individual Differences* 2007;42(2):305-16.
14. Ridsdale L, Kwan I, Cryer C. The effect of a special nurse on patients' knowledge of epilepsy and their emotional state. *British J General Practice* 1999;49:285-9.
15. Austin JK, Shafer PO, Deering JB. Epilepsy familiarity, knowledge, and perception of stigma: report from a survey of adolescents in the general population. *Epilepsy & Behavior* 2002;3:368-75.
16. Ismail H, Wright J, Rhodes P, Small N. Religious beliefs about causes and treatment of epilepsy. *Br J Gen Pract* 2005;55(510):26-31.
17. Mu Pf, Kuo Hc, Ping change K. Boundary ambiguity, coping patterns and depression in mothers caring for children with epilepsy in Taiwan. *International J Nursing Studies* 2005;42(3):27.