Original Research Paper

Marital Quality and Stress in Parents of Children with Epilepsy and Normal Controls: A Comparative Study

Umesh Kumar[1]*, Dr. C.R.J. Khess[2]

ABSTRACT

Background: Epilepsy is a commonest form of neurological disorder characterized by recurrent seizures of cerebral origin, presenting with episodes of sensory, motor or autonomic phenomenon with or without loss of consciousness. Seizures in epilepsy are caused by outbursts of excessive electrical activity in part or the whole of the brain. The majority of individuals the epilepsy do not have any obvious or demonstrable abnormality in the brain, besides the electrical changes. ***Aim:*** The aim of the present study was to assess the marital quality of life & stress of the parents of the children with epilepsy and normal control. ***Sample:*** The sample consisted of 30 parents of the children being diagnosed with epilepsy and 30 parents of normal controls. ***Tools:*** Tools used were GHQ 28, Parenting Stress Index and Marital Quality Scale. ***Result and Conclusion***: The findings of the present study indicates that poorer level of quality of life, significant negative correlation between burden items and significant positive correlation between occupation of parents and parental distress of the sub scale of parenting stress index with the parents of Epileptic children compared to parents with normal children.

Keywords: *Patients of Epilepsy, Normal population and parents.*

Epilepsy is a commonest form of neurological disorder characterized by recurrent seizures of cerebral origin, presenting with episodes of sensory, motor or autonomic phenomenon with or without loss of consciousness. Seizures in epilepsy are caused by outbursts of excessive electrical activity in part or the whole of the brain. The causes of epilepsy are multifaceted in nature which includes genetic predisposition, brain damage caused by birth complications, infections and parasitic diseases, brain injuries, intoxication and tumors, infectious illnesses like neurocysticercosis (tapeworm infection in brain), schistosomiasis, toxoplasmosis, malaria, meningitis and tubercular and viral encephalitis are some of the common infectious causes of epilepsy in developing countries (Senanayake & Román, 1993). The Global Burden of Disease 2000 (Mathers *et al*., 2002) estimates that about 37 million individuals globally suffer from primary epilepsy. When epilepsy caused by other diseases or injury is also included, the total number of persons affected increases to about 50 million. It is estimated that more than 80% individuals with epilepsy live in developing countries. Epilepsy places a

[1] Ph. D. Scholar, Dept. of PSW, RINPAS, Kanke, Ranchi, Jharkhand, India
[2] Professor of Psychiatry, Central Institute of Psychitry, Ranchi
*Responding Author

significant burden on communities, especially in developing countries where it may remain largely untreated. The Global Burden of Disease 2000 (Mathers *et al*., 2002) estimates the aggregate burden due to epilepsy to be 0.5% of the total disease burden. In addition to physical and mental disability, epilepsy often results in serious psychosocial consequences for the individual and the family. The stigma attached to epilepsy prevents individuals with epilepsy from participating 3in normal activities, including education, marriage, work and sports.

In India there are 55, 00,000 persons with epilepsy, 20, 00,000 in USA and 3, 00,000 in UK. Three to five per cent of the populations have a seizure sometime in their life and half to one percent of the population have *'active epilepsy'* (Sridharan, 2002).The range of incidence of epilepsy is roughly said to be 40 to 70 per 100,000 in most developed countries and from 100 to 190 per 100,000 in developing countries. In majority of countries of today's world, the prevalence of active epilepsy ranges from 4 to 10 per thousand populations. Higher prevalence of epileptic disorders was found in some African and South American countries (Hauser & Annegers, 1980; Palcencia *et al.,* 1992; Nicoletti *et al.,* 1999; Sander, 2003). In India the incidence rate of epilepsy is approximately 49.3 per 100,000 population and the number of new persons with epilepsy in India each year is close to half a million people (Mani, 1997).

Epilepsy is a common chronic condition that often begins in childhood. There are some startling statistics that demonstrate the prevalence of this problem. Each year, 150,000 children and adolescents will have a newly occurring seizure of some type; of those, 20% will develop epilepsy. In USA there are currently more than 2 million persons who have epilepsy; 50% of those cases began in childhood. A seizure of any type will be experienced by 4% to 10% of all children by age 20 years; 1% will be diagnosed with epilepsy (Hirtz & Nordi, 2002).

Aim of the Study
- The aim of the present study was to assess and compare the family burden stress and marital quality of life in the parents of children with epilepsy and normal controls subjects.

Sample of the Study
The sample was consisting of 30 parents of epileptic children's and 30 parents of normal control subjects. Parents of both genders were included in the study. Purposive sampling technique was used in the present research investigation.

Tools to be used
> **General Health Questionnaire (GHQ-28):** The GHQ-28 was developed by Goldberg and William in the year 1978. It is 28 items questionnaires, it is widely use for screening people for the presence of psychiatric illness.
> **The Marital Quality Scale:** The Marital Quality Scale is a self developed by Shah (1995) to assess quality of marital life and standardized on normal population in India. This scale is comprised of 50 items with a 4 point scale (1-4).The male and female forms of the scales are provided to administer according to the gender .The scale has 28 positively worded items on factors: Understanding, Satisfaction, Decision making, Trust and role functioning. And 22 negatively worded items on factors; Rejection,

Despair, Discontent, Dissolution-Potential, and Dominance. The range for the total score is 50-200. Higher the score indicates lower the quality of marital life and mean of the total score is the cut-off point to differentiate 'poor' quality of marital life from the 'better' quality of marital life.

The Parenting Stress Index /Short Form (PSI/SF) (Abdin, 1995): It is a direct derivative of the parenting Stress Index full-length test. All items on the short are contained on the long form with identical wording. Although the full-length PSI examines the parent-child dyad more closely than short form, the three factors proposed by Castaldi appear to capture the primary component of the parent-child system by focusing on the parent, the child, and their interactions. It is these three factors that were chosen for inclusion in the PSI/SF. The three subscales of the PSI/SF were labeled Parental distress, Parent-child Dysfunctional Interaction, and Difficult child.

Procedure

In this study initially 60 participants who were meeting inclusion and exclusion criterion were selected for this study through purposive sampling techniques. Out of these 60 participants 30 participants were having parents of epileptic children and 30 participants were parents of normal control subjects. Parents of epileptic children were selected from the inpatient department and outpatient department of Central Institute of Psychiatry, Kanke, Ranchi. Normal controls were selected from Kanke area of Ranchi district. There after socio demographic data was collected from all participants by using Socio-demographic and clinical data sheet. GHQ- 28 was administered as screening tool for selection of normal control subjects. Then the assessment of selected samples was done by using parenting stress index and marital quality of Life Scale on individual participants.

Statistical Analysis

The statistical analysis was done with the help of Statistical Package for Social Science-20 (SPSS-16). For the analysis of obtained data t-test was applied.

Table 1. Comparison of Parental Stress Inventory of Experimental (Epilepsy) and Normal Control Group

Variable (Domains of Parental Stress Inventory)	Group N=60		t (df=58)
	Epilepsy (n=30)	Normal (n=30)	
	Mean ± S.D.	Mean ± S.D.	
Parental distress	36.03±5.11	34.66±6.32	.92NS
Parent child dysfunctional interaction	38.76±4.72	32.46±5.61	4.70***
Difficult child	38.16±5.87	38.16±2.97	0.00NS

*** *Significant at the 0.001 level, NS-Not Significant*

Table (1) shows comparison of Parental Stress Inventory of Experimental (Epilepsy) and Control Group (Normal) by using t-test. It has been indicated that there was significant different in the domain of parent child dysfunctional interaction of the Parental Stress Inventory in two groups. However there was no significant different with others domains of Parental Stress Inventory in two group. These finding is demonstrate by Wirrell et al., 2008 and Kopp et al. 2008. These finding also supported by Buelow et al. 2006.

Table 2. Comparison of marital quality of life of mother of the patient with Epilepsy and Control Group (Normal)

Variable (Domains of marital quality of life) Applied on mother	Group N=60		t (df=58)
	Epilepsy (*n=30*)	Normal (*n=30*)	
	Mean ± S.D.	Mean ± S.D.	
Understanding	14.53±3.30	15.20±4.02	0.70NS
Rejection	22.70±4.10	23.16±3.08	0.49NS
Satisfaction	7.03±2.47	7.40±3.90	0.43NS
Affection	12.90±2.44	14.63±2.22	2.87**
Despair	6.30±1.93	5.40±1.30	2.03*
Decision making	10.10±2.44	11.56±3.09	2.03*
Discontent	3.46±1.71	3.90±1.66	0.99NS
Dissolution potential	1.70±1.46	1.30±.651	1.36NS
Dominance	7.06±1.11	6.63±1.42	1.31NS
Self disclosure	5.46±1.97	5.00±1.48	1.03NS
Trust	2.16±1.70	2.40±.855	0.67NS
Role functioning	7.28±1.15	8.70±1.23	0.80NS
Marital quality of life	12.50±1.76	11.30±1.04	1.51NS

*Significant at the 0.05 level, ** significant at the 0.01 level , NS-Not Significant*

Table (2) shows comparison of marital quality of life of mother of the patient with Epilepsy and Control Group by using t-test. It has been indicated that there were significant different in the domains of affection, despair and dissolution potential of the marital quality of life scale in the both group. However there were no significant different in the others domains of this scale in the two group. This current finding is suggest by, Hodes et al, 1999. These finding is also supported by Austin et al 2004.

Table-3. Comparison of marital quality of life of father of the patient with Epilepsy and Control Group (Normal)

Variable(Domains of marital quality of life) Applied on father	Group N=60		t Value (df = 58)
	Epilepsy (*n=30*)	Normal(*n=30*)	
	Mean ± S.D.	Mean ± S.D.	
Understanding	14.23±3.45	15.36±4.57	1.08NS
Rejection	24.13±4.22	21.83±3.65	2.25*
Satisfaction	8.50±2.71	8.46±2.06	0.05NS
Affection	14.33±3.08	14.30±2.26	0.04NS
Despair	5.86±1.85	5.46±1.19	0.99NS
Decision making	11.53±1.97	12.76±2.59	0.2.07*
Discontent	4.03±1.82	3.93±1.70	0.21NS
Dissolution potential	1.53±1.07	1.46±.776	0.27NS
Dominance	5.46±1.30	5.46±1.81	0.00NS
Self disclosure	6.23±1.83	6.23±1.79	0.00NS
Trust	2.23±1.38	2.40±.770	0.57NS
Role functioning	8.56±2.02	9.83±2.49	2.15*
Marital quality of life	12.82±1.06	9.98±1.07	0.25NS

Significant at the 0.05 level, NS-Not Significant

Table (3) shows comparison of marital quality of life of father of the patient with Epilepsy and Control Group by using t-test. It has been indicated that there were significant different in the domains of rejection, decision making and role functioning of the marital quality of life scale in the both group. However there were no significant different in the others domains of this scale in the two group. These finding is suggest that Shah 1995, Hodes et al, 1999. These finding is also supported by Austin et al 2004.

CONCLUSION

The present study findings concludes that parents of both Experimental (Epilepsy) patients and Control Group (Normal) appraise the care giving negatively though few positive aspects of it was also stated. When compared with Control Group (Normal) and parents of patients with Experimental (Epilepsy) one sub scale of Parenting Stress Index viz. parent – child dysfunctional interaction and poorer level of Quality of Life in the areas rejection, decision making and role functioning in father of epileptic children as compared to father with normal children.

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