
ORIGINAL ARTICLE

Depression in the Mothers of Children with Epilepsy

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Objective: To assess depression in the mothers of the children with epilepsy.

Design: This study was carried out on mothers of the children with epilepsy, from June 2012 to August 2012.

Subject and Methods: 50 mothers of children with epilepsy were rated on the Beck Depression Scale, The data was tabulated and statistically analyzed.

Results: Mothers of children with epilepsy had depression which was statistically significant.

Conclusion: There is statistically significant difference between the BDI score of different age group, whereas there is no statistical significant difference between the BDI Score of educated & uneducated and in BDI score of House wife and professional women

Key Words: Developmental disabilities, epilepsy, Depression

INTRODUCTION

The birth of child with epilepsy induces complex feelings in both of the parents. There is denial, aggression, unhappiness and even lack of acceptance¹. Feelings of guilt, depression, hopelessness and helplessness are all part of the adjustment process and though some of the mothers adjust well, psychopathology remains rampant among the others.

Many children diagnosed with epilepsy are on medications for long periods and visit specialists from different medical specialties. In Pakistan the cost of medical treatments are borne by the patient as there is no government support or health schemes like in the US and UK. A child with developmental disabilities may visit a psychiatrist, neurologist, pediatrician, occupational therapist, physiotherapist, and speech therapist. The parents bear the cost of all therapies and medical opinions. This often puts a large financial burden on the family especially if from the lower socio-economic strata.

Mothers of children with epilepsy have been shown to experience higher levels of stress and depression than their spouses. It has been noted that mothers of epileptic children show an increased anxiety with respect to the poor social relatedness and behavioral problems in their child. Epilepsy is not a single, distinct condition; instead, it is a heterogeneous family of disorders having in common an abnormally increased predisposition to seizures

Recent evidence suggests that many children with epilepsy experience increased rates of

psychosocial and cognitive problems that can reduce their health-related quality of life. In addition children with epilepsy have increased mortality and sudden death compared to healthy children. Despite a marked improvement in the treatment of childhood epilepsy with novel therapeutics and surgical techniques, many children never achieve clinical remission and many adverse consequences of childhood epilepsy continue which continues the agony for the parents especially the mothers

SUBJECT AND METHODS

Subjects: The subjects were mothers of children with epilepsy. Subjects meet the inclusion criteria. A total of 50 mothers were analyzed.

The Children: These children were diagnosed as having epileptic disorder and presently satisfied the according to ICD-10 (international Classification of disease).

Inclusion criteria for the mothers

1. Age group 18-50 years.
2. They never suffered from a psychiatric disorder in the past and never took any psychiatric medication in their lifetime (assessed via history and clinical evaluation).
3. They did not suffer from any medical illness or physical disability.

Inclusion Criteria for the Children

1. Age group 5-30years.
2. They were diagnosed with Epilepsy by their treating doctor at least 6 months prior to the study.

3. They had no physical disability / visual or hearing impairment

depression, 16-23 reflects moderate depression and 24-63 reflects severe depression^{19, 20}.

SCALES USED

The study was performed in a correlation manner. Age, education history, occupation and other relevant data were recorded in the data form. Mothers were clinically interviewed using the following scales –

1. Beck Depression Inventory (BDI) – evaluates depression and its emotional, cognitive and motivational components with 21 items. Scores range from 0-63 where 10-15 reflects mild

RESULTS

The data was analyzed through Statistical Package of Social Science (SPSS), 17th version. The initial screening of data was done by looking for omissions in the responses or by assuming missing values. After that descriptive for the study, sample were calculated which are given in Table 4.1 and 4.2.

Table 4.1: Mother’s descriptive

Variable	F	%	M	SD
Mother’s Age			32.84	8.68
≤20	4	7.80%		
21-30	24	47.06%		
31-40	14	27.45%		
41-50	6	11.76%		
≥51	3	5.88%		
Marital Status				
Married	40	78.4%		
Divorced	4	7.8%		
Widow	7	13.7%		
Mother Employed				
Yes	10	19.6%		
No	41	80.4%		
Mother’s education				
Uneducated	22	43.1%		
Primary School	7	13.7%		
Secondary School	13	25.5%		
Intermediate	2	3.9%		
Graduation	5	9.8%		
Higher	2	3.9%		
Family System				
Combine Family	31	60.8%		

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Nuclear Family	20	39.2%		
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Table 4.1 shows demographic characteristics of mothers that is, mean of age is 32.84 with standard deviation of 8.68. Average age of the Females whose children were epileptic patients 32.84±8.68 (95% C.I. 30.39-35.28). 2 (3.92%) mothers were 19 year & 2(3.92%) were 20years old. Whereas 24(47.06%) mother's age was in the

range of 23-30years, 14(27.45%) were 32-40 years, 6 (11.76%) were 42-50 and 3(5.88%) were 52 -55 years old. Most of the women were educated i.e. 29(56.9%) and 22(43.1%) were illiterate.

Table 4.2: Children's Descriptive

Variable	F	%	M	SD
Children's Age			6.7451	6.35561
≤1	14	27.5%		
2-5	15	29.4%		
6-10	13	25.49%		
≥11	9	17.54%		
Epilepsy Type				
Generalized Tonic Colonic Seizures	29	56.9%		
Myoclonic	5	9.8%		
Atonic	3	5.9%		
Petitmal/ absence Seizure	6	11.8%		
Simple Partial Seizure	1	2%		
Complex Partial Seizure	7	13.7%		
Reason Of Epilepsy				
Psychiatric	38	74.5%		
Psychological	11	21.6%		
Both	2	3.9%		
Duration of illness(years)			3.7693	4.36228
0.1-1	20	39.2		
3-6	22	43.2		
6.1-12	4	7.8		
12.1-15	5	9.9		

Maternal Variables Affecting Depression

		N	Mean± S.D	95% C.I	T result	P-value
Age	≤32 years	30	27.90±7.38	25.15-30.65	2.415	0.020
	≥33 years	21	22.67±7.95	19.05-26.29		
Education	Uneducated	22	23.68±9.46	19.48-27.88	1.636	0.108
	Educated	29	27.31±6.37	24.88-29.73		
Occupation	House Wife	41	26.80±6.96	24.61-29.00	1.976	0.054
	Professional	10	21.40±10.57	13.84-28.96		

Most of the women 41 (80.4%) were housewives and 10(19.6%) were professionals. Average monthly income of housewife were 15000 approximately (95%C.I. 12790.52-17160.70) and in professional women mean monthly income was 18000 approximately (95% C.I. 11752.54-23647.46). Most were married 40(78.4%), 4(7.8%)

were divorced and 7(13.7%) were widows. 30(58.8%) belongs to joint family system and 21(41.2%) were from nuclear family system. In extended family average no. members were 4.7(95% C.I. 4.7-6) and in nuclear family system average no. of members were 5.8(95%C.I 5-6.6)

Table 4.2 shows descriptive of the study. The mean age of the 50 children were 6.7451 years (SD=4.9, range: 6.35561). Based on the classification of seizure as proposed by International League Against Epilepsy (1981), most of the children were diagnosed with generalized seizures (n=29; 56.9%) or partial seizures (n=2; 2%). The mean number of years elapsed since diagnosis was 2.5 (SD=1.2; range: 0.2-15.9). Of the children, 30 (41.1%) had had at least once seizure attack in the 2 months before data collection and 16 (58.9%) had had no seizure attack in 2 months before data collection. Medication was still being taken by 96.2% of the children who had been prescribed (n=50). The demographic data for the children is shown in table 4.2

DISCUSSION

A majority of the mothers were unemployed. It has been noted in previous studies that employed mothers of disabled children perceive less stress in comparison to unemployed mothers and that employment may also serve as a buffer in their depression. Employed mothers usually have an outlet in the form of their job which allows them personal growth in some other area. In our clinical evaluation and work with these mothers we have seen mothers who are employed are better adjusted than those who are unemployed.

Educated mothers fared better on the BDI than non-educated mothers. This may be due to the fact that education and knowledge may add insight to a complex problem like epilepsy. These mothers may probably learn and know how to handle their children better than non educated mothers. Educated mothers may also choose the right resources for treatment and management of their children yielding better results and may thus have fewer problems in managing their children with epilepsy. Mothers with lower education or illiterate mothers may get frustrated easily and have lower tolerance than educated mothers. Employment is known to serve as a buffer against any depression. Spousal support is the key factor in bringing up a child with developmental disabilities.

In Pakistan often the woman is blamed for the birth of a child with epilepsy and often bears the brunt of the family members and relatives. Divorce is a very common occurrence after the birth of a disabled child. These factors often increase the depression in such mothers. Proper spousal and

family support serves as an important factor in alleviating depression.

In Pakistan, the joint family system provides better support in caretaking of the child with epilepsy. Multiple mothers in the form of female family members provide relief to mothers of such children. In the nuclear family set up though the entire burden of bringing up the child with epilepsy falls on the lone mother who often suffers silently with no one to share her problems.

A nuclear family may also increase the financial burden on the mother in bringing up a child with epilepsy. In keeping with the same, mothers from joint families showed lower scores on the BDI than mothers from nuclear families. Mothers who had just a single child with epilepsy showed much higher levels of depressive symptoms than mothers who had second healthy child.

Our study did not take into account uncontrolled versus controlled epilepsy, but the mere presence of epilepsy in their children affected BDI scores to a significant extent.

LIMITATIONS

The present study is limited to a fixed population of just 50 subjects. Larger studies that encompass various cultures and settings are needed if these findings are to be replicated. Longitudinal studies on psychopathology are needed to see if the pattern of psychopathology is static or changes over time as growth and development of children with epilepsy. The psychopathology in our study was not correlated with respect to child and maternal variables or to family structure and marital adjustment.

CONCLUSIONS

According to above table there is statistically significant difference between the BDI score of different age group, whereas there is no statistical significant difference between the BDI Score of educated & uneducated women and in BDI score of House wife and professional women. Psychiatric problems are common in mothers of the children with epilepsy, though they may often present as symptoms, in a subsyndromal manner and may not always help us ascertain a clear diagnosis. We have not compared the mothers. Along with the child, psychological well being of the mother is the must in the difficult task of bringing up a child with epilepsy.

REFERENCES

1. Quine I, Pahl J. First diagnosis of severe handicap – a study of potential reactions. *Dev Med Child Neurol* 1987;29:232-42.
2. Taanila A, Syrjala L, Kokkonen J, Javelin, MR. Coping of parents with physically and / or intellectually disabled children. *Child Care Health Dev* 2002;28:73-86.
3. Kazak AE, Marvin RS. Differences, difficulty and adaptation – stress and social networks in families of handicapped children. *Fam Relation* 1984;33:67-77.
4. Silver EJ, Stein RE. Access to care, unmet health needs and poverty status among children with and without chronic conditions. *Ambul Ped* 2001;1:314-20.
5. Beck AT, Steer RA. Manual for the Beck Depression Inventory. San Antonio: Psychological Corporation; 1993.
6. Beckman PJ. Comparisons of mothers and father's perceptions on the effect of young children with and without disabilities. *Am J Ment Retard* 1991;95:585-95.
7. Pelchat D, Bisson JM, Ricard N, Perreault M, Bouchard, JM. The longitudinal effects of an early family intervention program on the adaptation of families of children with disabilities. *Int J Nurs Stud* 1999;36:465-77.
8. Pelchat D, Ricard N, Bouchard JM, Perreault M, Saucier JF, Berthiaume M, Bisson J. Adaptation of parents in relation to their 6 month old infant's type of disability. *Child Care Health Dev* 1999;25:377-97.
9. Ohta M, Nagai Y, Hara H, Sasaki M. Parental perceptions of behavioural problems in Japanese autistic children. *J Autism Dev Disord* 1984;17:549-63.
10. Bebko JM, Konstantareas MM, Springer J. Parent and professional conditions of family stress associated with the characteristics of autism. *J Autism Dev Disord* 1987;17:565-76.
11. Hastings RP, Brown T. Behaviour problems of children with autism, parental self efficacy and mental health. *Am J Ment Retard* 2002;107:222-32.
12. Piven J, Chase G, Landa R, Wrozek M, Gayle J, Cloud D, Folstein S. Psychiatric disorders in parents of autistic children. *J Amer Acad Child Adolesc Psychiatry* 1991;30:471-8.
13. Veisson M. Depression symptoms and emotional states in parents of disabled and non disabled children. *J Soc Behav Pers* 1999;27:87-98.
14. Sanders JL, Morgan SB. Family stress and adjustment as perceived by parents of children with autism and Down's syndrome – implications for intervention. *Child Fam Behav Ther* 1997;19:15-32.
15. Firat S, Diler RS, Avci A, Saydaouglu G. Comparison of Psychopathology in mothers of autistic and mentally retarded children. *J Korean Med Sci* 2002;17:679-85.
16. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Washington DC: American Psychiatric Association; 1994.
17. Beck AT, Steer RA, Garbing MG. Psychometric properties of the Beck Depression Inventory – 25 years of evaluation. *Clin Psychol Rev* 1988;8:77-100.
18. Spielberger CD. State Trait Anxiety Inventory – A comprehensive bibliography. Palo Alto, CA: Consultant Psychologists Press; 1984.
19. Bagby RM, Taylor GJ, Atkinson L. Alexithymia – a comparative study of 3 self report measures. *J Psychosom Res* 1999;32:107-16.
20. Taylor GJ, Bagby RM, Parker JD. The Toronto Alexithymia scale – Reliability and factor validity in different languages and cultures. *J Psychosom Res* 2003;55:277-83.
21. Derogatis LR, Lipman RS, Covi L. Dimensions of out patient pathology – a comparison between clinical versus an empirical assessment. *J Consult Clin Psychol* 1970;34:2-9.
22. Olsson MB, Hwang CP. Depression in mothers and fathers of children with intellectual disability. *J Intellect Dis Res* 2001;45:535-43.
23. Gowen JW, Johnson-Martin N, Goldman BD, Applebaum M. Feelings of depression and parenting competence in mothers of handicapped and non handicapped children. *Am J Ment Retard* 1989;94:259-71.
24. Murphy M, Bolton PF, Pickles A, Fombonne E, Piven J, Rutter, M. Personality traits of relatives of autistic probands. *Psychol Med* 2000;30:1411-24.
25. Ryde-Brandt B. Anxiety and defence strategies in mothers of children with disabilities. *Br J Soc Psychol* 1990;63:183-92.
26. Sifneos PE. The prevalence of alexithymic characteristics in psychosomatic patients. *Psychother Psychosom* 1973;22:255-62.
27. Fava GA, Freyberger HJ, Bech J, Christodolou G, Sensky T, Theorell T, et al. Diagnostic criteria for use in psychosomatic research. *Psychother Psychosom* 1995;63:1-8.
28. Haviland MG, Hendryx MS, Shaw DG, Henry JP. Alexithymia in women and men hospitalized for psychoactive substance dependence. *Compr Psychiatry* 1994;35:124-8.
29. Taylor GJ, Parker JD, Bagby RM, Acklin MW. Alexithymia and somatic complaints in psychiatric out patients. *J Psychosom Res* 1992;36:417-24.
30. Singhi PD, Goyal L, Pershad D, Singhi S, Walla BNS. Psychological problems in families of disabled children. *Br J Med Psychol* 1990;63:173-82.
31. Wallander JL, Varni JW, Babani L, Banis HT, Wilcox KT. Family resources as resistant factors for psychological maldysfunction in chronically ill and handicapped children. *J Pediatr Psychol* 1989;14:371-87.
32. Sayar K, Kose S, Grabe HJ, Topbas M. Alexithymia and dissociative tendencies in an adolescent sample from Eastern Turkey. *Psychiatry Clin Neurosci* 2005;59:1 27-34.
33. Tutkun H, Savas HA, Zoroglu SS, Esgi K, Herken H, Tiryaki N. Relationship between alexithymia, dissociation and anxiety in psychiatric out patients from Turkey. *Isr J Psychiatry Relat Sci* 2004;41: 118-24.