

## RISK FACTORS FOR GENERAL HEALTH OF THE SPOUSES OF EPILEPTIC

SAYEDA SHAHIDA BATOOL, HAZIK MEHMOOD

Department of Psychology, G.C University, Lahore

### ABSTRACT:

#### OBJECTIVE

The study aims at assessing the risk factors for general health of the spouses of epileptic patients.

#### STUDY & DESIGN

Matched Group Design

#### PLACE AND DURATION OF STUDY

Spouses of patients were selected from outdoor units of different hospitals and spouses of non-patients were selected from non-hospital setting in Lahore. The data were collected during the year 2013.

#### SUBJECTS AND METHODS

The study included spouses of 82 epileptic patients and 82 non-patients. The spouses in both groups were comparable in education, socioeconomic status and conjugal age. Age of the sample ranged between 22 and 40 year. General Health Questionnaire and Stockholm Marital stress scale were administered.

#### RESULTS

Stepwise regression analysis revealed that 58% of variance in general health was accounted for by marital stress and education level of the spouses of epileptic patients

#### CONCLUSION

High marital stress and lower education level are risk factors for general health of spouses of epileptic patients.

#### KEY WORDS:

Epileptic, Spouses, Marital stress, General Health.

### INTRODUCTION

Epilepsy is a Greek word meaning "to possess" In the Greek period it was treated as a supernatural phenomenon<sup>1</sup>. A seizure or convulsion occurs in epilepsy, which disturbs the brain functioning and resulting short term troubles in the sensor, mental, and motor systems. Epilepsy not only disrupts the patient's own life, but it is a stigma for people around and affects families and relationships<sup>2</sup>. The prevalence of epilepsy varies in different regions of south Asia<sup>3</sup>. In Pakistan it is estimated to be 9.99 per one thousand populations<sup>4</sup>.

Given that epilepsy is a chronic illness. Studies have shown that care givers (e.g., family members, friends, relatives, and spouse) play important role in helping to manage the chronic illness. Caregiving to patients with epilepsy (PWE) is lifelong responsibility.

It is assumed that stressful situation gives rise to marital distress<sup>5</sup>, and the acute life events affect the marital quality<sup>6</sup>. In married people having chronic disorders mostly affect the person's spouse's life. Studies illustrate that spouses of PWE have high risks of stress, anxiety and fear. Marital stress and general health problems like physical and mental health problems are seen in the spouses of epileptic patients.

The marital problems have long been an issue in the couples, if one is epileptic<sup>7, 8, 9</sup>. Marriages that involve people with epilepsy are more likely to fail<sup>10</sup>, and higher divorce rates have been recorded for PWE<sup>7</sup>. Spouses are the primary caregivers of PWE<sup>11</sup> and Chen et al.<sup>10</sup> found significant correlations in depression, social support satisfaction and marital adjustment among couples if one spouse was suffering from epilepsy.

Chronic illness of the partner increases the marital stress and highly affects the general health of the spouse<sup>12</sup>. Various researchers found that spouses of ill persons experience even greater levels of distress than their parents do<sup>13</sup>.

Demographic variables also contribute to the psychological health and marital quality of spouses of patients with chronic illness (e.g., role of socio economic status)<sup>14</sup>. Cohen<sup>15</sup> proposed that the relationship between socioeconomic status and epilepsy related issues are culturally bounded.

Various studies in Pakistan have been carried out to assess the effects of epilepsy on patients but mental health and problems related to marital adjustment of spouses of patients with epilepsy is an ignored area. Present study was conducted to assess the marital stress and general health of the spouses of patients with epilepsy in comparison with the spouses of non-patients. The study hypothesised that: there would be significant mean difference on marital stress and general health status of the spouses of epileptic patients and non-patients; there would be significant gender difference on the marital stress and general health status of the spouses of epileptic patients; and education level,

socioeconomic status, family system, and marital stress would significantly predict general health of the spouses of epileptic patients

## SUBJECTS AND METHOD

### Participants

The study included 82 spouses of epileptic patients and 82 spouses of non-patients through purposive sampling technique. Sample of spouses of the epileptic patients was selected from psychiatric ward of Sir Gangaram Hospital, Lahore and Ahbab centre, Lahore. Eighty two spouses comparable in education, socioeconomic status and conjugal age of the non-patients were also included in the study. Age of the sample ranged between 22 and 40 year (Mean = 34.66, SD= 6.65). Average duration of their marriage was 7.22 year, and they belonged to diverse socio economic status. Inclusion criteria included that one partner in the couple had a confirmed diagnosis of epilepsy, the spouses of the patients were above 18 years of age, had completed at least primary education, were able to read and write, and married for at least 2 year prior to the data collection. Exclusion criteria included the presence of any serious medical illness or a chronic psychiatric condition such as stroke, cancer, physical disability, significant intellectual disability, or schizophrenia in the spouse of epileptic patient that may affect stress and marital adjustment.

Spouses of non epileptics in the comparison group were recruited through convenient sampling technique from Lahore city. They were matched with the group of spouses of epileptic patients on gender, age, educational, and employment.

### Measures

#### Stockholm Marital stress scale (SMS)

Stockholm Marital Stress<sup>16</sup> was used to measure marital stress including quality of emotional and sexual relationship with the spouse. A higher score indicates higher marital stress (range: 0–14). Cronbach's alpha for the present study was .77.

#### General Health Questionnaire (GHQ-28)

GHQ-28 contains 28-items<sup>17</sup>. The questionnaire is divided into four sublevels (somatic symptoms, anxiety and insomnia, social dysfunction and severe depression level). The higher score represents the poor general health of respondents. The internal consistency (alpha) of GHQ- 28 is .90 in the present study.

## PROCEDURE

After taking permission from the hospital administration and consent from the spouses of PWE, questionnaires were administered in a separate room assigned by the incharge of the unit. The non-patient sample was conveniently selected and approached at their homes. The purpose of the study was explained to all the participants and the confidentiality of their provided information was assured.

## RESULTS

### Group Differences

**Table 1**

Group Differences on General Health and Marital Stress of Spouses of Epileptic Patients and Non-patients (N= 164).

Variables	N	M (SD)	t	P-Value
General Health				
Spouses of Epileptic Patients	82	44.44(9.77)	15.67	.000
Spouses of Non-Patients	82	16.41(4.42)		
Marital Stress				
Spouses of Epileptics Patients	82	10.69(1.32)	32.62	.000
Spouses of Non- Patients	82	2.75(.65)		

Note. df= 162.

Table 1 shows that spouses of Epileptic patients scored significantly higher than the spouses of non-patients on general health  $t(162) = 15.67, p < .000$ ; and marital stress  $t(162) = 32.62, p < .000$ .

### Stepwise Regression

**Table 2**

Gender Differences on General Health and Marital Stress of Spouses of Epileptic Patients (N= 82).

Variables	N	M (SD)	t	P-Value
General Health				
Male Spouses	40	30.45(8.31)	6.90	.000
Female Spouses	42	43.88(11.26)		
Marital Stress				
Male Spouses	40	6.78(1.02)	4.16	.001
Female Spouses	42	10.85(1.51)		

Note. df= 80.

The results in Table 2 show that female spouses of epileptic patients scored significantly higher on general health  $t(80) = 6.90, p < .000$ , and marital stress  $t(80) = 4.16, p < .000$ .

**Table 3**

Significant Multivariate Correlates of General Health of Spouses of Epileptic Patients (N= 82).

Model	B		t	p-values
Marital Stress	.19	.70	7.03**	.000
Education	-.81	-.17	2.23*	.028
R <sup>2</sup> = .58				

Note: \*\*P< .000, \*P< .05.

In stepwise regression analysis demographic variable (viz., age, education, SES, family system) and marital stress were used to predict the general health of spouses of epileptic patients. The result shows that 58% variance in poor general health of the spouses of PWE was accounted for by high marital stress and lower education.

## DISCUSSION

Significant mean differences were illustrated in the general health and stress level of the two groups: Spouses of epileptic patients showed significantly poorer health and higher marital stress as compared with the spouses of non-patients (see Table 1). The evidence that spouses of epileptic patients report poor health and higher marital stress extends the findings from Western sample that the chronic illness affects the spouses' physical health and their marital life<sup>18</sup>. Epilepsy is a chronic illness, so the problems severely affect the spouses as a primary care givers. People having long term physical illness like epilepsy, normally experience high level of burden in the areas of patient care, emotional distress and family relations, and these factors affect the spouses' physical and psychological functioning<sup>19</sup>. Schulz (1995)<sup>20</sup> claimed that the spouses as care givers of the patients have greater chance to develop depression because of their proximity and emotional dependence on the patients.

The result showed that there were significant gender differences between the spouses of patients on marital stress and general health. Female caregivers showed poor general health and higher marital stress than male care givers. Females are more sensitive towards the married partners' health and their married life suffers more as compared to male partners because they are usually emotional, and economically and socially dependent on their husbands. Gender differences may exist, due to the different personality traits of men and women because in general men having personality of resilient and resistant, and that's why men do not report stress and depression<sup>21</sup>. The literature reports linkages between family care giving, and emotional and physical morbidity of care givers, especially women who are expected to shoulder most of the burden of care<sup>22,23</sup>. Our results are not in line with the meta-analysis<sup>24</sup> on the gender differences in caregivers, which suggested that male and female caregivers presented more similarities than differences in depression.

Results of stepwise regression showed that higher marital stress appeared as the most significant predictor or risk factor for the general health of the spouses of PWE (see Table 3). The significant role of marital stress in the general health of spouses has been supported by Coyne, Ellard and Smith<sup>13</sup>, that marital communication difficulties experienced by the spouses of chronically ill patient lead to depression and anxiety. Education appeared as a second significant predictor of the general health of spouses of PWE. The reason of significant role of education in this study might be that general education enhances the problem solving ability of a person, and well educated people better adhere to the advice of physicians, and psycho education related to the patient's disease and its management. Having knowledge about the disease and about the different preventive measures and therapies for the particular disease may be helpful for the spouse to well adjust with the situation.

Family system, SES, and age of the spouses of patients appeared as insignificant in the prediction of their general health. It was assumed that spouses who live in a joint family system receive more social support from other members at home, and will have better general health<sup>24</sup>. but this was not the case in our study. The reason might be that spousal relationship is intimate; and if one partner is ill, it disturbs his/her counterpart. The role of SES in the mental health is

controversial<sup>14, 15</sup>. Literature has indicated that women of more mature age experience mild anxiety as compared to younger caregivers of chronic illness<sup>25</sup>. Trismiati (as mentioned in Solikhah)<sup>25</sup> suggests that age enhances experience and knowledge. However reason of insignificant role of the age of spouses of patients in general health might be that the personality factors of spouses were not controlled in the study, which are significant predictors of stress tolerance and health status.

## Limitations and Suggestions

Sample consisted of epileptic patients with chronic symptoms only, because of it, diverse comparison among spouses of patients from different types of epilepsy was not possible in the study. Comparative analysis should be run on different types of epilepsy if the phenomenon is studied in future. Study sample was also small due to inclusion criteria, and was taken from Lahore. Sample should be diversified and taken from other cities in future studies. Survey study does not give us in depth information of the phenomena under study, so qualitative study should be done in future.

## Implications


The study provides guideline to the spouses that they can improve their general health by managing and coping with the stress in their marital relationship due the illness of their counterparts. The study could help professionals to understand the need of psychological support to the care givers of chronic illness and development of counselling plan for them.

## CONCLUSION

Female spouses feel more marital stress and have poor general health when their married partner is suffering from epilepsy. Higher marital stress and lower education level are risk factors for general health of the spouses of epileptic patients.

## REFERENCES

1. Satishchandra P, Gururaj G, Mohammad QD, Senanayake N. From prejudice to hope. USA: World Health Organization 2001.
2. Jacoby A, Snape D, Baker GA. Epilepsy and social identity: The stigma of a chronic neurological disorder. *Lancet Neurology* 2005;4(3):171-180.
3. Gururaj G, Girish N, Isaac MK. Mental, neurological and substance abuse disorders: Strategies towards a systems approach. Report submitted to the National Commission of Macroeconomics and Health. Ministry of Health and Family Welfare, Government of India, New Delhi, 2005.
4. Khatri IA, Iannaccone ST, Ilyas MS, Abdullah M, Saleem S. Epidemiology of epilepsy in Pakistan: review of literature. *Journal of Pakistan Medical Association* 2003;53(12):594-597.
5. Story LB, Bradbury TN. Understanding marriage and stress: Essential questions and challenges. *Clinical Psychology Review* 2004;23:1139-1162.
6. Karney BR, Story LB, Bradbury TN. Marriages in context: Interactions between chronic an acute stress among newlyweds. In: Revenson TA, Kayser K, Bodenmann, G, editors. *Couples coping with stress: Emerging perspectives on dyadic coping*. American Psychological Association; Washington, D.C:

- 
2005. pp. 13–32.
7. Dansky LV, Andermann E, Andermann F. Marriage and fertility in epileptic patients. *Epilepsia* 1980; 21(3):261–71.
  8. Agarwal P, Mehndiratta MM, Antony AR, Kumar N, Dwivedi RN, Sharma P, et al. Epilepsy in India: nuptiality behaviour and fertility. *Seizure* Sep 2006; 15(6):409–15.
  9. Myeong-Kyu KIM. Marital prospects of people with epilepsy among Asians. *Neurology Asia* 2007; 12(1):13–4.
  10. Chen J, Zhang Y, Hong Z, Sander JW, Zhou D. Marital adjustment for patients with epilepsy in China. *Epilepsy & Behavior* 2013; 28:99–103.
  11. Lee MMK, Lee T, Ng PKK, Hung ATF, Au AML, Wong VCN. Psychosocial well-being of carers of people with epilepsy in Hong Kong. *Epilepsy Behavior* 2002; 3(2):147–57.
  12. Mariann I, Espen R, Kristian T. The effect of change in mental disorder status on change in spousal mental health: The HUNT study. *Social Science & Medicine* 2011; 73(9):1408–141.
  13. Coyne JC, Ellard JH, Smith DAF. Social support, interdependence, and the dilemmas of helping. In: Sarason BR, Sarason LG, Pierce G, editors. *Social support: An interactional view*. Wiley; New York: 1990. pp. 129–140.
  14. Lawton P, Rajagopal D, Brody E, Kleban M. The dynamics of caregiving for a demented elder among Black and White families. *Journal of Gerontology* 1992; 47:156–164.
  15. Cohen S, Doyle WJ, Baum A. Socioeconomic status is associated with stress hormones. *Psychosomatic Medicine* 2006; 68(3):414–20.
  16. Orth-Gomer K, Wamala SP, Horsten M, Schenck- Gustafsson K, Shneiderman N, Mittleman MA. Marital stress worsens prognosis in women with coronary heart disease: The Stockholm Female Coronary Risk study. *JAMA* 2000; 284 (23): 3008–3014.
  17. Goldberg DP. *The General Health Questionnaire (GHQ-28)*. London: GL Assessment 1978.
  18. Sreeja I, Sandhya G, Rakesh I, Singh M. Comparison of burden between family caregivers of patients having Schizophrenia and Epilepsy. *The Internet Journal of Epidemiology* 2009; 6(2).
  19. Mittelman M, Zeiss A, Davies H, Guy D. Specific stressors of spousal caregivers: Difficult behaviors, loss of sexual intimacy, and incontinence. In: Coon DW, Gallagher-Thompson D, Thompson LW, editors. *Innovative interventions to reduce dementia caregiver distress: A clinical guide*. Springer Publishing Company; New York 2003. pp. 86–92.
  20. Schulz R, O'Brien AT, Bookwala, J, Fleissner K. Psychiatric and physical morbidity effects of dementia caregiving: prevalence, correlates, and causes. *The Gerontologist* 1995; 35(6):771–791.
  21. Ingersoll-Dayton B, Morgan D, Antonucci T. The effects of positive and negative social exchanges on aging adults. *The Journals of Gerontology* 1997; 52: 190–199.
  22. Papastavrou E, Tsangari H, Kalokerinou A, Papacosta SS, Sourtzi P. Gender issues in caring for demented relatives. *Health Science Journal* 2003; 3 (1):41–53.
  23. Pinquart M, Sorensen S. Differences between caregivers and noncaregivers in psychological health and physical health: A meta-analysis. *Psychology Aging* 2003; 18 (2):250–567.
  24. Pinquart M, Sorensen S. Gender differences in caregiver stressors, social resources, and health: An updated meta-analysis. *The Journal of Gerontology Series B. Psychological Sciences and Social Sciences* 2006; 61 (1): 33–45.
  25. Solikhah U, Prambudi SE, Nurjanah S. Family support role for mother anxiety with children Thalassemia. *Indigenous Psychology Seminar* April 19th 2014.