Psychological self-security and self-concept among Saudi epilepsy patients at a tertiary care center in KSA

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Abstract

Objective: While psychological issues in epilepsy patients have been studied extensively, the phenomena of self-concept and self-security have not been adequately addressed in such patients. Therefore, the aim of the current study is to assess the levels of psychological self-security and self-concept among Saudi epilepsy patients. Methods: A case-control study was conducted on adult patients with epilepsy from the Epilepsy Monitoring Unit at King Fahad Medical City in Riyadh, Saudi Arabia. Healthy controls were obtained from the community. Demographic data including age, gender and education level were collected. Self-concept and self-security were assessed using validated scales. Descriptive statistics were obtained, and inferential testing was conducted. Results: Data from 145 subjects was entered in the final analysis, including 100 patients with epilepsy and 45 controls (females = 32%). A significantly higher level of psychological insecurity was found in PWE (people with epilepsy) compared to controls. No significant difference was noticed on self-concept level between PWE versus controls. Education level was significantly lower in PWE than in controls. Those with higher education levels scored lower on psychological insecurity, although this effect disappeared when the data were split by health status. Conclusion: Level of psychological self-security was higher in PWE than controls, while no difference in self-concept was observed. This study highlights the areas of focus needed in epilepsy-related social services in order to improve the psychological wellbeing of patients with epilepsy.

Keywords: Epilepsy, psychology, self-security, self-concept, Saudi Arabia

Introduction

Epilepsy is a common neurological problem with a reported global prevalence of 1%[1] and a prevalence of 6.54 per 1000 in Saudi Arabia.² Patients with epilepsy (PWE) are not only exposed to physical risks including falls and burns, but also face social and psychological stigmatization, isolation, lack of understanding, and unemployment, and insecurity because of the unpredictable nature of seizures.³ Psychiatric disorders and cognitive impairment are usual complications of epilepsy leading to poor prognosis.⁴⁻⁵ Therefore, psychological integrity is crucial for patient acceptance and a positive attitude towards the disease and act as cornerstones of disease control and good patient outcomes.⁶⁷

Although knowledge about epilepsy is increasing in certain societies, negative attitudes towards PWE are still widely prevalent.⁷

Life stressors, severity and type of illness, and social and family support affects the perception of self-concept in an epileptic patient. Most of the patients suffer from poor self-concept owing to frequent seizures like spouse separation and social isolation as well as poor academic performance.⁸ Therefore, the adults may be susceptible to poor self-concept. An improved self-concept may lead to better patient compliance to treatment.

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Self-concept defined by Baumeister as the individual’s belief about himself or herself, including the person’s attributes and who and what the self is while psychological security denotes the feeling of being beloved, receptive to others, and the individual recognition that environment is friendly and hopeful, that the individual doesn’t have the feeling of being threatened or in danger.

Social and cultural factors directly affect the psychological well-being and behavior of PWE, including fear of social stigma which leads to adverse effects on his psychological wellbeing found that a large percentage of PWE felt stigmatized, and highlighted increased social support, and efforts to spread knowledge and awareness across the community, as areas of particular concern that would help counteract this stigma.

While the psychological issues faced by PWE have been studied extensively, the issues of self-concept and self-security have yet to be addressed adequately in such patients. Therefore, the aim of the current study is to investigate the effect of epilepsy on an individual’s level of self-security and self-concept, to determine if there is any relationship between self-security and self-concept and psychosocial variables, and whether these phenomena are affected by demographic variables.

Methods
A case control study was conducted at King Fahad Medical City, after approval by the Institutional Review board at King Fahad Medical City. Ethics approval obtained on May 15, 2016 IRB Number: 11-183.

Participants
Participants included adult PWE from the Epilepsy Monitoring Unit at King Fahad Medical City (KFMC) in Riyadh (N = 100), and matched controls from the community (N = 45) during 2013 and 2015. 68% were male, and 32% were female. Participant mean age was 32 [SD = 11.03; see Figure 1]. Self-concept and self-security were measured in all participants.

Materials
Psychological security scale
The psychological security scale used in the study was a modified version of the scale prepared Maslow. The new version was validated for a Saudi context. It consists of 75 statements, each with a 3-point Likert-scale response. A higher score on this scale indicates a lack of psychological security and psychological uncertainty. Reliability analysis showed good reliability (α =0.98).

Self-concept scale
The scale was prepared by Instructional Objectives Exchange (IOX) in the United States of America, it was standardized by Fathy Mustafa Al-Zayat. Arabic version was translated and validated by Alshehri. The scale was designed to examine the self-view a person brings to specific areas of experience. Each area is important to contribute to the overall self-concept. Comparing scores on the self-concept scale will provide a picture of areas of relative strength and vulnerability for subjects. It consists of 78 questions, with the dichotomous answers apply/not apply. The scale includes four dimensions of the self-concept; three of them related to other factors through them the self-concept was formulated such as the family, peers and the school, while the fourth dimension reflects the general self-concept.

Statistical analysis
Data were analyzed using SPSS computer software package for Windows (Version 22). Significance level (α) was set at (p < 0.05).

Results
Data for 145 subjects were included in the final analysis.

Self-security
Levels of self-security for the two groups were compared using an independent samples t-test. PWE showed a significantly lower level of self-security (M = 2.73, SD =0.56) compared to controls (M = 2.18, SD=0.41), t(143)=5.96, p<.001 [see Figure 1].

Self-concept
To determine if there was an effect of group membership on answers on the nominal self-concept scale, response frequency was calculated for ‘yes’ and for ‘no’ responses. Independent samples t-tests show no difference in frequency of yes responses between PWE (M = 42.4, SD = 6.83) and controls (M = 40.49, SD = 6.24), t(143) =1.6, p = .112, and no difference in frequency of no responses between PWE (M = 35.44, SD = 6.83) and controls (M = 36.13, SD = 6.12), t(143) = -.583, p = .561 [see Figure 2].

Education level
Educational level among the study sample results showed that 37% had a university degree. Chi-square showed
that there were significant differences in education levels between groups, \(\chi^2 (4, N = 138) = 25.95, p < .001\), with PWE more likely to have received basic education, and controls more likely to have received a higher-level education. Furthermore, a one-way ANOVA showed that participants differed significantly on their level of self-security based on their education level, \(F (4, 133) = 3.92, P = .005\), with those in the lowest education level bracket (elementary) having higher levels of psychological insecurity (\(M = 2.78, SD = 0.49\)) than those in the highest education level bracket (postgraduate; \(M = 1.98, SD = 0.28\); [see Figure 3].

**Discussion**

Epilepsy is a chronic disease that affects the patients’ quality of life and necessitates the development of coping strategies. Impaired self-concept or self-security may hinder this development.\(^6\)

The current study showed that PWE differ from healthy controls on levels of self-security, but show no such difference in self-concept. This suggests that PWE have an impaired level of psychological security. This effect could be due to social and cultural beliefs towards epilepsy, which necessitates the development of defense mechanisms. This could also be exacerbated by anxiety surrounding seizures.

The attitudes and opinions of the general population towards epilepsy has been studied in several countries, all of which highlight the crucial need for population awareness as it is often a taboo subject, which fuels misunderstanding regarding the nature of epilepsy, and causes PWE to fear social stigma.\(^{11,14,15}\) In Saudi Arabia, a recent study showed that while the general public is becoming more knowledgeable about epilepsy, it is not adequate, and attitudes towards epilepsy remain poor.\(^{16,17}\) These societal attitudes and behaviors may lead PWE to develop personal defenses, and may lead to impaired levels of psychological security.

Education level was found to be lower in PWE than in controls, highlighting the effect that epilepsy has on education and learning. Previous research has shown that chronic diseases such as epilepsy can affect school attendance as well as cognitive functioning and learning ability.\(^{22}\) It is worth noting that participants varied on their psychological security scores with respect to their education level, with those receiving lower levels of education reporting higher levels of psychological insecurity. This may be a reflection of the psychological advantages of further education, since no effect was found once the data were split based on health status. It is interesting to note the psychological advantages of education, which suggest that having an educational component to psychological interventions in PWE may help to improve their overall psychological security and wellbeing. However, further research is needed before that conclusion can be drawn.

**Limitations**

It would have been useful to include a measurement of the effect that epilepsy has had on the lives of the PWE who took part in this study, such as the Life Changes in Epilepsy Scale.\(^{23}\) This may allow for identification of specific areas that affect an individual's psychological security.

**Conclusion**

Psychological security may be impaired in epilepsy patients. The current study highlights the need for the inclusion of
interventions to improve psychological security in social services for PWE. The findings also highlight the role of education in developing sound psychological security, and the potential for future research in this area. It may also be useful to include measures on symptoms, such as frequency and severity of seizures, in order to determine an effect of disease severity.

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**Conflicts of interest**

There are no conflicts of interest.

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