

Factors Influencing Anxiety among Epilepsy Patients at Selected Hospital in Chennai

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Abstract: World Health Organisation and its partners recognize that epilepsy is a major public health concern. Projects to reduce the treatment gap and morbidity of people with epilepsy, train and educate health professionals, dispel stigma, identify potential for prevention and develop models integrating epilepsy control into local health systems are ongoing in many countries. In a project carried out in China, the treatment gap was reduced by 13% and there was improved access to care for people with epilepsy. The most common psychiatric conditions in epilepsy are depression, anxiety, and psychoses. Anxiety is common in patients with epilepsy; out of 49 patients with epilepsy attending a tertiary epilepsy care center, 57% had high-level anxiety. Anxiety in patients with epilepsy can be ictal, postictal, or interictal. Up to 50 or 60% of patients with chronic epilepsy have various mood disorders including depression and anxiety. Whereas the relationship between epilepsy and depression has received much attention, less is known about anxiety disorders. It is now recognized that anxiety can have a profound influence on the quality of life of patients with epilepsy. The relationship between anxiety disorders and epilepsy is complex. It is necessary to analyse the factors which influence anxiety among epilepsy patients. Non Experimental, Descriptive research design using Survey Approach data was collected from 60 epilepsy patients who were attending the OPD on regular schedule. On data analysis there was an association between the level of anxiety with the selected demographic variables, chi-square reveals significant with $p=0.00\%$ with employed patients.

Keywords: Assess, Factors influencing anxiety, Epilepsy.

Introduction:

Epilepsy accounts for 0.5% of the global burden of disease, a time-based measure that combines years of life lost due to premature mortality and time lived in states of less than full health. The most common psychiatric conditions in epilepsy are depression, anxiety, and psychoses.

Table below shows the Prevalence Rates of Psychiatric Disorders in Patients With Epilepsy and the General Population (2007 data)

Psychiatric Disorder	Controls	Patients With Epilepsy
Major depressive disorder	10.7%	17.4%
Anxiety disorder	11.2%	22.8%
Mood/anxiety disorder	19.6%	34.2%
Suicidal Ideation	13.3%	25.0%
Others	20.7%	35.5%

Anxiety is an experience of fear or apprehension in response to anticipated internal or external danger, accompanied by some or all of the following signs: muscle tension, restlessness, sympathetic hyperactivity, and cognitive signs and symptoms (hypervigilance, confusion, decreased concentration, or fear of losing control).

Anxiety is common in patients with epilepsy; out of 49 patients with epilepsy attending a tertiary epilepsy care center, 57% had high-level anxiety. Anxiety in patients with epilepsy can be ictal, postictal, or interictal.

GABA is the most important inhibitory transmitter in the central nervous system (CNS). Evidence suggests that the abnormal functioning of GABA receptors could be of great importance in the pathophysiology of epilepsy and anxiety disorders.

Although, as shown above, studies looking into the association between anxiety and epilepsy have been performed, because of the difficulty in separating the anxiety that accompanies a chronic disease from pathologic anxiety, studies investigating anxiety in epilepsy have nonetheless been relatively few. Hence the researchers would like to assess the level of anxiety among patients with epilepsy in this present scenario.

Up to 50 or 60% of patients with chronic epilepsy have various mood disorders including depression and anxiety. Whereas the relationship between epilepsy and depression has received much attention, less is known about anxiety disorders. It is now recognized that anxiety can have a profound influence on the quality of life of patients with epilepsy. The relationship between anxiety disorders and epilepsy is complex. It is necessary to distinguish between different manifestations of anxiety disorder: ictal, postictal, and interictal anxiety.

Despite the high prevalence of anxiety disorders in patients with epilepsy, there are no systematic treatment studies or evidence-based guidelines for best treatment practice

Literature survey:

. WHO, the **International League Against Epilepsy (ILAE)** and the **International Bureau for Epilepsy (IBE)** are carrying out a global campaign, 'Out of the Shadows' to provide better information and raise awareness about epilepsy, and strengthen public and private efforts to improve care and reduce the disorder's impact.

Swinkels WA, Kuyk J, de Graaf EH, van Dyck R, Spinhoven P A recent study looks for psychopathology using a standardized diagnostic interview in inpatients with all types of epilepsy obtained similar results: The 1-year prevalence of anxiety disorders was 25%, and that of mood disorders, 19% .

Goldstein et al (2010) found that patients with epilepsy with high seizure frequency had lower anxiety scores than did patients with lower seizure frequency. The risk of anxiety is higher in focal (more frequent in temporal lobe) epilepsy than in generalized epilepsy. In patients with temporal lobe epilepsy, Trimble et al reported that 19% of the patients were diagnosed with anxiety and 11% were diagnosed with depression.

Torta and Keller (2010) estimated that fear due to anxiety occurs as an aura in as many as 15% of patients.

Goldstein and Harden (2009) concluded from several studies that anxiety is one of the most common ictal emotions. Ictal anxiety symptoms manifest as fear or panic, sometimes with other characteristics of temporal discharges, such as depersonalization and déjà vu, as well as other psychological and autonomous phenomena.

International Epilepsy Association studied anxiety in association with type of epilepsy and frequency of seizures. The highest rates of psychiatric comorbidities, including anxiety, are reported in patients with chronic, refractory seizure disorders.

Edeh and Toone (2008) found that patients with temporal lobe epilepsy scored higher for anxiety than did those with focal, non temporal lobe epilepsy. Anxiety can also be seen in frontal lobe epilepsy.

According to the MEDSCAPE India Anxiety in epileptic patients may occur as an ictal phenomenon, as normal interictal emotion or as part of an accompanying anxiety disorder, as part of an accompanying depressive disorder, or in association with nonepileptic, seizurelike events as part of an underlying primary anxiety disorder. Interictal anxiety has a great influence on the quality of life of patients, since most of them have a permanent fear of new discharges.

Torta and Keller(2012) have estimated that as many as 66% of patients with epilepsy report interictal anxiety.

Blum D, Reed M, Metz A. studies have shown that the rate of mood disorder is higher in patient with epilepsy than in those with other chronic medical conditions such as diabetes and asthma .

Swinkels WA, Kuyk J Seizure frequency has been linked with severity of anxiety in some . This does not necessary imply ictal fear, but rather that as the burden of epilepsy increases, so does the anxiety. Yet clinically, the degree of anxiety is dissociated from seizure frequency in that it is the individual's perception of danger(e.g., of falling or dying) that is critical.

Baker GA, Jacoby A, Buck D, Brooks J, Age and gender have a relatively subtle effect: for example, first-onset epilepsy in late life may be linked with higher levels of anxiety .

Goldstein MA, Harden CL. The risk of anxiety disorders appears to be higher in focal (especially temporal lobe) than in generalized epilepsies, but they are also seen in patients with frontal lobe epilepsy as well as primary or generalized seizures . Several groups have found a link with the left temporal lobe but this is not entirely consistent in the literature .

AIM:

To identify the factors influencing anxiety among epilepsy patients.

OBJECTIVES:

- 1.To assess the factors influencing anxiety among epilepsy patients.
- 2.To associate the factors influencing anxiety with selected demographic variables.

ASSUMPTION:

factors influencing anxiety among epilepsy patient remains unidentified .

OPERATIONAL DEFINITIONS:

ASSESS:

It refers to the estimation of anxiety among epilepsy patients.

FACTORS INFLUENCING ANXIETY:

It refers to the factors that influence anxiety such as age , education in years , employment status , employment type , current economic status , seizure frequency , the number of antiepileptic drugs , family life/social life dissatisfaction), social support , the symptoms of anxiety and depression and ADL dysfunction

EPILEPSY PATIENTS:

Adult generalized epilepsy patient in the age group of 20-40 years old who are attending the Nerve centre,T.nagar.

LIMITATIONS:

1. Study is limited to four weeks
2. Study is limited with generalized epilepsy patient

PROJECTED OUT COME:

1. The results of the study will provide the information on the factors influencing anxiety among epilepsy patient.
2. The results will bring an awareness among para professionals to provide vigilant care.

Problem Statement:

A study to assess the factors influencing anxiety among epilepsy patients at selected hospital in Chennai

Methodology:

RESEARCH DESIGN:

Design chosen for the study is Non Experimental, Descriptive research design

RESEARCH APPROACH; Survey Approach

SETTING:

The study was conducted in Nerve center clinic, Chennai. The number of patients who attend the OPD are 40 patients with epilepsy per week(Both New and Old cases).

SAMPLE

Adult epilepsy patients in the age group of 20-40years who come to neurological OPD Nerve center.

POPULATION

It Includes all the epilepsy patients in the age group of 20-40 years.

SAMPLE SIZE:

60 adult epilepsy patients.

SAMPLING TECHNIQUE:

Non probability Purposive sampling technique

SAMPLING SELECTION CRITERIA:

1. Inclusion criteria:

- Adult epilepsy patient who are diagnosed with generalized epilepsy.
- Adult generalized epilepsy patient who are attending private clinic
- Adult generalized epilepsy patient in the age group of 20-40 years
- Adult generalized epilepsy Patients who can understand Tamil and English
- Adult generalized Patients who are willing to participate.

2. Exclusion Criteria:

- Adult patients with idiopathic epilepsy.
- Patients who are not willing to participate.

Data collection procedure:

Permission was obtained from Neurological OPD Chennai,. After obtaining Informed consent from the patients factors influencing epilepsy among epileptic patients will be identified and analysed.

Scoring Key:

The scores range from 20-80.

Little or none =1

Some of the time =2

A large part of the time =3

Most of the time = 4

SCORE INTERPRETATION

20-44 Normal Range

45-59 Mild to Moderate Anxiety Levels

60-74 Marked to Severe Anxiety Levels

75 and above Extreme Anxiety Levels

Results and Discussion:

Table:1 shows the factors influencing anxiety among patients with epilepsy

s.no	Factors influencing anxiety	Mean	Standard Deviation
1.	Physical causes	80.2	62.5
2.	Psychological causes	5.92	13.32
3.	Financial causes	96.23	70.2
4.	Familial causes	6.2	16.5
5.	Sociological causes	80.45	70.6

The First objective of the study was to assess the factors influencing anxiety among epilepsy patients.

The factors influencing anxiety among epilepsy patients the mean and standard deviation of physical causes are 80.2 and 62.5 respectively, with regard to the mean and standard deviation of psychological causes are 5.92 and 13.32. The financial causes mean was 96.23 and the standard deviation was 70.2. Coming on to the familial causes mean was 6.2 and standard deviation was 16.5. With regard to the sociological causes the mean score was 80.45 with a standard deviation of 70.6 respectively. **According to Goldstein and Harden (2010)**, epileptic events can produce symptoms indistinguishable from those of primary anxiety disorder. Symptoms of anxiety in epilepsy may result or be exacerbated by psychological reactions, including responses to the unpredictability of seizures and restrictions of normal activities. This results in low self-esteem, stigmatization, and social rejection. (Fear and anxiety are often associated with simple partial seizures.

Conclusion:

With regard to the association between the level of anxiety with the selected demographic variables, chi-square reveals significant with $p=0.00\%$ with employed patients.

Future scope:

Epilepsy has significant economic implications in terms of health-care needs, premature death and lost work productivity. An Indian study calculated that the total cost per epilepsy case was US\$ 344 per year (or 88% of the average income per capita). The total cost for an estimated five million cases in India was equivalent to 0.5% of gross national product.

Although the social effects vary from country to country, the discrimination and social stigma that surround epilepsy worldwide are often more difficult to overcome than the seizures themselves. People with epilepsy can be targets of prejudice. The stigma of the disorder can discourage people from seeking treatment for symptoms and becoming identified with the disorder. Hence further studies to be focused on the various aspects of the Epilepsy patients towards wellbeing and indirectly towards improving the social wellbeing of the country too.

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