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### A Study to Assess the Awareness of Caretakers Regarding Emergency Management During Seizure in a Selected Hospital, Bangalore, with a view to Develop an Information Pamphlet

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#### Abstract

**Introduction:** An epileptic syndrome consists of recurrent episodes of one or more of the following manifestations: loss of consciousness, convulsive movements or other motor activity, sensory phenomena and behavioural abnormalities [1]. According to WHO, around 50 million people worldwide have epilepsy, of which 20% resides in India [22].

**Material and methods:** The research design selected for this study was descriptive design. The setting selected was Inpatient and Outpatient Department of Neuro and Medicine Wards, SJMCH, Bangalore. 150 caretakers were selected for the study using non probability convenience sampling technique. A demographic proforma to collect the data and structured questionnaire to assess the awareness was used. The collected data were analyzed by using descriptive and inferential statistics. Result: the current study reveals that

out of 150 subjects, 37.33% had good awareness, 31.33% had average awareness, 21.33% had excellent awareness, 10% had poor awareness of emergency management of seizure. The study revealed statistically significant association between level of awareness and education, socio-economic class, and previous exposure to seizures, no association between awareness and age, gender, marital status, occupation, place of residence, or family history of seizures. Conclusion: The study findings reveal that the caretaker has good awareness regarding emergency management during seizures. Has an outcome emergency management during seizure, information pamphlet was developed as an educating the caretakers and family members.

**Keywords:** Seizure, Caretakers, Awareness, Management

#### Introduction

Epilepsy is derived from the Greek word “epilepsia”, meaning “seizure”. In early times, epilepsy was viewed as being of divine origin and was called the “sacred disease” because someone with epilepsy was thought to be “seized” or struck down by the Gods. [1]

An epileptic syndrome consists of recurrent episodes of one or more of the following manifestations: loss of consciousness, convulsive movements or other motor activity, sensory phenomena and behavioural abnormalities. [1]

According to WHO, 2022 reports around 50 million people Worldwide have epilepsy and one of the most common neurological disease globally. Nearly 80% people with epilepsy live in low and middle-income countries. It is estimated that 70% of people living with epilepsy could live seizure free if properly diagnosed and treated. Three quarters of people with epilepsy living in low-income countries do not get the treatment they need. In many parts of the world people with epilepsy and their families suffer from stigma and discrimination. [6]

A Neuro epidemiological survey conducted by M. Gouridevi in Karnataka that has shown prevalence rate over an interval of 20 years, illustrates a rising trend from 5.6 to 11.9 per 1,000 for rural population and 2.5 to 5.7 per 1,000 for urban population, an overall prevalence varying from 4.6 to 8.8 per 1,000. [2]

Although epilepsy is a common disorder, it is highly stigmatized. Not only public but even teachers are not free from stigmatization and cultural barriers. [3] According to neurology research International, in the 21<sup>st</sup> century, people with epilepsy still suffer prejudice and stigma, approximately 70% of people with epilepsy (PWE) control their seizures with appropriate antiepileptic medication (AEM). Because seizures are unpredictable and do not remain hidden in the social environment, epilepsy is a disruptive condition in all social situations and strongly interferes with employability. Unlike other chronic diseases, the clinical manifestations of epilepsy are highly visible, leading to greater barriers and lower social acceptability. Consequently, People with epilepsy have higher rates of unemployment and underemployment [4].

In most circumstances, first aid for seizures aims to protect the individual from harm during a seizure. Guidelines for seizure first aid from the Epilepsy Foundation are readily available and widely distributed, yet data from surveys and studies illustrate a deep unmet need in seizure first aid education<sup>[5]</sup>.

Even though there is an improvement in the knowledge regarding epilepsy, the attitude of people towards the disease remains unchanged. People still remain stigmatized and ignorant enough to follow absurd measures, which had shown the importance to reassess insights of people and to educate them regarding what should be done and what should not be during an epileptic episode. At the end of our study we had distributed information pamphlets on first aid measures during seizure to make even an ordinary person understand what is seizure and to use appropriate measures to handle an emergency episode.

### Materials and Methods

This study was a descriptive design conducted in Neuro and Medicine wards, SJMCH Bangalore. We obtained the approval of the institutional ethic committee before the initiation of the study and after obtaining appropriate administrative authority of SJCON. In order to assume the expected proportion of 50% considering the relative precision, and 95% confidence level, sample size of 150 was taken for the study. Samples were selected using non probability convenience sampling. Written consent from caretakers was obtained. The investigators introduced and explained and administered the demographic proforma, awareness questionnaire.

### The Following Instruments were used to Collect Data:

**Section A:** Proforma to collect the demographic variables.

**Section B:** A self-administered questionnaire to assess the awareness among caretakers regarding emergency management during seizure.

### Major Findings of the Study

The data obtained has been analysed and presented under the following headings.

#### Section 1: Findings Related to Baseline Variables of Caretakers

In the present study, most of the caretakers belongs to age group of 26 -35 years (36%). 56% of caretakers were males and 44% were females. A cross-sectional study conducted in South Bangalore (2019), to determine the public awareness towards the first aid management of epilepsy among 880 adults shows that majority were from the age group of 25 – 45 years<sup>8</sup> and most of the adults were males (58.1%)<sup>[8]</sup>.

The present study reveals that 72.66% belongs to Hindu religion and socioeconomic class of rupees <15,000 and 77.33% were from urban background and majority of them had no family history of seizure (86.66%). A descriptive study conducted in a selected hospital of Haryana, to assess knowledge and attitude regarding childhood seizures among 80 parents shows that 82.5% belongs to Hindu<sup>[18]</sup> and socioeconomic class of rupees 5001-10,000 (40.66%) and 67.5% of the parents were from rural background<sup>18</sup> and most of them were not having any family history of seizure

(95%)<sup>[18]</sup>.

The present study reveals that 67.33% of the subjects were married and majority of them have no previous exposure to seizure (80.66%). A cross-sectional study conducted in Tehran, to assess public awareness, attitudes, and first-aid measures on epilepsy among 833 people shows that 59.7% were married and 74% had observed an epileptic fit<sup>[20]</sup>.

The present study shows that 23.33% belong to high school category and 37.33% were professionals. A descriptive study conducted in a tertiary care hospital, Chandigarh, to assess the knowledge and attitude about seizures among 100 caretakers of patients with supratentorial craniotomy reveals that 56% belong to secondary category and 60% were skilled workers<sup>[1]</sup>.

#### Section 2: Findings Related to Awareness of Caretakers Regarding Emergency Management During Seizure

The study revealed that 21.3% had excellent awareness, 37.3% had good awareness, 31.3% had average awareness and 10.0% had poor awareness regarding emergency management during seizures.

It has shown that 76% had awareness about concept, 17.33% had awareness regarding causes, 36% had awareness regarding signs and symptoms, 57.33% had awareness regarding diagnosis, 9.3% had awareness regarding actions and 6% had awareness regarding prevention and management about seizure.

#### Section 3: Findings Related to Association of Awareness Regarding Emergency with Baseline Variables

In this study the statistical analysis revealed that there is a significant association between socio economic class at  $p=0.005$  level of significance, education at  $p = 0.02$  level of significance, exposure to seizure at  $p =0.041$  level of significance and there is no significant association with other variables.

### Discussion

The studies revealed that majority of caretakers are having good knowledge regarding emergency management of seizure.

In this study the statistical analysis revealed that there is a significant association between socio economic class at  $p=0.005$  level of significance, education at  $p = 0.02$  level of significance, exposure to seizure at  $p =0.041$  level of significance, suggest that people with good education and high socio-economic status have good awareness regarding emergency management of seizure.

### Implications:

The findings of the study may provide useful information about:

- Awareness of caretakers regarding emergency management during seizure.
- How to develop an information pamphlet which can be taken as a reference for further studies.

### Implication of Nursing Practice

- Nurses should take initiative in providing health education to the patients and family members through role play and distributing information pamphlet.

### Nursing Education

- Nursing curriculum should be included with simulation classes on first aid management during seizure, so that the students will get educated and can thereby help the caretakers to gain knowledge.

### Nursing Administration

- Based on the findings of the present study.

With the help of administrative authorities

- Periodic health camps can be conducted.
- Nurse-led clinics can be established exclusively for seizure.

### Recommendations

Based on interpretation and conclusion of the study following recommendations are made.

1. A comparative study can be done to assess the knowledge of caregivers of people with epilepsy and general public regarding epilepsy.
2. A longitudinal study can be conducted to assess knowledge regarding the false practices and beliefs followed by people.
3. A study can be done to assess the effectiveness on awareness of caretakers after structured teaching programme.

### Conclusion

The findings revealed that good awareness of caretakers regarding emergency management during seizure constitutes to only 37.3%. This study highlights the need for increased education and awareness. Developing an information pamphlet can be an effective way to improve awareness regarding neurological emergencies.

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