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Effectiveness of Instructional Module on Knowledge of Care Givers Regarding Home Care of Seizure Patient's at Selected Hospitals, Udaipur

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ABSTRACT

Seizures are caused by abnormal electrical discharges in the brain. Seizures can involve both the body (convulsions) and mind (altered mental status), or only parts of the body. Seizures can be caused by conditions that do not lead to epilepsy, such as fever and medications. The present study was to assess the effectiveness of instructional module on knowledge of care givers regarding home care of seizure patient's at selected hospitals, udaipur. Pre-Experimental one group pre-test post-test design was adopted in this study. The subjects selected for the study was care givers of the patients admitted with diagnosed seizures. Sample of study consisted of 50 care givers. The study participants were selected by random sampling technique. The tool used for the data collection was structured knowledge questionnaire and intervention was Instructional Module on home care of seizure patients. Results of the study showed that in pre-test majority 31(62%) had inadequate knowledge, followed by 15(30%) had moderate knowledge and only 4(8%) had adequate knowledge where as in post-test majority 31(62%) had adequate knowledge and 19(38%) had moderate knowledge regarding home care of seizure patients. Pretest mean score was 8.20±1.884 and posttest was 15.32±1.953 with mean difference was 7.12. The results depicts that t value=18.49 df=49 and p value=0.000 was highly significant at p value <0.05 level of significance. The study findings showed that there is effectiveness of instructional module on knowledge score regarding home care of seizure patients among care givers. The study concluded that awareness on home care of seizure patients to be necessary to care givers for safe and preventive aspect of care for seizure patients.

KEYWORDS

Knowledge Knowledge, Care givers, Seizure patients

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INTRODUCTION

Seizures are caused by abnormal electrical discharges in the brain. Seizures can involve both the body (convulsions) and mind (altered mental status), or only parts of the body. Seizures can be caused by conditions that do not lead to epilepsy, such as fever and medications. Young children with febrile seizures do not necessarily develop epilepsy unless other conditions arise. Certain medications may have the potential to lower seizure threshold and cause a seizure.[1]

The reason a person develops epilepsy may be unknown. Epilepsy can follow brain injury from trauma (accidents), stroke, surgery, brain tumors, or illnesses. A person may be born with brain abnormalities or may have been deprived of oxygen at birth, which led to epilepsy. Certain medical conditions also can cause epilepsy. In children, seizures may occur in medical conditions such as cerebral palsy, autism, and mental retardation. Occasionally, epilepsy runs in families (genetically inherited).[2]

Epileptic seizures are a common and important medical problem, with about one in 11 persons experiencing at least one seizure at some point. Epilepsy—the tendency to have recurrent, unprovoked seizures—occurs with a prevalence of about 0.5 percent and a cumulative lifetime incidence of 3 percent. The management of patients with epilepsy is often challenging, as evidenced by a recent report that over one half of all patients with epilepsy continue to experience at least occasional seizures despite treatment with antiepileptic medications.[3]

Seizures are among the most common treatable and preventable medical conditions that require children to use emergency medical services. Optimizing home management of seizures in pediatric patients can significantly reduce morbidity and mortality in this population.[4]

The goal of seizure treatment is to allow the patient to function normally, such as driving a car and going to work or school. Seizures can be treated with medication, surgery, or a combination of both. Antiseizure or anticonvulsant medications can cause drowsiness, interfere with thinking, and interfere with other medications, so it is important that the primary care provider and pharmacist know all medications (prescription and over-the-counter), vitamins, herbs, or other supplements a patient may be taking. The care of someone with epilepsy varies depending on the frequency and type of seizures. It is important for the person to take anticonvulsant medication regularly to prevent seizures.[5]

The care giver must be taught about how to determine and familiarize warning signs and how to care for patient during and after seizure attack; avoid using thermometers that can cause

breakage; use tympanic thermometer when necessary to take temperature; uphold strict bedrest if prodromal signs or aura experienced; turn head to side and suction airway as indicated; support head, place on soft area, or assist to floor if out of bed; do not attempt to restrain; monitor and document AED drug levels, corresponding side effects, and frequency of seizure activity. Maintain in lying position, flat surface; turn head to side during seizure activity; loosen clothing from neck or chest and abdominal areas; suction as needed; supervise supplemental oxygen or bag ventilation as needed postictally.[6]

The patient or caregiver should verbalize understanding of factors that contribute to the possibility of trauma and or suffocation and take steps to correct the situation, identify actions or measures to take when seizure activity occurs, The patient or caregiver will identify and correct potential risk factors in the environment, demonstrate behaviors, lifestyle changes to reduce risk factors and protect self from injury, modify the environment as indicated to enhance safety, will maintain treatment regimen to control or eliminate seizure activity, recognize the need for assistance to prevent accidents or injuries, maintain effective respiratory pattern with airway patent or aspiration prevented, demonstrate behaviors to restore positive self-esteem, participate in treatment regimen or activities to correct factors that precipitated a crisis.[7]

Most research consistently demonstrated that epilepsy patients and their families do not have a comprehensive understanding of the basic information about the illness ranging from how the diagnosis was made, seizure precipitants, types of seizures, the purpose and potential side effects of medications, safety concerns to the risks and potential consequences of seizures. Although some studies have suggested that patients and their families' attitude regarding epilepsy have become less negative over time, the problems of stigma remain widespread.[8]

STATEMENT OF PROBLEM

A Pre-Experimental study to assess the effectiveness of instructional module on knowledge of care givers regarding home care of seizure patient's at Selected Hospitals, Udaipur."

OBJECTIVES OF STUDY

1. To assess the pre-test level of knowledge of care givers regarding home care of seizure patient's

2. To assess the post-test level of knowledge of care givers regarding home care of seizure patient's

3. To compare the pre-test and post-test level of knowledge of care givers regarding home care of seizure patient's

4. To find out the association between pre-test level of knowledge with selected demographic variables.

5. To find out the association between post-test level of knowledge with selected demographic variables.

Hypothesis

Hypothesis will be tested at $p<0.05$ level of significance

H1 : There will be significant difference between pre-test and post-test knowledge score of care givers regarding home care of seizure patients after administering the self instructional module.

Materials and Methods:

Research Design

The Pre-experimental study design is adopted to assess the effectiveness of instructional module on knowledge of care givers regarding home care of seizure patient's at Selected Hospitals, Udaipur."

Group	Assessment of pre test	Self Instructional Module	Assessment of post test
Care Givers	O1	X (Intervention)	O2

Variables under study

Independent variables:

Instructional module on home care of seizure patients

Dependent variables:

Knowledge of care givers on home care of seizure patients

Research setting

The setting is the physical location and the condition in which data collection takes place in the study. The present study was conducted at pacific hospital, Udaipur.

Population

The population for the study was care givers of seizure patients.

Sampling technique

Sample is used in research when it is not feasible to study the whole population from which it is drawn. For the present study purposive sampling technique was used to select the samples.

Sample size

The sample size of present study was 50 care givers of seizure patients who meet the inclusion criteria of the study.

SAMPLING CRITERIA:

Inclusion criteria: care givers

- who are taking care of seizure patients for atleast 6 months or more
- who are willing to participate in the study.
- who are cooperative.
- who can read/understand the language.

Exclusion criteria: care givers

0. who are taking care of seizure patients for less than 6 months

- who are not present at the time of data collection.
- who are not willing to participate in the study.

Selection and development of tool

The tool was developed by keeping in mind the objectives of the study and prepared after extensive review of literature, internet sources and through discussion with guide, co-guide and opinions of various experts in the field of medical and surgical nursing. The suggestions and opinions were considered to prepare and finalize the tool.

Description of tool

The tool consists of 2 parts:-

Part A: Socio-Demographic variables:

It consist of items for obtaining information from age in years, type of family, education, occupation, source of information, gender and monthly family income..

Part B: Self structured knowledge questionnaire on home care of seizure patients.

Scoring Criteria:

For each correct response 1 mark will be given and 0 mark for incorrect answer.

- Scores ranging from 0-7 would be considered inadequate knowledge
- Scores ranging from 8-14 would be considered moderate knowledge
- Scores ranging from 15-20 would be considered adequate knowledge

Description of intervention

The intervention for the present study was self instructional module on home care management of seizure patients. The instructional module includes meaning of seizures, causes, signs and symptoms, assessment, immediate management and home care management of seizure patients.

Reliability of tool

The reliability of the tool was assessed by Guttmann method (r=.764). The tool was found to be reliable.

Ethical consideration

- Approval from ethical committee of venkteshwar college of Nursing Udaipur.
- Prior to data collection, written permission was obtained from the concerned authority of pacific hospital, Udaipur.
- Anonymity and confidentiality of subjects was maintained.
- Informed consent was obtained from the subjects.

Plan for data analysis

The data analysis will be done according to study objectives by using descriptive and inferential statistics. The plan of data analysis would be as follows:

- Frequency, percentage, mean and standard deviation will be calculated.
- Paired t test will be used to test the hypothesis.
- Chi-square test will be used for association.

RESULTS AND DISCUSSION

Table 1 Frequency and percentage distribution of demographic variables N=50

S. No	Socio-Demographic Variables		Frequency (f)	Percentage (%)
1	**Age in years**			
	a.	21-30 years	13	26
	b.	31-40 years	14	28
	c.	41-50 years	16	32
	d.	51-60 years	7	14
2	**Type of family**			
	a.	Nuclear family	31	62
	b.	Joint family	19	38
3	**Education**			
	a.	Illiterate	12	24
	b.	School education	14	28
	c.	Graduation	15	30
	d.	Post graduation	9	18
4	**Occupation**			
	a.	Employed	28	56
	b.	Unemployed	22	44

5	**Source of information**			
	a.	Health professionals	30	60
	b.	Mass media	13	26
	c.	Friends	7	14
6	**Gender**			
	a.	Male	36	72
	b.	Female	14	28
7	**Family monthly income per month**			
	a.	Less than 5000	8	16
	b.	5001-10000	10	20
	c.	10001-15000	22	44
	d.	More than 15000	10	20

Table 2 Pre-test level of knowledge of care givers regarding home care of seizure patients N=50

	Pre-Test		Post-Test	
Level of knowledge	**f**	**%**	**f**	**%**
Inadequate knowledge	31	62	0	0
Moderate knowledge	15	30	19	38
Adequate knowledge	4	8	31	62

Table 2 and fig 1 reveals that in pre-test majority 31(62%) of care givers had inadequate knowledge, followed by 15(30%) had moderate knowledge and only 4(8%) had adequate knowledge where as in post-test majority 31(62%) of care givers had adequate knowledge and 19(38%) had moderate knowledge regarding home care of seizure patients.

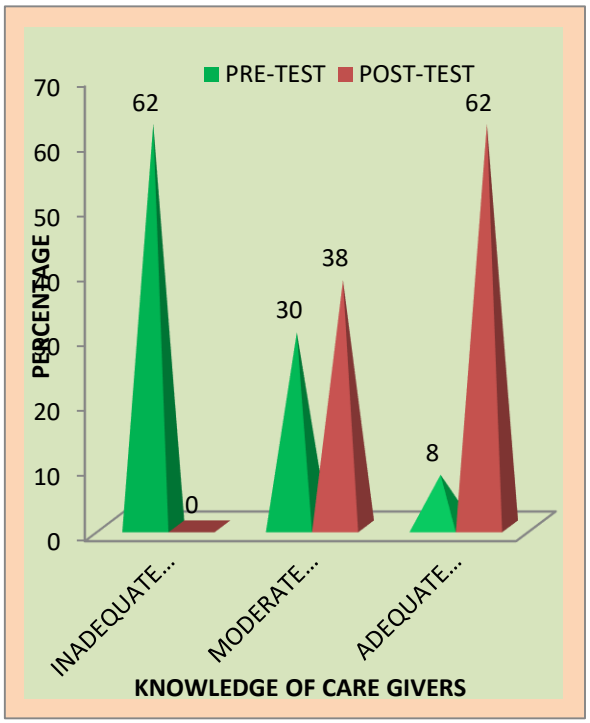

Figure 1 Percentage distribution of pre-test and post-test level of knowledge of care givers regarding home care of seizure patients

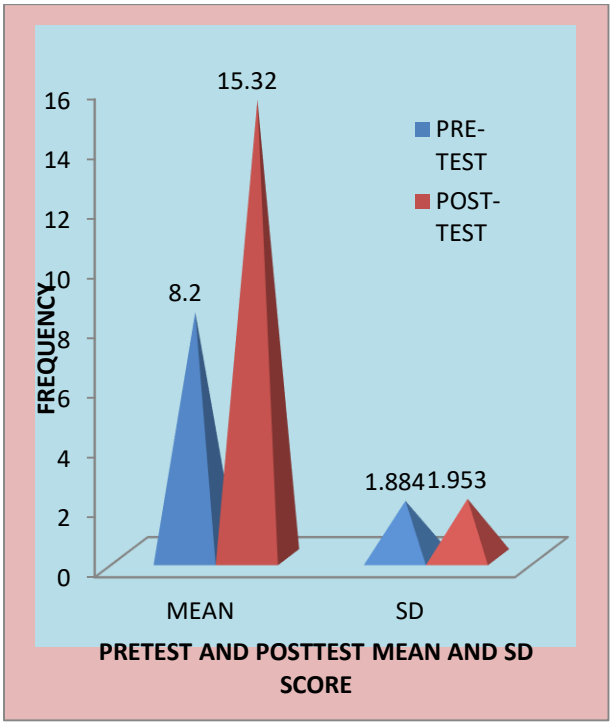

Figure 2 Distribution of mean and SD of pre-test and posttest level of knowledge score of care givers regarding home care of seizure patients

Table 3 Comparison of pre-test and post-test knowledge score of care givers regarding home care of seizure patients N=50

Level of knowledge	Mean	SD	Mean D	't' value	df	'p' Value
Pre-Test	8.20	1.884	s	18.49	49	0.000*
Post-Test	15.32	1.953				

*p value <0.05 level of significance

Table 3 depicts that pre-test mean and SD was 8.20±1.884 and post-test mean and SD was 15.32±1.953 with mean difference of 7.12. The mean pre-test and post-test was compared and tested using paired t test (t value=18.49 df=49 and p value=0.000) was highly significant at p value <0.05 level of significance. The study findings showed that instructional module was effective in improving the knowledge of care givers regarding home care of seizure patients.

Sunita Kumari (2016) conducted a study assess the effect Of health teaching regarding home care of child with convulsion among care givers in selected hospitals of Pune city. Result showed that majority of 55% of people in pre-test of study Group were having poor knowledge score 41.7% of people in pre-test of study Group were having average knowledge score 3.3% of the study Group were having good knowledge score whereas in post-test majority 93.3% of the people had good knowledge score and 6.7% of people in post –test of study group were having average score. According to finding paired t test to compare difference between average scoring of before and after health teaching, since P value is less than 0.05(P value=0.000) difference in average score is statistically significant association was present between the knowledge, types of family & education.[9]

In present study occupation of care givers was found significant association with at p<0.05 with post-test knowledge regarding home care of seizure patients. The other demographic variables of care givers such as age in years, type of family, education, source of information, gender and family monthly income were found non significant with pre-test and post-test knowledge regarding home care of seizure patients.

CONCLUSION

The study results showed that in pre-test majority 31(62%) of care givers had inadequate knowledge and only 4(8%) had adequate knowledge where as in post-test majority 31(62%) of care givers had adequate knowledge and 19(38%) had moderate knowledge. The study concluded

that instructional module was effective in improving the knowledge of care givers regarding home care of seizure patients. The study suggests that it is essential for the care givers to have knowledge and positive attitude towards caring for seizure patients.

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