JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING FIRST AID MANAGEMENT OF SEIZURES AMONG UNDERGRADUATE STUDENTS OF SELECTED COLLEGES OF HIMACHAL PRADESH IN AVIEW TO DEVELOP INFORMATIONAL BOOKLET.

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ABSTRACT
Knowledge of students regarding first aid management of seizure is one of the key features to maintain awareness regarding seizures. Seizures are yet considered as taboo and therefore visualized with a different view and completely different methods of dealing with it. So, students who are learners and Consequently act as a tool to change the world can be a medium to impart knowledge regarding seizures and therefore teaching them basic first aid that is to be given immediate through informational booklet becomes helpful and a major move to save someone's life. Aim of study is to assess the knowledge regarding first aid management of seizures among undergraduate students of selected Colleges, HP Method: Study was conducted in different Colleges of Himachal Pradesh. quantitative research approach and descriptive research design was used to assess the knowledge regarding first aid management of seizure and convenient sampling technique was used to select 170 students of Himachal Pradesh. Self-structured tool was used assess knowledge regarding first management of seizure. Results: The data revealed that majority of participants 74(43.5%) had good knowledge, 55(32.4%) had average knowledge, 28(16.5%) had below average knowledge and 13(7.6%) had excellent knowledge regarding first aid management of seizure.

KEY WORDS: Undergraduate students, seizure, informational booklet, first aid

INTRODUCTION

First aid is a preliminary measure that is given to a person suffering from any injury or Illness. It is referred to an emergency intervention that is useful in saving lives of an individual, preventing permanent disablement and providing immediate support to the injured person at the time of emergency crisis.[1]

Seizures can be defined as the burst of uncontrolled electrical activities between brain cells which is also called neurons or nerve cells and cause temporary abnormalities in muscle tone or movements, behavior and sensation.[2]

According to WHO Epilepsy is a chronic non communicable disease of the brain that affects almost around 50 million people worldwide. It is characterized by recurrent seizures, which are brief episodes of involuntary movement that may involve a part of

the body (partial) or the entire body (generalized) and are sometimes being accompanied by loss of consciousness and control of bowel or bladder function.[3]

In studies it is stated that one seizure doesn't signify epilepsy, it is being studied that up to 10% of people worldwide have one seizure during their lifetime. Epilepsy is defined as having two or more unprovoked seizures. Epilepsy accounts for a significant proportion of the world's disease burden, affecting around 50 million people worldwide. The estimated proportion of the general population is with active epilepsy (i.e. continuing seizures or with the need for treatment).At a given time is between 4 and 10 per 100 people.[3]

Globally, an estimated 5 million people are diagnosed with epilepsy under each year. In high-income countries, there are estimated to be 49 per 100,000 people diagnosed with epilepsy each year. In low and middle –income countries, this figure can be as high as 139 per 100000. Close to 80% of people with epilepsy live in low- and middle –income countries.[3]

According to the study conducted by NCBI in 2015 the incidence is consistently reported to be highest in the first year of life. The prevalence of epilepsy in children is consistently higher than the incidence and ranges from 3.2-5.5/1000 in underdeveloped countries.[4]

According to CDC (Centers for Disease Control and Prevention) Seizures are classified into two groups. Generalized Seizures: Affect both sides of the brain and alters the systemic functioning of the body. The type is Focal Seizure they are just affecting one side of the brain and therefore symptoms are occurring for a short period of time and then it resolves by the time. Types of generalized seizures are Absence Seizures: also called petit mal seizures, can cause rapid blinking or a few seconds of staring into space. Tonic-clonic seizures: also called grand mal seizures, can make a person cry out Loss of consciousness. Fall to the ground. Have muscle jerks or spasms. Under Generalized seizures there comes: Tonic: Muscles in the body become stiff. Atonic: Muscles in the body relax. Myoclonic: Short jerking in parts of the body. Clonic: Periods of shaking or jerking parts on the body.[5]

Types of focal seizure is Simple focal seizures: It affects a small part of the brain. These seizures can cause twitching or a change in sensation, such as a strange taste or smell. Complex focal seizures: can make a person with epilepsy confused or dazed. The person will be unable to respond to questions or direction for up to a few minutes. Secondary generalized seizures: it begins in one part of the brain, but then spread to both sides of the brain. In other words, the person first has a focal seizure, followed by generalized seizures. Seizures may last as long as a few minutes.[5]

II. OBJECTIVES OF THE STUDY

1. To assess the knowledge regarding first aid management of seizures among undergraduate students of selected colleges of Himachal Pradesh.
2. To find out the association between knowledge regarding first aid management of seizures with their selected socio demographic variables.
3. To develop and provide the informational booklet regarding first aid management of seizures among undergraduate students of selected colleges of Himachal Pradesh.

METHODS

The Research approach used in this study is the quantitative descriptive design. The present study was conducted in the selected colleges of Himachal Pradesh. Through questionnaire method accessible population was taken using convenient sampling technique. Tool consist of **Section A** – Socio demographic variables The socio demographic variables include personal information about subjects such as age, gender, religion, marital status, name of college, and academic year. **Section B**--Self structured Knowledge questionnaire. Self-Structured questionnaire consist of multiple-choice questions. It consists of 28 objective type items of response, viz. scoring '0' for incorrect answer '1' for correct answer. The maximum score was 28 and minimum score was 0 on self-structured knowledge questionnaire. **Section C:** Informational booklet developed to create awareness and provide knowledge regarding first aid management of seizure and to create positive attitude towards seizures. The informational booklet further was verified by various nursing health department i.e., from Mental health nursing, Medical surgical nursing, Community health nursing, Child health nursing.

SCORING KEY:

- Score 0 is given for wrong answer and score 1 is given for every right answer.
- Modified blooms cut off points criteria was used to assess the level of knowledge.

SCORING CRITERIA TABLE

SCORE	KNOWLEDGE SCORE
0-7	BELOW AVERAGE
8-14	AVERAGE
15-21	GOOD
22-28	EXCELLENT

Reliability of tool was obtained from split half method i.e.0.74

IV. RESULTS

Table 1: Frequency and Percentage Distribution of Socio Demographic Variables

N=170

Sr. No.	Socio Demographic Variables	Frequency (f)	Percentage (%)
1.	**Age in years**		
	18-20	85	50.0
	21-22	72	42.4
	23-24	11	6.5
	>24	2	1.2
2.	**Gender**		
	Male	26	15.3
	Female	143	84.1
	Others	1	0.6
3.	**Religion**		
	Hinduism	134	78.8
	Sikhism	32	18.8
	Muslim	4	2.4
	Christian	0	0
4.	**Marital Status**		
	Married	1	0.6
	Divorce	0	0
	Widow	1	0.6
5.	**Name of The College**		
	Akal College of Agriculture	60	35.3
	Akal College of Psychology	8	4.7
	Akal College of Engineering	21	12.4
	Akal College of Education	5	2.9
	Akal College of Music	1	0.6
	Akal College of Food And Technology	4	2.4
	Akal College of Commerce	16	9.4
	Others	55	32.4
6.	**Academic Year**		
	1st Year	44	25.9
	2nd Year	47	27.6
	3rd Year	41	24.1
	4th Year	38	22.4

Table 2.Frequency and Percentage Distribution of knowledge score regarding first aid management of seizures.

Level of Knowledge	Knowledge Score	Frequency(f)	Percentage (%)
Excellent	22-28	13	7.6%
Good	15-21	74	43.5%
Average	8-14	55	32.4%
Below average	0-7	28	16.5%

Maximum Score= 28 **Minimum Score=0**

Table2. (fig.9) Shows Frequency and Percentage Distribution of undergraduate students in terms of knowledge score. The data revealed that majority of students 74(43.5%) had good knowledge, 55(32.4%) had average knowledge, 28(16.5%) had below average knowledge and 13(7.6%) had excellent knowledge.

Fig.1 Bar diagram showing Distribution of Frequency and Percentage according to Level of Knowledge

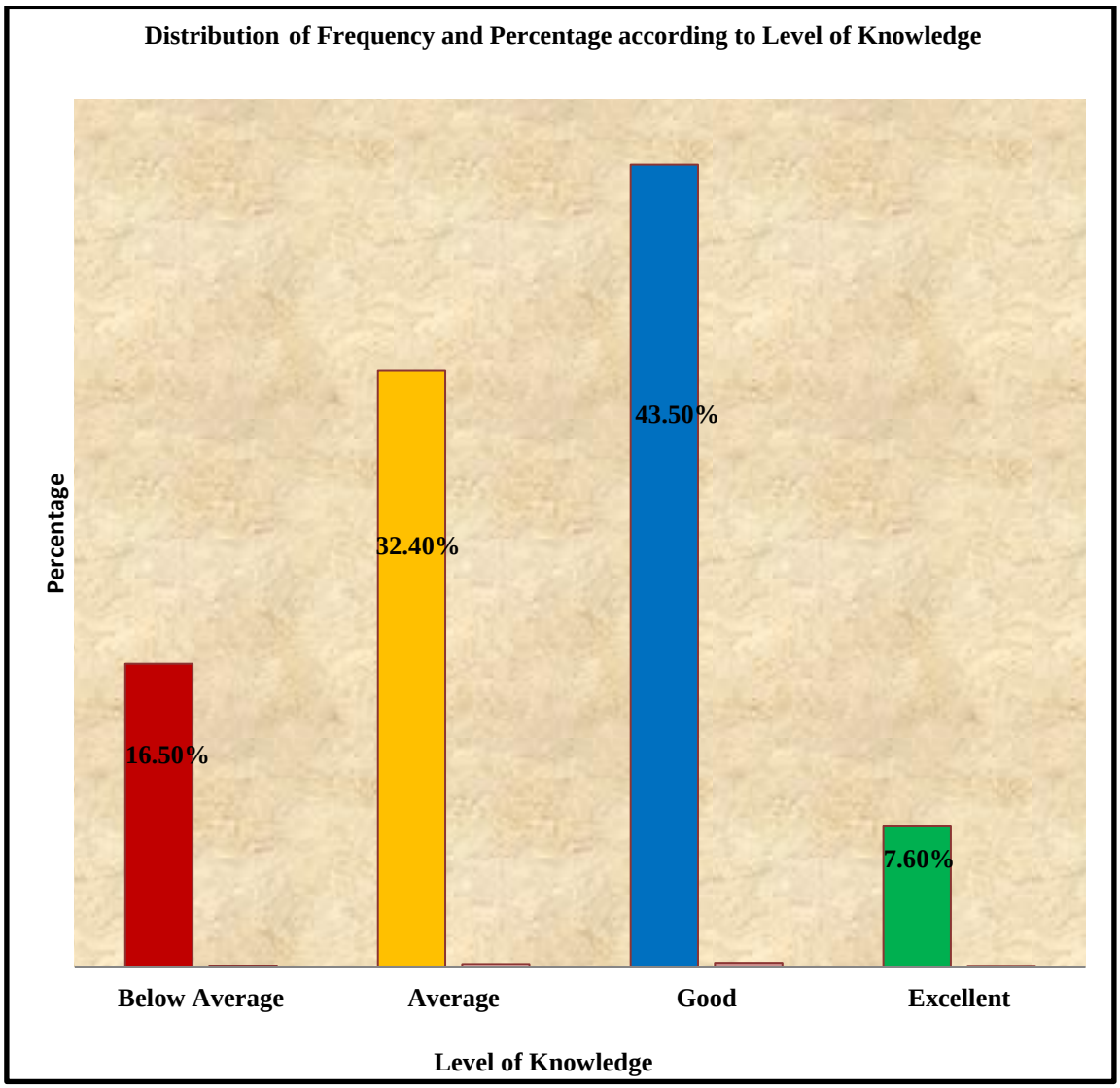

Table 3. Association between knowledge score regarding first aid management of seizures with socio demographic variables. N=170

S No.	Demographic Variables	Below Average	Average	Good	Excellent	χ^2	Df	p-value
1.	**AGE**							
	18-20	10	33	35	7			
	21-22	17	20	30	5		1	0.962
	23-24	0	1	9	1	15.15		**NS***
	>24	1	1	0	0			
2.	**GENDER**							
	Male	14	10	2	0	49.62	1	0.000
	Female	1	45	72	12			**S***
	Others	0	0	0	1			

Maximum Score = 28 Minimum Score = 0 S* = Significant NS*= Non Significant

The above **Table 3.** revealed that gender has significant association with knowledge score of undergraduate students regarding first aid management of seizures as the calculated p value is less than 0.05 (χ^2= 49.629[a] ; p value=0.000). Other socio demographic variables such as name of college, academic year, age, religion, marital status has no significant association with knowledge score of undergraduate students regarding first aid management of seizures as the calculated p value is more than 0.05. Hence they have no significant impact on knowledge of undergraduate student regarding first aid management of seizures.

DISCUSSION

The findings of the study have been discussed in the accordance with the objectives of the study and previously reviewed literature.

Findings related to frequency and percentage distribution of socio demographic variables

In the present study majority of the participants 85 (50.0%) were in the age group of 18-20 years followed by 72(42.4%) in the age group 21-22 years, 11 (6.5%) were in the age group 23-24 years and 2 (1.2%) were in the age group more than 24 years respectively. In a similar study 371 undergraduates participated that comprised of majority females (62.0%), Chinese ethnicity (74.7%) and Malaysian (88.4%).[6]

Findings related to knowledge score of undergraduate students regarding first aid management of seizure

In the present study majority of students 74(43.5%) had good knowledge, 55(32.4%) had average knowledge, 28 (16.5%) had below average knowledge and 13 (7.6%) had excellent knowledge. In view with the another study the participant had low level of awareness 64.7%, while 71.15 of them have read about epilepsy and 16.2% had attended lectures on epilepsy. Therefore this study highlighted the need for education program in order to improve awareness, knowledge and attitude towards epilepsy.[6]

Findings related to association of knowledge score of undergraduate students regarding first aid management of seizure

The results of this study shows that significant association was found with gender(χ^2= 49.629[a] ; p value=0.000), other demographic variable such as name of the college, academic year, age, religion, marital status have no association with knowledge. In similar study a low level of knowledge were significantly associated with no or low level of awareness and knowledge related to epilepsy (χ^2= 51.2, p≤0.001.[6]

VI. SUMMARY

This research study adopted descriptive research design and was conducted on undergraduate students of selected colleges of Himachal Pradesh, A total of 170 undergraduate students selected by convenient sampling technique from selected colleges of Himachal Pradesh. A self structured questionnaire related to selected first aid measures taken by an individual while they witness the occurrence of seizure. The result that we have analyzed from frequency and percentage distribution of undergraduate students in terms of level of knowledge. The data revealed that majority of students 74(43.5%) had good knowledge, 55(32.4%) had average knowledge, 28 (16.5%) had below average knowledge and 13 (7.6%) had excellent knowledge. Therefore this gives us a

glimpse about the need to inculcate the knowledge regarding first aid management among youth so that accidents and deaths could be as far as possible be avoided.

VII. CONCLUSION

The findings of the study revealed that majority of students 74(43.5%) had good knowledge, 55(32.4%) had average knowledge ,28(16.5%) had below average knowledge and 13(7.6%) had excellent knowledge. The data revealed that gender has significant association with knowledge score of undergraduate students regarding first aid management of seizure as the calculated p value is less than 0.05. Hence they are statistically significant at the level $p<0.05$.

This study concludes that the knowledge regarding first aid management is average and the informational booklet would be a significant intervention in order to upgrade up their knowledge regarding first aid management of seizures. So assessing their knowledge and providing them informational booklet will definitely help to reduce the incidence of mismanagement of seizure in surroundings and environmental settings of an individual.

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