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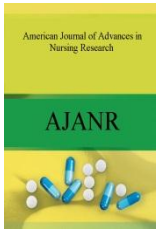

STUDENTS KNOWLEDGE OF FIRST AID MANAGEMENT OF HEAD INJURY

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ABSTRACT

Head injury is the one of the most common problem in India. Most of the people are treated in head injury in emergency room high chance in young generation people. Young people are not having awareness in first aid management of head injury. First-aid is “Lifesaving" "Preventing deterioration" and "Easing pain". Treatment for "Lifesaving" is necessary for life threatening situations such as head injuries loss of consciousness, respiratory arrest, cardiac arrest and excess hemorrhage. So we are giving knowledge in young people definitely it will help to reduce bleeding, and control complication of head injury.

INTRODUCTION

Head injury is defined as alteration in physical or mental function related to injury to the head. Any injury that results in trauma to the scalp, skull or brain can be classified as a head injury. The terms traumatic brain injury and head injury are often used interchangeably in medical literature. This broad classification includes neuronal injuries, hemorrhages, vascular injuries, cranial nerve injuries, and subdural hematoma. The incidence of head injury is 1.7 million people in the United States alone each year. About 3% of these incidences lead to death. Adults suffer head injuries more frequently than any age group. Their injuries tend to be due to falls, motor vehicle crashes or being struck by an object and assaults [1].

When a head injury occurs, loss of brain function can occur even without visible damage to the head. Force applied to the head may cause the brain to be directly injured or shaken. Bouncing against the inner wall of the skull. The trauma can potentially cause bleeding in the spaces surrounding the brain, bruise the brain tissue, or damage the nerve connections within the brain [2].

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NEED FOR THE STUDY

According to centers for disease control and prevention more than 50,000 individual die from traumatic brain injury. There are 2 million Traumatic Brain Injuries each year (One every 15 seconds).500000 of these injuries require hospital admission. Every 5 minutes someone dies from a head injury. Over half of the deaths occur at the time of the incident or within two hours of hospitalization. Every 5 minutes someone becomes permanently disabled due a head injury. 70,000 - 90,000 of those who survive will have lifelong disabilities.2000 more will live in a persistent vegetative state. Over 50% of those who sustain a Brain Injury have been intoxicated at the time or injury. The cost of Traumatic Brain Injuries in the U.S. is over $48 Billion each year.[2]

Also, treatment for "Preventing deterioration" and "Easing pain" is required for non-life threatening injury and sickness. Above mention study also to initiate the researcher to select this topic. So, it is important to cultivate a social attitude among the community to help injured and sick people rather than to abandon them [3].

STATEMENT OF THE PROBLEM

“Effectiveness of structured teaching programme

on knowledge regarding first aid management of head injury among godavari college students in selected junior colleges".

Objectives Of The Study

1. To assess the pretest level of knowledge regarding first aid management of head injury among junior college students.
2. To assess the posttest level of knowledge regarding first aid management of head injury among junior college students
3. To find out the effectiveness of structured teaching programmed on knowledge regarding first Aid management of head injury by comparing pretest and posttest level of knowledge
4. To find out the association between pretest knowledge score with selected demographic variables

Research Design

A pre-experimental design, one group pretest-posttest design without control group (quasi experimental design)

Sample Size & Sampling Technique

The sample comprises 60 junior college students. The sampling technique used was simple random sampling

Criteria for sample selection

Inclusive criteria

- ✓ Students who are available at the time of data collection period.
- ✓ Male and female students are selected for the study.
- ✓ Students who can read and understand English, Hindi.

EXCLUSIVE CRITERIA:

- ✓ Students having hearing problem.
- ✓ Students who are not willing to participate in this study
- ✓ Senior college students are not selected for this study

DESCRIPTION OF THE TOOL

The tool consists of two sections.

Section- 1

Socio-Demographic data on 8 different variables such as age, sex, residential area, religion, income, head of the family member's, education, previous class attended, source of information.

Section-2

It consists of 30 items regarding knowledge on first aid management of head injury among junior college students. Each item has four options with one most appropriate answer. The maximum score for the correct response to each item was one and for the wrong answer the score is zero. Thus for 30 items, the maximum obtainable score was 30.

Scoring mode:

Each correct response was given a score of one & incorrect response a score of zero. The maximum scoring possible was 30 & minimum 0 in the knowledge questionnaire. The scoring was categorized as

1 – 10 = Inadequate knowledge
11 – 20 = Moderate knowledge
21 –30 = adequate knowledge

RESULTS AND DISCUSSION

Table 1 Shows the frequency and percentage distribution of demographic variablessuch as age, sex, area, religion, income, head of the family education, previous first aid management of head injury class attended, source of information

Age of the junior college student shows that majority 32 (53.33%**)** belongs to the age group of 20 and above, 13 (21, 67%) belongs to the age group of 17- 19, 15(25.00%) of the students belongs to the age group of 15-16 years. In sex distribution, most45 (75%) belongs to male, 15(25%) belongs to female. According to religion 38 (63.33%) belong to Hindu, 15 (25%) belong to Muslim and 7 (11.67%) belong to other religion

In family income distribution, majority 18(30%) belongs to >5000 income, 18(30%) belongs to 5001-10000 income, 24(40%) belongs to >10000 income. In Head of the family education is 20(33.33) belongs to illiterate and primary education secondary education 29(48.33) degree 11(18.33). In previous first aid management of head injury class attended history of the students rarely 10 (16.67%) were attended class and majority 50(83.33%) of the students were not attended previous first aid management of head injury classes. In source of information, 37(61.67%) from Internet, TV, 10(16.67%) were have source from peer group, and 13(21.67%) were have source from parents.

Table 2 shows before giving structured teaching programme (pre test), majority 39(65%) of the subject had moderate knowledge regarding the first aid management of head injury, 20(33%) had adequate knowledge and only 1(2%) had inadequate knowledge regarding the first aid management of head injury. Knowledge of 60 students was assessed using a structured questionnaire analyzed using descriptive statistics.

Table 3 shows that after the administration of structured teaching programme (post test), majority 30(60%) of the subject had adequate knowledge regarding

the first aid management of head injury, 30(60%) had moderate knowledge and 0% had inadequate knowledge regarding the first aid management of head injury. In the post-test there was marked improvement in the knowledge of the subject with majority gained adequate knowledge regarding the first aid management of head injury.

Table 4 shows the association between pretest levels of knowledge of students regarding first aid management of head injury with demographic variables of students. Chi-square value was calculated to find out the association. The result shows that, the calculated value is greater than (at 0.05 level) tabulated value for age, sex area religion income head of the family education previous class attended source of information. So there is association between pretest level of knowledge about first aidanagement of head injury among j junior college students above mentioned demographic variables.

Table 5 shows value to determine the effectiveness of structured teaching programmed regarding first aid management of head injury among junior college students. The mean value of posttest (20.233 is more than mean value of pretest (13.867). In that's' table value is (2.001) and calculated value (36.46 is more than the tabulated value (at 0.05 levels). So, it is concluded that there is a significant difference between the pretest score and post test score of first aid management of head injury among junior college students. So H1 hypothesis is accepted.

RECOMMENDATIONS

Based on the findings of the present study recommendations offered for the future Studies are:

- A similar study can be replicated on a large subject there by findings can be generalized.
- A comparative study can be conducted with control group.
- The comparative study may be conducted to find out the effectiveness between self instructions modules regarding the same topic.
- Descriptive study can be conducted to assess the knowledge and practice of junior college students.
- A longitudinal study can be done using post-test after one month, six months and one year to see the retention of knowledge.
- A comparative study can be done to the junior college students studying in rural and urban colleges.

Table 1. Frequency and percentage distribution of demographic variables of junior college students regarding first aid management of head injury.

Sr. No.	Demographic Variables	Category	Frequency(f)	Percentage (%)
1	Age	15-16	15	25.00
		17-19	13	21.67
		20 & above	32	53.33
	Sex	Male	45	75.00
		Female	15	25.00
3	Residential Area	Rural	48	80.00
		Urban	12	20.00
4	Religion	Hindu	38	63.33
		Muslim	15	25.00
		Other	7	11.67
5	Income	< 5000	18	30.00
		5001-10000	18	30.00
		> 10000	24	40.00
6	Head of the family members Education	Illiterate & Primary education	20	33.33
		Secondary education	29	48.33
		Degree	11	18.33
7	Previous class attended	YES	10	16.67
		NO	50	83.33
8	Source of information	Internet TV	37	61.67
		Peer Groups	10	16.67
		Parents	13	21.67

Table 2. Distribution of the Sample According to the Level of Pretest Knowledge of Students Regarding First Aid Management of Head Injury

Sr.No	Levels of pretest knowledge	Score	Frequency	Percentage
1	Adequate	0-10	20	33%
2	Moderate	11-20	39	65%
3	Inadequate	21-30	1	2%
	Total		60	100%

Table 3. Distribution the samples according to the level of post test knowledge of students regarding first aid management of head injury

Sr.No	Level of posttest knowledge	Score	Frequency	Percentage P%
1	Adequate	0-10	30	**50%**
2	Moderate	11-20	30	**50%**
3	Inadequate	21-30	0	**0%**
	Total		60	100%

Table 4. Association between the level of pre-test knowledge with the selected demographic variables N=60

Sr. No.	Demographic Variables	Chi Square Cal	Chi Square Table	P Value	Level of Significance
1	Age	11.649	9.488	0.02	Significant
2	Sex	5.664	5.991	0.059	Not Significant
3	Area	14.567	5.991	0.001	Significant
4	Religion	11.438	9.488	0.022	Significant
5	Income	13.465	9.488	0.009	Significant
6	Head Of The Family Education	7.148	9.488	0.128	Not Significant
7	Previous Class Attended	1.046	5.991	0.593	Not Significant
8	Source Of Information	4.698	9.488	0.32	

(Significant-P < 0.05)

Table 5. comparison of overall pretest and posttest knowledge scores regarding first aid management among junior college student.

Item	Adequate f(%)	Moderate f(%)	Inadequate f(%)	Mean	S.D	S.E. of Mean	"t" value
Pre-test Score	30%	65%	5%	13.867	4.459	0.576	
Post –test Score	48%	52%	0%	20.233	3.921	0.507	36.46

CONCLUSION

Head injury is the common problem in young generation. The researcher felt a deep sense of satisfaction and fulfillment for having undertaken the study. The study provided the investigator with deeper insight and empathy to the needs of junior college students the expert's opinions and direction from the guide, and help from junior college authorities and teachers made the study fruitful and interesting.

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Nil

CONFLICT OF INTEREST

No interest

REFERENCES

1. Bratteb G1, Wisborg T, Fredriksen. (2010). Injuries in road traffic accident and initial treatment to prevent head injury; p. 15-18
2. Brunner &Suddarth's text book of medical surgical nursing. 10th ed. Philadelphia: Lippincott Willams& Wilkins; p.1862-1863.
3. Article related to first aid and emergency treatment of Head injury. Available from: http://www.nlm.nih.gov/medlineplus.