

Effect of Structured Teaching Programme on First Aid and Emergency Management of Head Injury

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Abstract

Head injury is a major cause of disability and fatality the world over with adolescents more vulnerable to it. The present study, covering 30 boys in age group 16-19 years studying in CSI Polytechnic, Salem showed that structured teaching programme on First Aid and emergency management of head injury improved knowledge of students in preventing head injuries and their management.

“Health is Wealth”, and “Prevention is better than Cure”. Health is an essential factor for a happy and contented life. Advances in nursing science and nursing research focus on violence, injury and human safety.

Head is the top part of the human body containing brain, mouth and sense organs. It is regarded as the seat of intellect, the ornamental top of a pillar. Accident is the principle cause of head injury. It is the leading cause of emergency room visits and hospitalisation. Head injury accounts for 75,000 to 100,000 deaths annually. About two-thirds are of those are younger than 30 years.

Traumatic brain injury is a major cause of death and disability world wide and the leading killer of people. Major causes include falls, vehicle accident and violence. It is more common among adolescents. Most of the students self drive to school / college, even without license. Often they drive rashly in the peak hours and in late nights. Our responsibility as a nurse is to care for the adolescents to protect their health and guide them to successful adulthood. So assessing the knowledge of adolescents and educating them will enable them to prevent head injury due to accidents, falls etc. and to provide first aid if such situation occurs.

Objectives

This study sought to (1) compare the mean pre-test and mean post-test knowledge score on first aid and emergency management of head injury among samples, and (2) find the association between the mean post-test knowledge score on first aid and emergency management of head injury among samples and the selected demographic variables (age, residential area, previous source of information).

Hypotheses

H1- There will be significant difference between the mean pre-test and mean post-test knowledge score on First Aid and Emergency Management among students.

H2- There will be significant association between the mean post-test knowledge score on First Aid and Emergency Management and the selected variables among

samples (age, residential area and previous knowledge of the sample about head injury).

Methodology

Evaluative approach was used in this study. The research design used was pre-experimental: one group pre-test and post-test design. This study was conducted in CSI Polytechnic institution in Salem, which has around 1500 students and it is a co-education institution. It has 10 departments; medium of instruction is English and Tamil. We selected only boys studying in English medium.

Sampling Criteria

The inclusion criteria was:

- Boys of age between 16 - 19 years.
- Students who knew how to read and write English.
- Adolescent boys studying in CSI Polytechnic, Salem.

Exclusion criteria was students who already had head injury or provided first aid to individuals (friends and relatives) with head injury.

Sample size and technique: The sample had 30 subjects between the age group of 16 years to 19 years and the sampling technique adopted for selecting the samples was convenient sampling procedure.

Tools and Data Collection Procedure

Permission was obtained from the Principal, CSI Polytechnic, Salem, one week prior to conducting the study.

On the day of investigation, based on inclusion and exclusion criteria, the selected samples were gathered in the conference hall of CSI Polytechnic institution. The tool used was Self Administered Questionnaire which consisted of:

Part A - Demographic variables including age, residential area, know to drive or not and previous knowledge, and

Part B - Questionnaire on knowledge includes definition, principles of first aid and characteristics of first aid, prevention of head injury.

There were a total of 25 items with each one correct response. The responses were scored using the scoring key; the score was computed by giving 1 point for the correct answer and zero point for wrong answer.

Pre-test was conducted and Structured Teaching Programme (STP) was given on First Aid and Emergency Management by lecture-cum-demonstration method with

1. Principal, 2. Associate Professor, 3 - 6. MSc(N) Final Yr students, Shanmuga College of Nursing, Salem (TN).

flash cards and writing board. Post-test was conducted after one week.

Results

The students at an age group of 16 to 17 years were 50 percent; 40 percent belonged to age range 18-19 years and 10 percent of the sample belonged to 20-21 years bracket (Figure 1).

The student who had previous knowledge regarding first aid and emergency management from their friends and relatives were 66.47 percent; the health professionals were 10 percent and none 6.67 percent.

Majority (93.33%) of students had poor knowledge before structured teaching programme in pre-test. Only 6.67 percent students had adequate knowledge. After STP, majority of students (63.33%) got adequate knowledge and 10 percent had excellent knowledge. So, the STP was found effective.

The mean pre-test knowledge score (7.9) with the standard deviation of 2.64 was lesser than the mean post-test knowledge score (12.2) with the standard deviation of 3.398.

The 't' test value was 2.885. The calculated value was greater than the table value (1.70) at 0.05 percent. Hence the structured teaching programme was effective.

Association with the post-test level of knowledge of students and their selected demographic variables:

Table 1 shows the detail of association of post-test level of knowledge of students and their selected demographic variables.

There was a significant association between previous knowledge and level of knowledge of students.

Recommendations

The same kind of study can be done with larger sample (among school / college students and teachers) for generalisation; a comparative study can be done to find the effect of similar study between adolescents and adults; and a follow-up study can be done among the same samples after 2 years on safe driving.

Conclusion

This is a pre-experimental study, conducted among 30 male students in CSI Polytechnic, Salem. The study showed that effective structured teaching programme improved the knowledge of students in prevention and first aid management of head injury.

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Table 1: Post-test level of knowledge of students versus demographic variables (n=30)

S.No	Demographic variables	df	Chi-square value	Table value	Remarks	Level of significance
1.	Age	2	0.0675	5.99	5.99 > 0.0675	Not significant
2.	Residential area	1	0.24	3.84	3.84 > 0.24	Not significant
3.	Previous knowledge	3	7.89	7.82	7.82 < 7.89	Significant

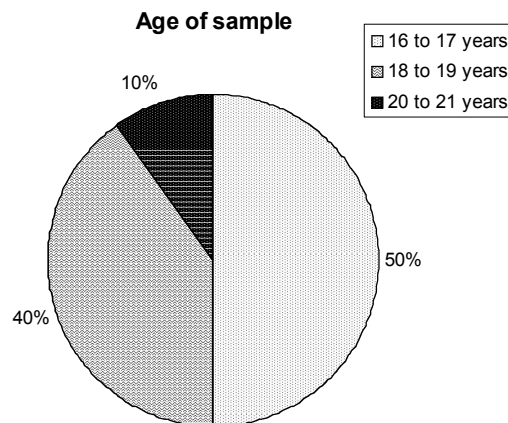


Fig 1 : Age-wise distribution of the study sample

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