

KNOWLEDGE ON MANAGING TRAUMA VICTIMS IN ROAD TRAFFIC ACCIDENTS AMONG AUTODRIVERS.

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Abstract

A quasi-experimental study was conducted to identify the effectiveness of video assisted teaching module regarding knowledge on managing trauma victims in road traffic accidents among auto drivers. The sample consisted of 60 auto rikshaw drivers. The sampling technique used was purposive sampling. The experimental group was subjected to video assisted teaching. Video was shown to the experimental group samples on the next day of pre test data collection and post test was conducted after 7 days for both experimental and comparison group. The data were tabulated and analyzed using descriptive and inferential statistics. Video assisted teaching module was found to be effective in increasing the knowledge level on managing trauma victims among the auto drivers in road traffic accidents ($p=0.001<0.05$) in all knowledge categories and as the post test knowledge scores of experimental group (23.76 ± 2.52) and comparison group (13.2 ± 2.4); ($p< 0.001$) showed a difference of 10.56 ± 2.52 .

Keywords: Effectiveness, knowledge, video assisted teaching module, auto drivers.

Introduction

Every day thousands of people are killed and injured on our roads. Men, women or children walking, biking or riding to school or work, playing in the streets or setting out on long trips, will never return home, leaving behind shattered families and communities. Millions of people each year will spend long weeks in hospital after severe crashes and many will never be able to live, work or play as they used to do.

The Indian road traffic accidents death rate is six percent of the worlds, though the total number of vehicle in Indian road is one percent of total world

rate, road traffic accidents death rate in India is double that of the developed countries. It results because of delay in reaching the causality to appropriate medical care, or lack of knowledge regarding treatment. On the contrary, if help is provided to causality as soon as possible life could be saved. This helps lower mortality and morbidity rates, complications due to injury or delays in the treatment and a less monetary burden on the casualty.

In most of these accident cases the majority of injured persons are transported to the hospital by taxi or buses. But the drivers are untrained and not skillful in managing the victims of road traffic accidents. Sometimes, this may worsens the condition of the patient and results in permanent neurologic damage due to improper handling. Many a times, the victims expire on the way to the health care setting due to lack of immediate first aid measures which was really essential at times. Hence, the investigator felt that there is a need to educate the auto drivers who have the chances in first contact with the victim, regarding trauma management in road traffic accidents.

Statement of the problem

A study to assess the effectiveness of video assisted teaching module regarding knowledge on managing trauma victims in road traffic accidents among auto drivers in selected community at Kollam.

Objectives

- Assess the knowledge of auto drivers regarding managing trauma victims in road traffic accidents before giving video assisted teaching module.
- Evaluate the effect of video assisted teaching module regarding managing

trauma victims in road traffic accidents on knowledge among auto drivers.

- Identify the association between pre-test knowledge score of auto drivers regarding managing trauma victims in road traffic accidents and selected demographic variables.

Hypothesis

- **H₁**-There will be a significant difference between mean pre-test and post test scores on knowledge among auto drivers of experimental and comparison group.
- **H₂**- There will be a significant difference in post test knowledge score among the experimental and comparison group.
- **H₃**- There will be a significant association between pre-test knowledge score and selected demographic variables.

Methodology

The present research study is evaluating the effectiveness of video assisted teaching module regarding knowledge on managing trauma victims in road traffic accidents among auto drivers in selected community at Kollam. A quantitative research approach was considered most appropriate considering the nature of the problem. The research design adopted for the present study is quasi experimental pre test post test comparison group design.

Population and Sample

The population for the present study includes male auto drivers. Sample consisted of 60 auto drivers between the age of 21-50 (30 experimental and 30 comparison group) from various auto stands at Kollam who fulfilled the criteria for sample selection. Sampling technique used was purposive sampling.

Sampling criteria

Inclusion criteria

- Male auto drivers between 21-50 years of age.
- Auto drivers who can read and write Malayalam.

- Drivers who are willing to participate.

Exclusion criteria

- Female auto drivers.
- Auto drivers who already had formal training on first aid measures.
- Auto drivers who have permit outside Kollam district.

Materials and methods

The tools used were questionnaire for collecting demographic variable and video assisted teaching module was provided as intervention.

Research tools

Tool 1: Structured questionnaire.

Section A: Socio demographic variables included are age, educational status, place of residence, ownership of Auto and monthly income.

Section B: Questionnaire to assess knowledge on managing trauma victims in road traffic accidents. This was categorized under four headings: General information on trauma management, Assessment of trauma client, Actions in trauma management and transportation of injured person.

Tool 2: Development of video: Video has been developed on managing trauma victims in road traffic accidents which covers the information of each sub categorized knowledge domains of the structured questionnaire.

The video used for this particular study is developed by the researcher based on review of research articles, non-research literature, discussion with experts and guide and based on the community experiences.

Data collection procedure

The study was conducted from 07 January 2013 to 29 January 2013. Samples were selected after explaining the purpose of the study and obtaining written consent for participation (experimental group -30 and comparison group -30). They were selected by purposive sampling method and divided into both experimental and comparison group in to

six subgroups with 5 members in each group. Data were collected (pretest) from both experimental and comparison group samples by administering structured knowledge questionnaire. Video assisted teaching module regarding management of trauma victims in road traffic accidents were shown to the experimental group on the next day of pre test data collection. Post test was conducted 7 days after the intervention to the experimental group. Post test was conducted for both experimental and comparison group using the same questionnaire. Video has been shown to the comparison group after the post test data collection. Data were tabulated, analyzed and interpreted using descriptive and inferential statistics.

Results and Discussion

- The results show that 80 percent of the auto rickshaw drivers participated in the study had poor level of knowledge.
- Video assisted teaching module was found to be effective in increasing the knowledge level on managing trauma victims among the auto drivers in road traffic accidents ($p=0.001 < 0.05$) in all knowledge categories.
- The post test knowledge scores of experimental group (23.76 ± 2.52) and comparison group (13.2 ± 2.4); ($p < 0.001$) showed a difference of 10.56 ± 2.52 .

Table: 1

Mean, standard deviation, mean difference, paired standard deviation, 't' value and p value of the pre test score and post test score of knowledge on managing trauma victims in road traffic accidents among auto drivers in the experimental group. (N = 30)

	Mean	SD	Mean difference	Paired Standard deviation	't' value	P value
Pre test score	14.13	3.24	9.63	2.68	19.65*	0.001
Post test score	23.76	2.52				

Note. $t_{29} = 2.04$; $0.001 < 0.05$

*significant at 0.05 level

As the 'p' values are greater than 0.05 level of significance, there is no significant association between knowledge of auto drivers regarding managing trauma victims in road traffic accidents and selected demographic variables other than place of residence ($p=0.007 < 0.05$). Hence, it can be concluded that video assisted teaching module has significant effectiveness regarding knowledge on managing trauma victims in road traffic accidents.

Table: 2

Association between knowledge of auto drivers regarding managing trauma victims in road traffic accidents and selected demographic variables. (N = 60)

Variables	Poor Knowledge	Average Knowledge	Df	χ^2
Age in years				
21-30	12	2	2	0.904
31-40	14	4		
41-50	22	6		
Education				
Up to high school	42	8	1	1.689
Above high school	6	4		

Place of residence				
Rural	39	9	1	0.007*
Urban	9	3		
Ownership of auto				
Own	26	9	1	1.714*
Hired	22	3		
Monthly income				
<4000	24	5	1	1.267*
>4000	24	7		

*Significant at p <0.05

This study result shows that due to the difference in the means of the two knowledge scores and the direction of t values, it was concluded that there was a statistically significant improvement in the knowledge on managing trauma victims in road traffic accidents of auto drivers, 14.13 ± 3.24 to 23.76 ± 2.52 ($p < 0.001$) with an improvement of 9.63 ± 2.68 after video assisted teaching module and hence it was inferred that there was a significant improvement in knowledge on managing trauma victims in road traffic accidents of auto drivers in experimental group after the video assisted teaching module.

Conclusion

The following conclusions are drawn from the finding of the study.

- Auto drivers have a poor level of knowledge on managing trauma victims in road traffic accidents as 80 percent of the auto rickshaw drivers participated in the study had poor level of knowledge and 20 percent of them had average level of knowledge on managing trauma victims in road traffic accidents.
- Video assisted teaching module was found to be effective in increasing the knowledge level on managing trauma victims among the auto drivers in road traffic accidents.
- The knowledge level on managing trauma victims in road traffic accidents doesn't show a consistent pattern of significance in terms with selected demographic variables of among auto drivers.

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