

A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVALENCE AND RISK FACTORS OF ROAD TRAFFIC ACCIDENT AMONG THE COLLEGE STUDENTS IN VILLUPURAM.

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ABSTRACT:

"A descriptive study was conducted to assess knowledge regarding the prevalence and risk factors of Road traffic accident among the engineering students at V.R.S. Engineering College, Arasur, Tamilnadu. Data was collected by Self Structured questionnaire and convenient sampling. The result revealed that the majority of engineering students have moderate knowledge regarding prevalence and risk factors of Road traffic accident.

Objectives

- To assess the knowledge of prevalence and risk factors of RTA among the engineering students.
- To determine the association of knowledge level of engineering students regarding the RTA to selected demographic variables.

Research Methodology: Research design- Descriptive research design

Research setting- V.R.S. Engineering College

Target population- Engineering students

Sample size- 54 Engineering Students

Sampling Technique- Convenient sampling technique

Result and conclusion- The result of the study revealed that the majority of engineering students that is 83.3% have moderate knowledge, 9.3% of students have inadequate knowledge and 7.7% of students have adequate knowledge. The association of level of knowledge score with all variables is non-significant at $p > 0.05$ except source of information at $p < 0.05$ level.

KEYWORDS: Knowledge, prevalence, risk factors, road traffic accident, engineering students.

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INTRODUCTION:

The Road traffic accidents (RTA) have become a major public health issue of the world particularly in the developing nations. It is the price we pay for the rapid urbanization, modernization and economic development. RTA has become a leading cause of deaths, disabilities and hospitalizations which causes major socio-economic burden to the society across the world.

As per WHO data, deaths from road traffic accidents accounts for 25% of all casualties due to injury. Globally, in one year there are around 1.2 million people had been killed in vehicular accidents. 80% of these deaths happened in developed and underdeveloped countries. Road Traffic Accidents accounts for 2.1% of total mortality and 21% of the total injury.

In India every year RTA accounts for over 1,00,000 deaths, 2 million hospitalizations, 7.8 million minor injuries and an estimated loss of 55,000 crores rupees or nearly 3% of the GDP lost every year. If the current rate is continued unchecked, it is projected that deaths due to RTAs will be 1, 50,000 and 2.8 million victims will be hospitalized by 2020. Around 1, 85,000 deaths and 3.6million victims will be hospitalized by 2020. The social and psychological suffering of the injured persons is enormous. It is sad to note that lives saved as a result of advancements in communicable and non-communicable diseases is now being wasted on the roads.

Road traffic accidents in Tamil Nadu are one of the highest when compared to rest of India. In the year 2013, the state had recorded 15,564 deaths of the 14,503 total accidents, the highest when compared to for any other states in India. The state had also notoriously topped the list of highest accidents in a state for the previous ten years from the year 2002 to the year 2012. It was estimated that around 8 accidents occur every hour, and a total of 15 % of all vehicular accidents in the country have occurred in Tamil Nadu. Such is the magnitude of the problem of road traffic accidents in Tamil Nadu.

As per the State transport authority report published in 2013 two wheelers were the most commonly involved vehicle accounting for 22,496 accidents. They also have accounted for 60–72% of casualty admission to major tertiary care hospitals. Road Traffic Accident (RTA) is the number one cause (80 to 90%) for all injuries. India with the burden of both communicable and non-communicable diseases, and RTA a form of non- communicable disease has all set to take the third place in terms of death by the year 2020 as per WHO.

The educational interventions done through students were successful in reducing the risk factors. The researcher concludes that college students had less knowledge regarding prevention of RTA and by providing teaching interventions the occurrence of accidents can be prevented.

MATERIAL AND METHODS:

Research approach and research design:

Quantitative descriptive research design was used to collect data required for the study

Setting of study:

Present study was conducted in the V.R.S Engineering College Arasur.

Population: The populations of this study were Engineering Students

Sample: Engineering students were sample for this study.

Sampling Technique: Convenient Sampling was used to collect the samples

Sample size: 54 Engineering Students.

Development & description of Tool:

The tool used for this study was structured Questionnaire schedule was selected. The tool consist of two sections-

Section A - Questionnaire to collect demographic data of Engineering Students

Section B- Structured Questionnaire schedule to assess the knowledge regarding prevalence and risk factors of road traffic accident It consists of 30 questions related to RTA.

Ethical consideration:

Formal permission was obtained from Principal; V.R.S College of Engineering and informed consent was taken from research sample.

Data Collection Procedure:

Before commencing the task of data collection, formal permission was obtained from Principal, V.R.S College of Engineering, Arasur. Data was collected on the 54 engineering students which are studying in V.R.S College of Engineering, Arasur.

RESULT:**Frequency and percentage of the sample characteristics:**

Highest percentages (46.3%) of engineering students were within the age group of 21-23 years and lowest percentages were belongs to the age of more than 24 years. Most (87%) of the students belongs to hindus and (3.7%) belongs to Christianity. Majority (70.4%) of the subjects were belonged to nuclear family. Majorities (74.1%) of the students were vegetarian and Majority of students (75.9%) were using two wheelers and least (1.9%) were using car. (68%) of engineering students were previously exposed to knowledge regarding RTA. Highest percentage (83.3%) of engineering students had information from books, newspaper, magazines.

Table 1: The knowledge of engineering students regarding prevalence and risk factors of RTA was assessed by structured questionnaire.

Level of knowledge	Frequency	Percentage
Inadequate knowledge	5	9.3%
Moderately adequate knowledge	45	83.3%
Adequate knowledge	4	7.4%

Table 2 depicts, the frequency and percentage distribution of level of engineering students knowledge score on prevalence and risk factors of road traffic accidents reveals that 5(9.3%) of the subjects had inadequate knowledge followed by 45 (83.3%) of the subjects had moderately adequate knowledge and 4(7.4%) had adequate knowledge.

In context of association between levels of knowledge with demographic variables of engineering students: There was significant association between sources of information. The other demographic variables were not having significant association with level of Knowledge.

DISCUSSION:

The results showed that the frequency and percentage distribution of level of engineering students knowledge score on prevalence and risk factors of road traffic accidents reveals that 5(9.3%) of the subjects had inadequate knowledge followed by 45(83.3%) of the subjects had moderately adequate knowledge and 4(7.4%) had adequate knowledge.

The present study depicts the association of knowledge score with all demographic variables. It was found that the level of knowledge of students is significant with previous source of information regarding RTA.

CONCLUSION:

A descriptive study has been done to assess the knowledge regarding prevalence and risk factors of Road traffic accidents among the engineering students at V.R.S. engineering college, Tamilnadu. A structured questionnaire schedule was prepared to collect the data which consist of 30 questions. Data is planned, collected, organized and analyzed, orderly in descriptive and inferential statistics.

The result drawn that the majority of engineering students that is 83.3% have moderate knowledge, 9.3% of students have inadequate knowledge and 7.7% of students have adequate knowledge regarding prevalence and risk factors of RTA. The association of level of knowledge with the age, education, religion, type of family, dietary

pattern, types of road, traffic rules regarding RTA is Non- Significant and association of level of knowledge with previous source of information regarding RTA is significant.

Adolescents live in a world of fantasy and they are not aware of their health needs. So researcher being in nursing profession felt the need to educate college students to impart appropriate knowledge regarding the prevention of road traffic accident.

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