



“A study to assess the knowledge and attitude regarding road traffic accidents among undergraduate students of selected colleges of anand District.”

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ABSTRACT:

BACKGROUND: First aid is a primary care given to the ill or injured person before medical care is not arrived to prevent the condition from worsening, preserve life and promote recovery. The first aider should update his knowledge and skill since it plays an important role in preventing a person's life. The main objective of study is to assess knowledge and attitude of road traffic accident among the undergraduate students of selected colleges of Vallabh Vidyanagar.

METHOD: Quantitative descriptive research study conducted in selected colleges of Anand District. The non-probability convenient sampling technique was used for the study. The multiple choice questionnaire and 5 point Likert scale were distributed among 320 undergraduate students. The data were analysed by using a descriptive , inferential statistical method.

RESULTS: Demographic description of sample by frequency and percentage shows that out of 320 samples , 132 (41.3%) sample had poor knowledge scores , 164(51.3%) had average knowledge scores and 24(7.5%) had good knowledge scores regarding first aid management of road traffic accidents. In assessing the attitude of undergraduate students regarding first aid management of road traffic accidents ,98.4% students had positive attitudes and 1.6% had negative attitudes.

CONCLUSION: The finding of study indicated that more than 2 year have significantly higher average case record scores , than those with lower driving experience. Males have a higher affinity of having a positive attitude than females as per the sample observation.

KEYWORDS: Assess, knowledge, attitude, first aid management, road traffic accidents, under graduates students, Anand district

INTRODUCTION: Traffic accidents have now earned India a dubious distinction; with nearly 140,000 deaths annually, the country has overtaken China to top the world in road fatalities.[1] India is the only country in the world which faces more than 15 fatalities and 53 injuries every hour as a consequence of road crashes. It is projected that road traffic injuries will move up to the third position by the year 2020 among leading causes of the global disease burden. They are considerable economic losses to victims, their families, and to countries as a whole.[2] Every year the lives of approximately 1.35 million people are cut short as a result of a road traffic crash. Between 20 and 50 million, more people suffer non-fatal injuries, with many incurring a disability as a result of their injury. [3] More than 90% of road traffic deaths occur in low- and middle-income countries. Road traffic injury death rates are highest in the African region. Even within high-income countries, people from lower socioeconomic backgrounds are more likely to be involved in road traffic crashes. The Golden Hour is a general concept aimed at optimizing the chances of a seriously injured person surviving the trauma or avoiding a severe disability. [4]Any tragedy can be taken to either success or failure within the first 10 minutes of medical attention. This crucial period is also referred to as THE GOLDEN HOUR. Quick and the timely help rendered in this period would ensure that the victim is nearly saved so that appropriate treatment can be made available from the nearby hospital.[5]

Need of the study

The “**GlobStatus Report on Road Safety**” published by the WHO identified the major causes of traffic collisions as driving over the speed limit, driving under the influence and not using helmets and seat belts. [10] More than 70% of fatal road crashes in 2017 involved adults in the 18- 45 years age group, according to a report. As many as 1.47 lakh people died on roads in 4.64 lakh accidents reported during 2017, the reports by the **Ministry of Road Transport and highway** said. Fatal road accident victims largely constitute young people in the productive age groups. Young adults in the age group of 19-45 years accounted for 72% of victims during 2017. People in working age group of 18-60 years accounted to share of 87.2% in the total road accident fatalities as per the report form. [6]

According to Department of port and transport, government of Gujarat in 2017 number of accidents 19081, number of deaths due to accidents 7289 and number of person injured is 16802 and number of vehicle registered a soon in 2016 is 22036539. [7]

In 2017 one person dies every 3 minutes in road accidents in India according to official report by Ministry of Road Transport and Highways. [8]

Utkarsh Chandra, Urvi Patel, Vidhi Gadoya, Vincy Gandhi, Vidhi Modh, Vaidehee Chaudhary conducted cross sectional study in March 2018, to assess Knowledge and Attitude towards First Aid in Road Traffic Accidents among College Students of Ahmedabad city, India.. Data was collected from 150 students of medical and non-medical college by using questionnaire. The major finding of this study was that among 150 students, 70(46.6%) students had good knowledge of first aid, out of which 45 were medical and 25 were non-medical. 80 students (53.3%) had average knowledge of first aid of which 30 were and 50 were non medical[9]

REVIEW OF LITERATURE:

Amal Salem Alhejaili and Shorooq Abdulrazzaq Alsubhi (2016) conducted a study to assess Knowledge and Attitude of First Aid Skills among Health Science Students at Taibah University. The participants in this study were approximately 110 randomly chosen with ages ranging between 19 and 26 years. A questionnaire was distributed to 110 female students through collective data collection. A total of 110 female students participated in this study and out of this 43 (39.1%) were medical, 37 (33.6%) were dentist and 30 (27.3%) were nurses. Only 58 students completed the answers of the questionnaire to compare between pre- and post- awareness with the response rate of 52.7%. This study concluded that the inadequate knowledge about first aid and lacked the main concept and technique of first aid among the female medical students.[10]

Bhatia V, Puri S M, Kaur(2010) conducted A cross sectional interventional study in India to develop first aid health kits, having appropriate drugs and equipment in the schools and to strengthen the school health services by involving teachers and training them to take appropriate action in the school hours. 100 Government schools in Chandigarh and Union Territory of India were selected for the study. 90,839 children were included. The result of the study revealed that only 6 % of schools had health care/first aid kits in the pre-intervention phase, which increased to 87% in the post intervention phase. Availability of common drugs like paracetamol increased from 16% in pre-intervention to 71.7% later on. The study concluded that sensitization of school administrators, educators and explaining the relevance of school health resulted in significant improvement and preparation of health kits and strengthening of school health services.[11]

Chaitali A. Gore, Sruthi Sankar, Shabnam Sheriff, Swetha Anand, Smrithika L., Swathi Maiya (2017) conducted a cross- sectional research study to assess knowledge regarding first aid among undergraduate medical students. 150 undergraduate medical students of Vydehi Medical College, Bangalore are selected given A questionnaire and filled by them. Data was analysed using percentages and Chi-square tests. The overall scores were, 43 out of 150 students had excellent knowledge, 71 out of 150 needed improvement, 35 out of 150 had adequate knowledge and only 1 out of 150 had poor knowledge about First-Aid. The association between terms and level of knowledge was found to be statistically significant. It was concluded that First Aid knowledge among medical students needs improvement.[12]

Statement of the study

A study to assess the knowledge and attitude regarding first aid management of road traffic accidents among undergraduate students in selected colleges of Anand District.

Objectives

1. To assess the knowledge regarding first aid management of Road Traffic Accidents among the undergraduate students.
2. To assess the attitude regarding first aid management of Road Traffic Accidents among the undergraduate students.
3. To find association between level of knowledge and the selected sociodemographic variables.
4. To find association between Attitude and selected socio demographic variables.

MATERIALS AND METHODS:

A quantitative research approach was used for this study. Descriptive cross sectional research design was used for this study. Non probability convenient sampling technique was used for this study. After pilot study Cronbach's alpha was computed for finding out the reliability. The obtained value of 'r' was 0.787, indicating that the tool was reliable for the final study. Research study was conducted from 26th January to 1st February in selected colleges of Anand District. An administrative approval was obtained from the principal of selected colleges of Anand District. A sample of 320 students was selected using a non-probability convenient sampling technique. The investigator introduced the questionnaire and 5 point likert scale data sheet to the selected undergraduate students to assess the knowledge and attitude of undergraduate students. Before collecting data the investigator has informed about the importance of this study and ascertained the willingness of the participants. All the data was collected on the day of final data collection. The researcher thanked and appreciated all the participants for their cooperation.

Inclusive criteria :

Undergraduate students who are willing to participate in the study.

Exclusive criteria :

Undergraduate students who will be absent on the time of data collection.

RESULT AND DISCUSSION:

A master data sheet was prepared to complete the data by the investigator.

Baseline Performa containing demographic variable was analyzed using frequency and percentage distribution. Assessment of knowledge was analyzed using frequency and percentage distribution and divided into poor, average , and good categories.

Assessment of attitude scale was analyzed using frequency and percentage distribution and divided in positive and negative category. Association between knowledge and socio demographic was analyzed using frequency distribution and finding total mean score. Association between attitude category and socio demographic was analyzed using frequency distribution.

Findings related to description of demographic data of samples

NO.	DEMOGRAPHIC DATA	FREQUENCY	PERCENTAGE
1.	Gender		
	Male	225	70.3
	Female	95	29.7
2.	Age of the respondent		
	Below 18 years	79	24.7
	18-20 years	187	58.4
	20-22 years	48	15.0
	Above 22 years	6	1.9
3.	Locality of the respondent		
	Urban	186	58.1
	Rural	134	41.9
4.	Driving experience		
	Below 3 months	33	10.3
	3 to 6 months	18	5.6
	6 months to 1 year	59	18.4
	1 year to 2 years	185	57.8
	More than 2 years	25	7.8
5.	First aid training programme attended		
	Yes	25	7.8
	No	295	92.2

Out of 320 respondents under study 225(70.3%) male and 95(29.7%) female participated in this study. In regards to age 79(24.7%) belonging below 18 years, 187(58.4%) belonging 18-20 years of age group, 48(6%) belonging 20-22 years of age group, 6(1.9%) belonging to above 22 years of age group. In regards to locality of respondents 186(58.1%) belonging to urban locality, 134(41.9%) belonging to rural locality. In regards of driving experience 33(10.3%) having below 3 months experience, 18(5.6%) having 3 to 6 months experience, 59(18.4%) having 6 months to 1 year experience, 185(57.8%) having 1 to 2 year experience, 25(7.8) having more than 2 years' experience of driving. In regards to the first aid training programme, 25(7.8%) were positive and 295(92.2%) were negative about it.

Findings related to knowledge of sample regarding first aid management of road traffic accidents among the undergraduate students.

Result	Frequency	Percent	Valid Percent	Cumulative Percent
Poor	132	41.3	41.3	41.3
Average	164	51.3	51.3	92.5
Good	24	7.5	7.5	100.0
Total	320	100.0	100.0	

Among 320 samples 132(41.3%) undergraduate students having poor knowledge regarding first aid management of road traffic accidents. Among 320 samples 164(51.3%) undergraduate students having average knowledge regarding first aid management of road traffic accidents. Among 320 samples 24(7.5%) undergraduate students have good knowledge regarding first aid management of road traffic accidents.

Findings related to attitude regarding first aid management of road traffic accidents among the undergraduate students.

Result	Frequency	Percent	Valid Percent	Cumulative Percent
Negative	5	1.6	1.6	1.6
Positive	315	98.4	98.4	100.0
Total	320	100.0	100.0	

Among 320 samples 5(1.6%) undergraduate students had a negative attitude towards first aid management of road traffic accidents. Among 320 samples 315(98.4%) undergraduate students had positive attitudes towards first aid management of road traffic accidents.

CONCLUSION AND ACKNOWLEDGEMENT: CONCLUSION: In assessing the knowledge, out of 320 samples, 132(41.3%) samples had poor knowledge scores, 164(51.3%) had average knowledge scores and 24(7.5%) had good knowledge scores regarding First aid management of Road Traffic Accident. Hence, the majority of samples had average knowledge regarding First aid management of Road Traffic Accidents. In assessing the attitude of undergraduate students regarding first aid management of road traffic accidents, 98.4% students had positive attitudes and 1.6% had negative attitudes. Here, it can be seen that there exists an underlying association between driving experience of an individual and their gender. There exists a significant difference between Case Record Scores among respondents of different driving experiences. It can be said that respondents having driving experience of more than 2 years have significantly higher average case record scores, than those with lower driving experience. A significantly high level of linear association has been found between Case Record Scores and Attitude Scores. It is safe to say that a higher Case Record Score induces a higher score in the Attitude Scale. Significant association has been detected between the gender and the Attitude level of the respondents. Males have a higher affinity of having a positive attitude than females as per the sample observations.

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RECOMMENDATIONS FOR FURTHER STUDY

- 1.) A similar study can be replicated in large samples and in all cities of Gujarat State or other states so that findings can be generalized for a large population.
- 2.) A study can be conducted to determine the existing role of nursing personnel regarding education of the community regarding First Aid Management of Road Traffic Accidents.
- 3.) A comparative study can be carried out between medical and non-medical students to identify the difference in terms of knowledge regarding First Aid Management of Road Traffic Accidents.

CONFLICT OF INTEREST: None

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ETHICAL CLEARANCE: Before initiating research study formal permission obtained from the institutional committee of Charutar Arogya Mandal, Karamsad.

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