



KNOWLEDGE AND ATTITUDE REGARDING FIRST AID IN DRIVERS

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ABSTRACT

Introduction: First Aid can be defined as the emergency and short-term treatment provided to an ill or injured individual while waiting for the assistance of a certified medical professional. The First Aid is not a goal in and of itself; rather, it is a sign that a "Secondary Aid" is required. Many lives would be saved if proper First Aid was provided early. **Aim:** The main aim of this study is to assess the Knowledge and Attitude of First Aid among drivers in Mangalore. **Methodology:** A Descriptive research design was adapted for the study. The sample comprised of 240 drivers both Auto rickshaw and bus drivers and were selected using convenient sampling technique. Self-structured questionnaire and Likert Scale were used to collect the data. **Results:** Data was analyzed using SPSS. The analysis revealed that majority 61.7% of the participants had Moderate Knowledge and majority of participants 95.4% had Positive Attitude. It is evident that there is Mild Positive Correlation between Knowledge and Attitude. There is no association between knowledge and attitude on First Aid among drivers and selected baseline variables. **Conclusion:** The findings revealed that most participants are aware of the basic term 'First Aid', however they are hesitant to provide First Aid in cases of Road traffic accident due to fear of legal consequences and poor self-esteem.

KEYWORDS: Attitude, Drivers, First Aid, Knowledge, Mangalore, Road traffic accident.

INTRODUCTION

First Aid can be defined as the emergency and short-term treatment provided to an ill or injured individual while waiting for the assistance of a certified medical professional Care. The concept of "First Aid was first proposed by the renowned German surgeon General Esmarch (1823-1908) and St. John Ambulance Association of England was established in 1877. In India, Red Cross Society was founded in 1920, with more than 400 branches across India and significant progress has been made in illness prevention and health enhancement.^[1]

Road safety is a public health issue and a major cause of death and injury worldwide. First Aid, on the other hand, is the assistance that can be offered by individuals who are close to him before transporting him to a doctor. A new campaign to encourage more people to learn First Aid skills is being launched by St. John Ambulance.^[2]

In a poll of over 2,000 people, it discovered that, 59% of respondents lacked confidence in their ability to try to save a life. Principal Superintendent of St. John Ambulance Sue Killen stated that "Our most recent investigation shows that, is just not passing. Everyone should take the obligation to study First Aid on their own because we cannot rely on others to have the skills. With this information, every one of us has the power to make the distinction between a life lost and a life saved". Every time an airway is obstructed, almost 2,500 people die, but if someone had known the recovery posture, lives would have been saved.^[3]

NEED FOR THE STUDY

Every year, around the world, 13 million individuals die in traffic-related incidents. Twenty to fifty million people worldwide experience non-fatal injuries that leave them temporarily or permanently disabled. In India, there are

over 1.5 lakh road fatalities annually, 1,130 accidents, and 420 fatalities every day, 47 accidents and 18 fatalities per hour². A total of 4,12,400 road accidents that claimed 1,53,900 deaths and injured 3,84,400 people were recorded across the nation in 2001. Road accidents disproportionately impact people between the ages of 18-45, who make up about 67 percent of all unintentional fatalities. It is thought that having a basic understanding of First Aid can save thousands of lives during emergencies, and First Aid training for drivers is essential because drivers are frequently present when these terrible fatalities occur.^[4]

OBJECTIVES

- To assess the knowledge regarding First Aid among drivers.
- To assess the attitude regarding First Aid among drivers.
- To find out relationship between knowledge and attitude of First Aid among drivers.
- To find association between knowledge and selected baseline variables.
- To find association between attitude and selected baseline variables.

HYPOTHESIS

- H1: There will be a significant difference between knowledge and attitude regarding First Aid among drivers.
- H2: There will be a significant association between knowledge and selected baseline variables.
- H3: There will be a significant association between attitude and selected baseline variables.

MATERIALS AND METHODS

A Descriptive research design was adapted and Convenient Sampling technique was used to collect data through a Self-structured questionnaire and Likert Scale.

RESULT

SECTION 1: DESCRIPTION OF BASELINE VARIABLES

Table 1: Frequency and Percentage Distribution of Subjects According to Demographic Characteristics.

N=240

SL NO	VARIABLES	CATEGORY	FREQUENCY (f)	PERCENTAGE (%)
1.	Age in years	24-30	74	30.83%
		30-40	71	29.58%
		40-50	54	22.5%
		Above 50	41	17.08%
2.	Education	Primary Secondary	73	30.14%
		Higher secondary	81	33.75%
		Graduate.	32	13.33%
			54	22.5%
3.	Experience in driving	0-5 years	35	14.58%
		6-10 years	69	28.75%
		11-15years	46	19.16%
		Above 15 years	90	37.5%
4.	Do you have any Previous exposure	Yes No	120	50%

Drivers included in the study were all those who are holding driving License and above 24 years of age. Ambulance drivers were excluded from the study. A total of 240 drivers selected for the study. Informed consent was taken from the participants and confidentiality was assured. Data was entered and analysed using SPSS.

DESCRIPTION OF FINAL TOOL

Part I: Baseline Proforma

This tool consists of 7 items which are age, education, years of experience in driving, previous exposure to First Aid information / training, the source of information, previous experience about performing First Aid, availability of First Aid box in vehicle, seating capacity of vehicle.

Part II: Structured Knowledge questionnaire

The structured knowledge questionnaire consists of 20 questions, 8 knowledge, 7 comprehension, and 5 application questions. Each correct answer was given a score of '1', and the wrong answer was scored '0'. Three different scoring levels were used, a score of 71% and above (>14) indicated good knowledge, and 41–70% (8–14) indicated moderate knowledge, whereas less than 40% (<8) indicated poor knowledge. The maximum total score is 20. The reliability of the tool was found to be 0.81.

Part III: Attitude of drivers on First Aid.

This self-structure scale consists of 15 items, 9 positively and 6 negatively stated items. The participants responses are categorized into Strongly agree, Agree, Neutral, Disagree, and Strongly disagree. The maximum total score 75. The negatively stated items were scored reversely. Two different scoring levels were used, a score of below 40% (15-45) indicated poor attitude and a score above 71% (46-75) indicated good attitude. The reliability of the tool was found to be 0.95.

	to First Aid information/training		120	50%
5.	Previous experience about performing First Aid	Yes	117	48.75%
		No	123	51.25%
6.	Availability of First Aid box in vehicle	Yes	180	75%
		No	60	25%
7.	Seating capacity of vehicle	>5	119	49.58%
		<5	121	50.41%

The data in Table 1 reveals that majority of the drivers (74) belong to the age group of 24-30. Their educational status includes 81 drivers have completed secondary education. Experience in driving includes 90 drivers have experience in driving for more than 15 years. Half of the population was previously exposed to First Aid training (120 participants) through internet, family, friends and other half i.e., 120 participants were never exposed to the same. According to previous experience

about performing First Aid, 121 participants do not have any previous experience. Availability of First Aid box in vehicle includes 180 participants do have a first box in their vehicle and 60 participants do not have a First Aid box in vehicle. According to seating capacity of vehicle, 121 participants are either autorickshaw drivers, taxi drivers with <5 seating capacity and 119 participants are bus drivers with >5 seating capacity.

SECTION 2: KNOWLEDGE OF DRIVERS ON FIRST AID

N=240

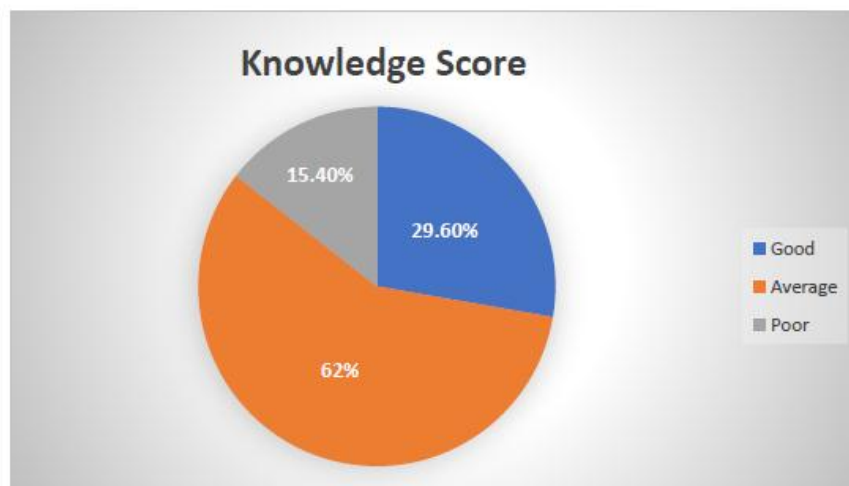


Figure 1: Pie diagram showing the percentage distribution of participants according to their level of Knowledge.

The data presented in Figure 1 reveals that Majority (61.7%) of the participants had Moderate Knowledge,

(15.4%) samples had Good Knowledge, (22.9%) is having Poor Knowledge on First Aid.

SECTION 3: ATTITUDE OF DRIVERS TOWARDS FIRST AID

N=240

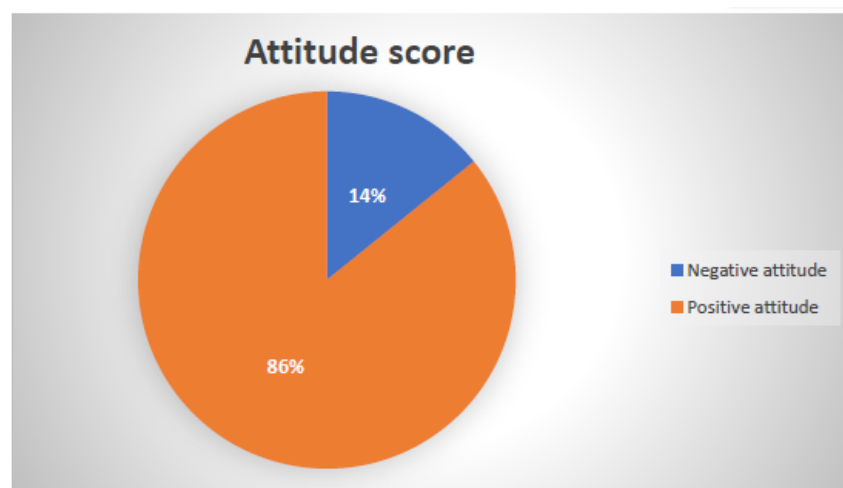


Figure 2: Pie diagram showing the attitude towards First Aid.

The data presented in Figure 2 reveals that majority of participants 95.4% had Positive Attitude and 4.6% of participants revealed Negative Attitude.

SECTION 4: ASSESS THE CORRELATION BETWEEN KNOWLEDGE SCORE AND ATTITUDE SCORE TOWARDS FIRST AID AMONG DRIVERS

H1: There will be a significant relationship between knowledge and attitude regarding First Aid among drivers.

The hypothesis was tested using Karl Pearson's correlation coefficient.

The data from table 2 reveals that there is a Mild Positive correlation between knowledge and attitude score.

SECTION 5: ASSOCIATION BETWEEN KNOWLEDGE ON FIRST AID AND BASELINE VARIABLES

To find out the association Chi square test was done. To test the statistical significance the following null hypothesis was formulated.

H02: There is no significant association between the level of knowledge and the selected baseline variables.

Table 2: Correlation between knowledge level and attitude towards First Aid among Drivers

Variables	r value
Knowledge Attitude	0.275

Table 3: Association between knowledge level and selected baseline variables.

N= 240

Sl. No.	Variables	<Median	>Median	X ²	P value
1.	Age 24-30 30-40 40-50 Above 50	39 39 24 19	35 32 30 22	1.77	0.620
2.	Education Primary Secondary Higher secondary Graduate	39 38 21 23	34 43 11 31	4.94	0.176
3.	Experience in driving 0-5 years 6-10 years 11-15years Above 15 years	21 29 26 45	14 39 21 45	3.38	0.336
4.	Previous exposure to First Aid training/ information Yes No	60 61	60 59	0.017	0.897
5.	Previous experience about performing First Aid Yes No	66 55	53 66	2.404	0.121
6.	Availability of First Aid box in vehicle Yes No	93 28	87 32	0.450	0.502
7.	Seating capacity of vehicle >5 <5	59 62	60 59	0.066	0.797

p >0.05

The data from Table 3 indicates that the Chi-Square value computed between Knowledge level and age ($\chi^2=1.77$), education ($\chi^2= 4.94$), experience in driving ($\chi^2=3.38$), do you have any Previous exposure to First Aid information/training ($\chi^2=0.017$), previous experience about performing First Aid ($\chi^2=2.404$), availability of First Aid box in vehicle ($\chi^2= 0.450$), seating capacity of vehicle ($\chi^2=0.066$) is greater than 0.05 (>0.05) which indicates there is no association between knowledge towards First Aid and baseline variables. Hence null hypothesis is accepted and research hypothesis is

rejected.

SECTION 6: ASSOCIATION BETWEEN ATTITUDE ON FIRST AID AND BASELINE VARIABLES

To find out the association Chi square test was done. To test the statistical significance the following null hypothesis was formulated.

H03: There is no significant association between the level of attitude and the selected baseline variables

Table 4: Association between attitude level and selected baseline variables.**N=240**

Sl. No.	Variables	<Median	>Median	X2	P value
1.	Age				
	24-30	31	43		
	30-40	37	34		
	40-50	27	27	7.41	0.060
	Above 50	28	13		
2.	Education Primary Secondary	38	35		
	Higher secondary Graduate	39	42		
		17	15	0.506	0.918
		29	25		
3.	Experience in driving	18	17		
	0-5 years	29	39		
	6-10 years 11-15years	22	25	5.144	0.162
	Above 15 years	54	36		
4.	Previous exposure to First Aid training/ information	60	60		
	Yes No	63	57	0.150	0.698
5.	Previous experience about performing First Aid	58	61		
	Yes No	65	56	0.595	0.440
6.	Availability of First Aid box in vehicle				
	Yes	93	87		
	No	28	32	0.450	0.502
7.	Seating capacity of vehicle				
	>5	59	60		
	<5	62	59	0.066	0.797

p >0.05

The data from Table 4 indicates that the Chi-Square value computed between Attitude level and age ($\chi^2=7.41$), education ($\chi^2=0.506$), experience in driving ($\chi^2=5.144$), do you have any previous exposure to First Aid information/training ($\chi^2=0.150$), previous experience about performing First Aid ($\chi^2=0.595$), availability of First Aid box in vehicle ($\chi^2=0.502$), seating capacity of vehicle ($\chi^2=0.797$) is greater than 0.05 (>0.05) which indicates there is no association between Attitude towards First Aid and baseline variables. Hence null hypothesis is accepted and research hypothesis is rejected.

DISCUSSION

Description of Baseline variables

The baseline variable findings of the present study depict the majority of the drivers (30.83%) belong to the age group of 24-30. Whereas educational status includes, 33.75% drivers have completed secondary education. Experience in driving includes 90 drivers have experience in driving for more than 15 years while 68 drivers have 6-10 years' experience. Half of the population was previously exposed to First Aid training through internet, family, friends. According to previous experience about performing First Aid, only 119 participants have previous experience about performing First Aid, were 180 participants have a first box in their vehicle, and 119 participants are bus drivers with >5 seating capacity vehicle.

A similar study was conducted in Kumaon division of Uttarakhand state, India to assess the knowledge and attitude and practice of First Aid among 267 commercial drivers. The findings showed that majority of the drivers (94) belongs to the age group of 40-49 years and 69 drivers have completed secondary education. Over one-third of the study participants (38.5%) were taxi drivers and just under a sixth (15.1%) drove auto rickshaws. Majority of the drivers (58.7%) had over 10 years of experience in their present occupation. First aid kit was available in the vehicles of 84.9% participants and 69% used its contents at least once in the past.^[5]

Knowledge Score of Drivers on First Aid

The result of the present study shows that, majority of the drivers 29.6% have good knowledge, 61.7% drivers have average knowledge and 15.4% drivers have poor knowledge on First Aid.

In a similar study conducted in Addis Ababa, Ethiopia to assess the knowledge, attitude and practice of First Aid and factors associated with practice among 785 taxi drivers. The findings showed that 50.35% had adequate knowledge regarding First Aid.^[6]

Attitude Score of Drivers on First Aid

The result of the present study shows that, majority of the drivers 229 (95.4%) have Positive Attitude towards First Aid while 11(4.6%) drivers have Negative Attitude towards First Aid.

The current study findings are congruent with another study conducted by Sharjah Study group to evaluate Knowledge and Attitude of First Aid measures among drivers in Sharjah. The findings showed that the drivers had 'Positive Attitude' (65.14%) towards First Aid.^[7]

Correlation between Knowledge and Attitude of First Aid Among Drivers

The study reveals that there is a 'Mild Positive Relationship' between Knowledge and Attitude of First Aid Among Drivers (r value = 0.275).

The results of this study are in conflict with those of a quasi-experimental study conducted in Madurai to evaluate the effectiveness of planned teaching programme on knowledge and attitude regarding First Aid among 50 auto drivers this study shows that there will be a mild positive correlation ($r = 0.55$) between knowledge and attitude regarding First Aid Management among auto drivers.^[8]

Association Between Knowledge of Drivers on First Aid and Baseline Variables

The data analysed denotes that the obtained 'p' value is greater than 0.05 level of significance, which indicates there is no association between knowledge towards First Aid and baseline variables. Hence null hypothesis is accepted and research hypothesis is rejected.

These similar findings were found in a quasi-experimental study carried out in Madurai, to assess the efficacy of a planned instruction course on First Aid' knowledge, and attitude among 50 drivers. In relation to the relationship between the stated degree of Knowledge and Attitude and certain Demographic variables, the findings showed that, there was no relationship between knowledge and attitude and certain demographic variables. Based on the analysis of the data, it can be concluded that, the 'p-value' obtained is significant above the 0.05 level.^[8]

Association Between Level of Attitude and the Selected baseline Variables

Chi square test was used to identify the association between level attitude and baseline variables. The result shows that there is no association between Attitude towards First Aid and baseline variables. Hence null hypothesis is accepted and research hypothesis is rejected.

The results of this investigation are comparable to those of a quasi-experimental study carried out in Madurai, to assess the efficacy of a planned instruction programme on First Aid' knowledge and attitude among 50 drivers. There was no significant correlation found between Knowledge and Attitude' on the post-test' and the chosen demographic variables, according to the 'results' of the relationship between the Knowledge and Attitude. Hence, null hypothesis is accepted, and the research hypothesis is rejected.^[8]

LIMITATIONS

1. Study was confined to a Geographic area
2. Limited tool
3. The study sample were from different levels of education
4. Restricted open-ended questions

CONCLUSION

In our study, 49.58% were rickshaw drivers and 50.41% were bus drivers. The main study concludes that majority of drivers 61.7% had basic knowledge that First Aid can save lives. And only a few of them had previous exposure to knowledge and training on First Aid. However, Attitude of the drivers in assisting victims of Road traffic accident was positive (95.4%) and majority of them were willing to be trained in First Aid.

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