

A study to assess the knowledge and attitude regarding road safety measures among college going two wheeler rider students of Faridabad

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Abstract: Road traffic accident occurrence on road through out the world. Thousands of people lost their lives on the road every day most of the time road traffic death and injuries remain almost invisible to society at large. The two wheeler riding is significant cause of injuries to teenage group which is often associated with alcohol intoxication and drug abuse leads to risk taking behavior creating an awareness regarding the road safety and prevention of accident will reduce the morbidity and mortality related to accidents and save more lives. Descriptive survey approach was adopted to collect the data. The structured questionnaire and likert's five point attitude scale was administered to randomly selected sample of hundred students from selected college of Faridabad. The major findings of study revealed that the overall mean percentage of the knowledge (71.52%) is higher than the mean percentage of the attitude (70.79%) regarding road safety measure and prevention of accidents. The co-relation found between the knowledge and attitude is +0.314: it is a positive co-relation between the knowledge and attitude of the respondent on the road safety measure and prevention of accident.

Keywords: Knowledge, Attitude, Road safety measures, two wheeler rider, college students.

I. INTRODUCTION

India has the second largest road network in the world with over 3 million km of roads of which 60% are paved. Global incidence rate of the road accident is As per data registered by the World Health organization, nearly 12 lakhs people are known to die each year in road accidents globally out of which more than 83,000 people are killed in India while roughly 5 times of this number (about 4 lakhs) are seriously injured in India. It means, we kill about 230 people and injure about 1100 every day on Indian roads. These roads make a vital contribution to the India's economy. On the whole, the facilities for the road users are not up to the mark, leading to a high toll of the death victims. Recently, there is a growing concern over the road crash problem.

Every scooter or motorcycle rider would have had at least one small accident on our Indian roads. Road accidents involving two wheelers have increased by huge numbers in recent years. While the increasing traffic, speeding, not following traffic rules and even drunken driving can be attributed for the increase in road accidents, following just a few tips below will make a huge difference to our safety.

An accident has been defined as "An unexpected, unplanned occurrence which may involve injury" or "unpremeditated event resulting in recognizable damage" or "Occurrence in a sequence of events which usually produces unintended injury, deaths or property damage". Road traffic safety refers to methods and measures for reducing the risk of a person using the road network being killed or seriously injured. The users of a road include pedestrians, cyclists, motorists, their passengers, and passengers of on-road public transport, mainly buses. Best-practice road safety strategies focus upon the prevention of serious injury and death crashes in spite of human fallibility.

Road safety is a collective effort of the government and people. While the government administration must leave no stone unturned in ensuring proper condition of the roads and enforcing strict adherence to traffic rules, responsible driving and the right attitude of people with respect to traffic rules is perhaps the first step on the long road to 100% safety on the roads. The two wheeler riding is significant cause of injuries to teenage group which is often associated with alcohol, intoxication and drug abuse and feeling of being indestructible leads to risk taking behaviour. This means that everyday another one thousand families have to cope with unexpected loss of a loved one. Losing of child is never easy. The future of the country is its young people. They cannot afford to lose their children to road traffic accidents.

II. RESEARCH METHODOLOGY

2.1 Research design:

A non experimental descriptive research design was adopted.

2.2 Subjects and setting:

The sample comprised of total 100 college going two-wheeler rider student' at selected colleges of Faridabad.

2.3 Sampling technique:

Convenient sampling technique has been used in selecting college of Faridabad.

Purposive sampling technique has been used in selecting 100 college going two-wheeler rider students.

2.4 Variables under study:

Research variables under study include Road safety measures, two wheeler rider and college students. Inclusive criteria were College going two wheeler rider students who are willing to participate in study and are available during the period of data collection.

2.5 Description of Tool:

The tools used in the study are divided into three sections.

Section A: Socio demographic characteristics of the participants in relation to their age, sex, education, previous exposure to accident, exposure to mass media and experience of accidents by self or family member or friends and witness of any accident

Section B: It consists of items related to the structured knowledge questionnaire regarding road safety measures and prevention of accidents.

The tool consists of 46 items in multiple choice question formats under seven aspects which are General aspect of road traffic accidents, Causes and factor related to the road accidents, Effects of road traffic accidents, Rules and regulation for road safety, Traffic signs and signals, Preventive aspects of road traffic accidents and safety measures, First aid measure for victim of accidents.

Section C: Likert's five point attitude scale consists of 16 items related to the attitude of college going Two wheeler rider student regarding road safety measures and prevention of accident. The scale includes 8 positive and 8 negative items equally.

2.6 Validity and reliability:

The tool has been validated by 8 experts; they include Community Health Nursing and community medicine. On the basis of expert's suggestions, broad reviews of literature, following modifications were made in the final tool.

The stability of the tool was done by test retest method. By applying Spearman Brown prophecy formula, the value obtained was found for knowledge $r'=0.74$ and for the attitude $r'=0.77$, so the tool was found to be stable.

The reliability coefficient of internal consistency was computed by Karl Pearson coefficient correlation method. The reliability coefficient obtained for tool for knowledge was = 0.83 and for attitude = 0.87, found to be internally consistent and reliable for the study.

2.7 Data Analysis:

Data was analyzed by applying descriptive and inferential statistics i.e. Mean Standard Deviation and mean percentage was used to describe the variables.

III. RESULT AND ANALYSIS

3.1 Sample characteristics:

Majority of respondents belonged to the age group of 20-21 years (41.0 percent), majority of respondents were males (57.0 percent) and with regards to educational status both B.sc nursing 2nd year and B.sc nursing 3rd year college group equally (50.0 percent) participated. Majority (71.0 percent) of respondents had television as the source of information regarding road traffic accidents, road safety measures and prevention of accidents. Regarding the experience of road traffic accidents 42.0 percent had answered ‘yes’, among them majority (22.0 percent) were had self experience of road traffic accidents. With regard to response on witnessing of road traffic accidents out of 25 percent, those who witnessed majorities (14.0 percent) informed the police and helped to get medical aid.

3.2 Assessment of level of knowledge regarding road safety measures:

The overall mean knowledge score was found to be 71.52 percent with that majority (59.0 percent) of the respondents had moderate knowledge and only 41 percent of the respondents had adequate knowledge on Road safety measures. Regarding the aspect wise mean knowledge score of respondents the result showed that mean percentage of the respondent’s knowledge is higher (81.5 percent) on the aspect of Effects of road traffic accidents compare to 74.2 percent on General aspect of road traffic accidents, 54.2 percent on Causes and factors related to the road accidents, 80.5 percent on Rules and regulation for road safety, 65.4 percent on Traffic signs and signals, 78.0 percent on Preventive aspects of road traffic accidents and safety measures, 62.3 First aid measure for victim of accidents.

3.3 Assessment of attitude regarding road safety measures:

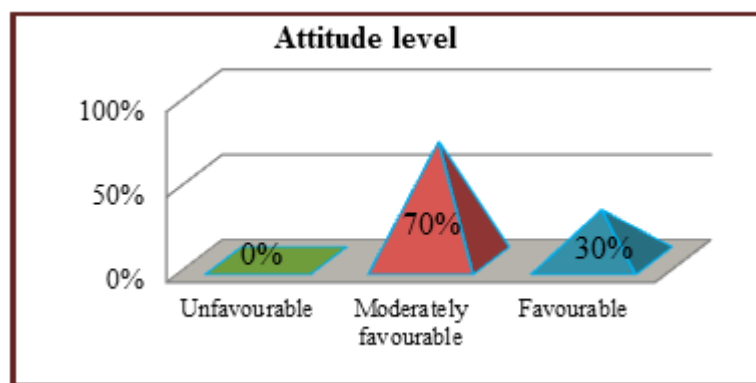


Figure 1: Pyramidal diagram showing the attitude regarding road safety measures.

The data presented in figure 1 revealed that showed that majority (70 percent) of the respondents had moderately favourable attitude, and only 30 percent of the respondents had the favourable attitude towards road safety measures.

3.4 Correlation between knowledge and attitude on Road safety measures:

Aspects	Respondents Response			Correlation coefficient (r)
	Mean	Mean (%)	SD	
Knowledge	32.9	71.52	7.8	+ 0.314*
Attitude	56.63	70.79	7.2	

*Significant at 0.05 level of significance

The correlation found between the knowledge and attitude was **+0.314**. It indicates a positive correlation between the knowledge and attitude of the respondent on the Road safety measures.

IV. DISCUSSION

Assessment of level of knowledge regarding road safety measures

The findings of the study revealed that overall mean knowledge of college going two wheeler riders regarding road safety measures was moderate (71.52 percent). Similarly a cross sectional study was conducted in South Indian medical college to assess the knowledge and practice of road safety measures. The result showed that majority of the students had moderate knowledge level.

Assessment of attitude regarding road safety measures:

The findings of the present study reveals that overall attitude of college going two wheeler riders was found 70.79 percent, among which majority of respondents had moderately favourable attitude and 30 percent of the respondents had the favourable attitude towards road safety measures. The study findings was supported by another cross-sectional study to evaluate the knowledge, attitude and practice among university students in Ajman, UAE.

Correlation between knowledge and attitude on Road safety measures:

The result of the study showed a positive correlation between the knowledge and attitude of the respondent on the Road safety measures. Similar study was conducted to assess the knowledge of and attitude towards road traffic accidents among commercial motorcycle riders at Nigeria.

V. CONCLUSIONS

The present study revealed that the overall mean knowledge regarding road safety measures among college going two wheeler riders was moderate and similarly overall mean attitudes of college going two wheeler riders were found to be moderately favourable attitude. There was positive correlation between the knowledge and attitude of the respondent on the Road safety measures. The study had certain limitations that the sample was small and limited to 100 samples. The study has recommendations that the similar study may be conducted on a large sample for wider generalization. Even a comparative study can be undertaken to assess the knowledge and attitude of teenage and adult two wheeler riders. An experimental study can be carried out to assess the effectiveness of structured teaching programme.

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