

Awareness and Attitude Regarding Road Safety Measures Among Dental Students

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Abstract: Background: The rapid and unplanned urbanization in India along with rise in number of motor vehicles lead to rapid increase in morbidity and mortality owing to road traffic accidents over the past few decades. The present study was aimed to assess the awareness and attitude regarding road safety measures among dental college students.

Methods: The present cross-sectional study was conducted in Mamata dental college, Khammam. All the third, fourth year and interns were included in the study. A total of 200 students were studied. They are aged from 21- 26 years.

Results: In total, 200 dental students were studied, ranging from third years to Interns of age 21 to 26 years, the mean age being 23.5. 70 % of students had an idea about traffic signals.

Conclusion: The awareness regarding road safety measures among study participants were satisfactory. The attitude among dental students are not satisfactory, only 62.5% students know the necessity of helmet while driving.

Keywords: awareness, attitude, helmet, road safety measures.

1. Introduction

Road transportation has brought enormous benefits to society and individuals by providing easy access to a Wide range of socio- economic services [4]. Motor vehicle population is growing at a faster rate than population growth and economy in India [4]. With the increase in motor vehicle population there are some adverse effects such as road accidents. According to a survey in the conducted in the year 2011, 1.42 lakhs people were killed and more than 5 lakhs people were severely injured [4].

All over the world, currently road traffic accidents were given the ninth leading position for the cause of death and is predicted to be seventh leading position for the cause of death by the year 2030 [8]. The cause of road traffic accidents is divided into two categories 1) General causes, 2) Specific causes. General cause include increase in number of vehicles, extension of road networks, large national developmental projects. Specific causes include driver errors, excess Speed, violating traffic rules [2]. When longevity and quality of life of the individual is concerned, prevention of road traffic accidents plays a very crucial role [2]. By following some of the measures

such as awareness and practice of road safety measures can feasibly reduce the impact of road traffic accidents on the people lives [1].

Road safety is primarily meant for the prevention of accidents and to protect the road users from getting injured or killed. As most of the dental students use motor vehicles for their everyday chores, awareness and attitude regarding road safety measures may decline the number of road accidents.

The aim of this study is to assess the awareness and attitude regarding road safety measures among dental college students.

2. Methodology

A cross sectional survey was conducted among 200 students of Mamata Dental College and hospital, Khammam, Telangana from 3-7-19 to 5-7-19. A structured self-administered questionnaire in English was distributed to the interns of Mamata college.

The questionnaire was pretested and necessary modifications was done and finalized before collection of data. Consent is taken prior to study from study population. The permission was taken from the Head of department of Public Health Dentistry

All the third, fourth year and interns who are present during the day of the survey were included in the study. Students who are absent during the day of the survey and not willing to participate were excluded. Total number of students present during the survey conducted were 200 students which includes males and females of ages between 21 to 25 years. The background questionnaire included questions on a range of demographic variables such as age and course of study.

It was an 18 item questionnaire measuring awareness and attitudes of students regarding road safety measures.

3. Statistical analysis

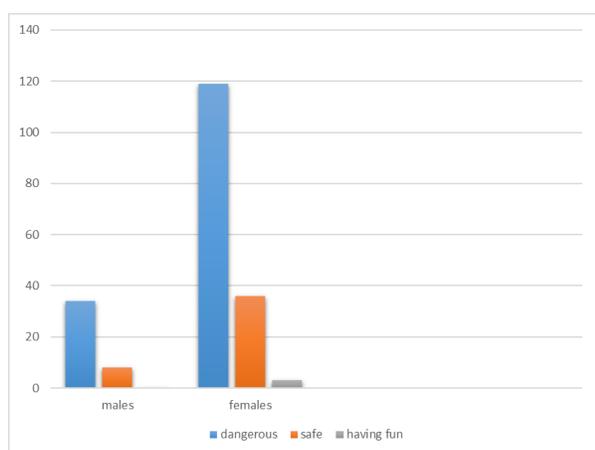
Statistical analysis was done by using SPSS 25. Descriptive statistics were performed. Chi square test was used to find the association among categorical variables.

4. Results

A. Demographic data of study population

This study was conducted among 200 dental students, out of which 21% are males, 79% are females. The third year students who participated in the study are 26%, the fourth years are about 30%, interns are about 44%. Statistically significant difference was observed $p < 0.05$ in some questions.

Variable		Variable	Percentage
Year of study			
	Third year	52	26
	Final year	60	30
	Intern	88	44
Total		200	100



11.5 % of students answered as “it protects head from injury”, 7% of students answered as “it aids the skull in protecting the brain”, 19% of the students answered as “it protects eyes from dust or terrible lights”, 62.5% students answered as “all the above” for the question that necessity of helmet while driving. The statistically significant difference was observed $p = 0.008$.

76.5% students answered that using mobile phone while driving is safe, 1.5% students answered that using mobile phone while driving is having fun. The statistically significant difference was observed $p = 0.047$.

70% students reacted as “yes”, 30% students reacted as “no” for the question that they have an idea about traffic signals. The statistically significant difference was observed $p = 0.004$.

24% of students answered as 'youth', 3.5% of students answered as 'old people', 18% of students answered as 'children', 54.5 % students answered as 'all the above', for the question who requires the traffic awareness the most. The statistically significant difference was observed as $p = 0.004$.

Green light indicate	Frequency	Percentage
To stop	20	10
To go	174	87
To slow down	6	3
Total	200	100

10% of students answered as 'to stop', 87% of Students answered as 'to go', 3% of students answered as 'to slow down', for the question that what does a green light in the traffic signal indicate. The statistically significant difference was observed $p = 0.017$.

5. Discussion

The present study was conducted to assess the knowledge and practice of road safety measures among dental students. Most of the participants in this study are females out of 200 students 158 are females, 42 are males.

In the present study 70.5% of study participants used their own vehicles moving around. 76.5% study participants had an opinion that using mobile phone while driving / riding is dangerous. Majority of the students identified the traffic signs correctly. Almost similar findings were reported by Kulkarni v et al from South India that most of the students identified the traffic signs correctly [7].

A study by Zaidi et al overall knowledge appeared to be satisfactory except on few determinants like mobile use and the condition of vehicle [6]. P Okafor et al reported knowledge of traffic sign and speed limit was poor among commercial bus drivers [7].

Awareness of road safety measures among dental students was high in our study. This may be due to increase in the awareness activities through mass media. Similar findings were reported in a study done by kalbandkeri [1].

It was observed that 34.5% students had a driving license according to present study. Similarly, a study conducted in SN medical college 42.2% had driving license [6].

The behavior concerning mobile usage and over speed while driving is highly dangerous to the driver and to the public. Hence, the behavior patterns need to be addressed through proper legislative and educated measures [5]. Better practices relating to road safety should be encouraged to reduce the morbidity and mortality related to road traffic accidents [1].

6. Conclusion

The overall knowledge and practice of road safety measures was high among the study participants. But regarding the practice behavior by the participants in certain areas were not desirable, like the practice of wearing helmet, exceeding speed limits etc. Therefore, the students should be encouraged to practice optimum road safety measures. Continuous reinforcement and reminding them of traffic rules can bring about a positive change in them and motivate them for strictly sticking to norms of traffic.

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