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A CROSS SECTIONAL STUDY REGARDING AWARENESS OF TRAFFIC RULES.

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ABSTRACT Road accidents had been a major cause for concern across the Indian subcontinent. In 2019 alone, the country reported over 151 thousand fatalities due to road accidents. Each year, about three to five percent of the country's GDP was invested in road accidents. Road accidents are on the rise in countries that have experienced significant and rapid development. This is due to the increased use of automobiles as a result of urbanization and development. A cross-sectional study of undergraduate medical students at a government medical college in Ahmedabad was done. Present study done among 298 under graduate students; out of them 203 were male and 95 were female students. Although the study population had good knowledge regarding traffic rules, only 36.24% were using helmet, 46.31% were using seat belts regularly, 57.72% were using mobile while driving. 76.17% were serviced vehicle properly, 75.84% were slowed down their vehicle when they see yellow light at traffic signal. Almost 98.99 % were using signal to change lane.

KEYWORDS : Attitude, Knowledge, Students, Traffic rules

INTRODUCTION

Road traffic injuries are a major; but neglected global public health problem, requiring concerted efforts for effective and sustainable prevention [1].

Developing countries like India are facing an additional problem of non-communicable diseases, including RTA on top of already existing communicable diseases. Like any other disease, even accident has agents, hosts and environmental factors. These work together to produce injury or damage [2].

Across the Indian subcontinent, road accidents had been a major source of concern. Road accidents claimed the lives of almost 151 thousand people throughout the country in 2019. Road accidents cost the country between three and five percent of its GDP each year. Notably, despite having only 1% of the world's vehicle population, India was responsible for 6% of all global road traffic accidents. Young Indians were involved in over 70% of the crashes [3].

In 2018, around eight thousand people lost their lives in road accidents across the Indian state of Gujarat. Traffic discrepancies have been a major source of death, injury and damage to property every year. In 2018, over-speeding of vehicles was the main reason for road accident casualties. The south Asian country ranked first out of 200 reported in World Road Statistics that year for the number of road accident deaths [4].

A total of 151,113 people were killed in 480,652 road accidents across India in 2019, an average of 414 a day or 17 an hour, according to a report by the transport research wing of the ministry of road transport and highways. India continued to had the most road fatalities in the world, followed by China, a distant second at 63,093 deaths in 2,12,846 road accidents in 2019, the report revealed. The United States of America (USA) reported the most road accidents at 2,211,439, and witnessed 37,461 deaths in 2019. According to the report, speeding was the leading cause of deaths, while, in terms of vehicles, two-wheelers were involved in most road fatalities. Across states, most road accidents were reported in Tamil Nadu (57,228), followed by Madhya Pradesh (50,669), Uttar Pradesh (42,572), Kerala (41,111) and Karnataka (40,658) accidents. Maharashtra ranked sixth with 32,295 accidents, but saw the second-highest number of fatalities (12,788), after 22,655 in Uttar Pradesh. Among cities, Delhi retained its first rank with 1,463 deaths, followed by Jaipur (1,283), Chennai (1,252) and Bengaluru (768) [5].

During 2019 in Gujarat around 3349 car accidents and approx. 6412 two wheeler accident was noted [6].

Methodology

Study Design: Cross-sectional

Study Period: September 2019-February 2021Study Area: B. J. Medical College and hospitalStudy Population: Students of B. J. Medical College.Sample Size: 298 Students were taken from different semesterStudy Tool: Structured Questioners were selected from THE MOTOR VEHICLES ACT, 1988 & RULES QUESTION BANK

Data Analysis: Data collected analyzed by Epi-Info 7 and Microsoft Excel and relevant statistical test were applied.

RESULT

The present cross-sectional study was conducted among total 203 males and 95 females undergraduate students to know the magnitude of awareness among them.

Table 1 Profile Of Study Participants

Socio-demographic profile		
Variable	No. of Participants	Percentage
Gender		
MALE	203	68.12%
FEMALE	95	31.88%
Age		
<20	175	58.72%
>20	123	41.28%
Experience of Driving		

<2 years	119	39.93%
>2 years	179	60.07%
Licence		
Yes	253	84.89%
No	45	15.10%

Table 1 showed that among 298 study participants 110 (84.62%) of them had a driving license. The majority of the participants 175 (58.72%) were less than 20 years of age and 123(41.28%) were above 20. The mean age was found to be 21.68+2.83 years (Mean + SD).

Table 2 Knowledge Score Among Study Participants

Score of knowledge		
Group of Score	No. of Participants	Percentage
<15	3	1.00%
16-20	18	6.04%
21-25	117	39.26%
>26	160	53.70%

Total 30 questioners were selected from THE MOTOR VEHICLES ACT,1988 & RULES QUESTION BANK. Each question was given a score of 1 and responses were obtained through pre-tested questionnaire. Frequency interval were applied for the score. Total 30 questioners were selected from THE MOTOR VEHICLES ACT, 1988 & RULES QUESTION BANK. Each question was given a score of 1 and responses were obtained through pre-tested questionnaire.

Table 3 Attitude With Correct Answer

Attitude with correct answers		
Question	No. of correct Answer	Percentage
1. What should be the minimum age to issue driving license?	132	44.30%
2. When should you wear helmet?	244	81.88%
3. When should you wear seat belt?	254	85.23%
4. From where should you overtake vehicle?	234	78.52%
5. What should be maximum speed to drive two-wheeler in city?	247	82.89%
6. What should be maximum speed to drive car in city?	254	85.23%
7. Car should be driven in same lane or lane needed to be change frequently?	230	77.18%
8. What should you do during pedestrian cross the road ?	267	89.60%
9. When you reached narrow road and you saw truck coming in front of you ?	265	88.93%

Nearly 81.88 % and 85.23 % had an attitude of wearing helmet and seat belts respectively. 78.52% participant had correct attitude from where they should overtake vehicle. 82.89% and 85.23% had an attitude to drive two wheeler and four wheeler respectively in city properly.

Table 4 Traffic Rule Practiced By Participants

Practice		
	No. of Participants	Percentage
1. Do you wear helmet?		
Some times	170	57.05%
Regularly	108	36.24%
No	16	5.37%
N/A	4	1.34%
2. Do you wear seat belt?		
Regularly	138	46.31%
N/A	81	27.18%
No	32	10.74%
Some times	47	15.77%
3. Do you use mobile while driving?		
No	126	42.28%
Only receive a call	27	9.06%
Listen music	68	22.82%
All of the above	77	25.84%
4. How frequently you serviced vehicle?		
According to company manual	227	76.17%
Only if any problem	71	23.83%
5. When you see yellow light on traffic signal		
Slow down vehicle	226	75.84%
Cross speedily	55	18.46%
Slow down only if you see traffic police	17	5.70%
6. Do you use signal to change lane or turn vehicle?		
With vehicle indicator	174	58.39%
With hand	18	6.04%
All above	101	33.89%
No	3	1.01%

On analysis of data study found that even though the study population had good knowledge regarding traffic rules, only 36.24% were using helmet, 46.31% were using seat belts regularly, 57.72% were using mobile while driving. 76.17% were serviced vehicle properly, 75.84% were slowed down their vehicle when they see yellow light at traffic signal. Almost 98.99 % were using signal to change lane.

Table 5 Opinion Of Participants Regarding New Traffic Penalty Rule

Opinion	No. of Participants	Percentage
Very high amount of penalty that person cannot afford	78	26.17%
It will improve quality and safety of driving on road	156	52.35%
It will promote corruption	64	21.48%

Nearly half (52.35%) of the participants were said new traffic rules will improve the quality and safety of driving on road while one fourth (26.17%) and one fifth (21.48%) were said it's very high amount of penalty that people cannot afford and will promote corruption respectively.

CONCLUSIONS

This study reveals a lack of knowledge, attitude, and risk behavior in undergraduate medical students when it comes to road safety. This must be taken seriously, and large-scale steps to raise road safety awareness must be implemented. We can predict a still low level of road safety awareness in rural areas based on the findings of this study, which were conducted in an urban population. As we see more and more children operating vehicles, training must begin early. Helmets, seat belts, following traffic laws and signals, avoiding drunken driving, and speeding must all be strictly enforced.

Recommendation

The Knowledge about Road Traffic rules and regulation should be more emphasize among young generation and to change the attitude of people, correct knowledge should be imparted during their schooling years before they proceed for license.

Every driver must learn to be cautious on the road as it is a skill that must be mastered before getting behind the wheel. "The man behind the wheel has a significant impact on the road." As a result, proper driver instruction should be prioritized through a rigid driving licensing system. This could be regarded a viable technique for improving road safety

awareness and reducing RTA incidents.

Limitation:

All the questions were not included in questionnaire from the THE MOTOR VEHICLES ACT, 1988 & RULES QUESTION BANK.

REFERENCES:

1. Sharma D, Singh U, Mukherjee S. A study on road traffic accidents in Anand-Gujarat. undefined. 2011;
2. Text Book Of Preventive And Social Medicine : Park 23rd Edition.
3. India: number of fatalities in road accidents | Statista [Internet]. [cited 2021 Nov 10]. Available from: https://www.statista.com/statistics/746887/india-number-of-fatalities-in-road-accidents/
4. India - road accident fatalities in Gujarat 2018 | Statista [Internet]. [cited 2021 Nov 10]. Available from: https://www.statista.com/statistics/1084550/india-road-accident-fatalities-gujarat/
5. India had most deaths in road accidents in 2019: Report | Mumbai news - Hindustan Times [Internet]. [cited 2021 Nov 10]. Available from: https://www.hindustantimes.com/mumbai-news/india-had-most-deaths-in-road-accidents-in-2019-report/story-pikRXxsS4hptNVvf6J2g9O.html
6. India | Road Accidents: Gujarat | CEIC [Internet]. [cited 2021 Nov 10]. Available from: https://www.ceicdata.com/en/india/road-accidents-gujarat