



Sarth E-Journal of Research

E-mail : sarthejournal@gmail.com
www.sarthejournal.com

ISSN NO : 2395-339X
Peer Reviewed
Vol.7 No 11

Impact Factor
Quarterly
Oct-Nov-Dec 2022

CURRENT TRAFFIC TRENDS AND CHANGES IN LAW IN THE CONTEXT OF GUJARAT STATE

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ABSTRACT

The negative effects of traffic congestion on both public health and the economy continue to be a significant source of worry. Road accidents are the major cause of mortality in India, accounting for about eleven percent of all unintentional deaths. If greater attention is paid to road safety and the required actions are followed, then it will be possible to prevent having accidents while driving. The goal of this study was to determine the degree of acquaintance with and adherence to a number of different regulations concerning road safety. A pharmacy school served as the location of this particular cross-sectional investigation. Participating in the study were all eligible pharmacy students in their fourth year who were able to drive a car with either two or four wheels. Using a questionnaire that has been used in the field before and was semi-structured, a total of 132 persons were questioned for this study. The data were analysed with SPSS version 22, which was used to obtain percentages along with confidence intervals. The vast majority of survey participants (81.1%) were knowledgeable about the minimum age required to obtain a driver's licence. Only 16% of long-distance bikers strictly comply with all traffic restrictions, although 76% of them always wear a helmet when they ride. The incidents of drinking while driving, riding without a helmet, and wearing a helmet while riding as a passenger all demonstrate a lack of sound judgement on the part of the individuals involved. The great majority of people who took part were familiar with the fundamental regulations governing transportation. The participants had good sentiments towards road safety measures; however, the actual implementation did not match those beliefs.

KEY WORDS: Laws, Trends, Traffic, Restrictions, Regulations.

INTRODUCTION

An unexpected and unplanned occurrence that could result in physical injury is what we mean when we talk about accidents. ¹ Accidents have developed into a huge epidemic of

non-communicable diseases in the modern era. As a result of increased industrialization and urbanisation throughout the world, the number of vehicles driving on public roads has risen. The effects of traffic congestion on both public health and the economy continue to be a significant source of worry. Accidents can be caused by a wide variety of factors, including driver error, the condition of the road, and the status of the vehicle itself, amongst others. They result in a significant amount of harm being done to individuals and a significant amount of money being lost as a consequence of deaths, injuries, and lost productivity. According to the findings of the 2018 Road Safety Report, there were more than 1.35 million fatalities attributed to road traffic accidents (RTAs) in the year 2016. According to the World Health Organisation, the largest fatality rate among children (aged 5-14) and young people (aged 15-29) is caused by unintentional causes. This is true for both age groups.² The vast majority of individuals in India who need to travel someplace do so by way of a mode of transportation that involves the use of roads. Road accidents are the major cause of mortality in India, accounting for about eleven percent of all unintentional deaths. In 2018, there were about 151,417 people who lost their lives as a consequence of accidents in India. This is a 2.4% increase over the numbers from the previous year.³ Some of the primary contributors to these rear-end collisions include excessive speeding, driving under the influence of alcohol, failing to wear a helmet or seatbelt, using a mobile phone while driving, and other similar behaviours. Therefore, it is of the utmost significance to both increase awareness and put into practise efficient road safety measures in order to reduce the number of RTAs. The purpose of the Motor Vehicles Act (MVA) of 2019 is to create a transportation system in the country that is efficient, secure, and free of corruption. This will be accomplished by improving road safety, enhancing rural transport, public transit, and last-mile connectivity via the use of automation, computerization, and online services. For traffic violations such as those committed by minors, driving under the influence of alcohol or drugs, driving without a licence, failing to wear a helmet when required to do so, driving too fast, or carrying too much goods, offenders will now face harsher fines.² The primary purpose of the research is to investigate recent modifications that have been made to the way traffic control is handled. Because young people are likely to make up the majority of the population in the next several decades, it is vital that we equip them with all of the information and experience they will need to ensure their own safety while driving in order for them to do so. The assessment and education opportunities that have been made available as a result of this research project have the potential to provide a more direct connection between the students' knowledge and the way they actually behave while they are behind the wheel. In light of all that has been said and done, the current investigation was carried out with the cooperation of college students from the state of Gujarat.

STUDY METHOD

From the 1st of August to the 30th of August 2023, a descriptive, community-based cross-sectional study was conducted in the field practising area of a Pharmacy college located in the state of Gujarat. The study lasted for a total of 30 days. Participating in the study were all pharmacy students in their fourth year who demonstrated an advanced level of competence in driving a two- or four-wheeled motor vehicle. Participants who had previously taken part in the pilot research were not eligible to take part in the main experiment, nor were students who had previously rejected to take part. A census-like method was used to sign up participants for the study. The number of students who expressed interest in taking part in the study (132 in total) served as the basis for determining the size of the sample. The instrument for the research was a questionnaire with a semi-structured format that had been designed and tested in advance. Before being employed in the full study, the questionnaire underwent testing in a pilot study, feedback from senior academics in the departments of community

medicine and sociology was included into its development, and any necessary changes were made to the questionnaire. The reliability was judged to be 0.81 using Cronbach's alpha, which was employed to make the determination. The questionnaire also includes socio-demographic questions, such as those asking respondents about their ages, genders, and educational backgrounds. Additionally, it contains questions about the examinee's understanding with numerous traffic rules as well as their compliance with those laws. The data was gathered through the use of face-to-face interviews.

Eighty-one percent of the research participants were between the ages of 17 and 19, and the majority (74.2%) were male. The majority of the study's participants (81.1%) were aware of the minimum age to get a driver's licence, and 97.7% were aware of the requirement to wear a helmet when operating a motorcycle or scooter in India. While 65.1% could recognise traffic signs, only 23.4 percent could correctly identify the average speed limit for motorbikes in Gujarat states. 583 out of 1000 participants had sufficient understanding of traffic laws. Eighty-three percent or so of them agreed that drivers should always respect the speed limits, and fifty-eight percent agreed that pillion riders should always wear helmets. The vast majority of participants (94.7%) agreed that wearing a helmet is essential while cycling long distances. The majority (55.3%) of respondents agreed that it is not a good idea to get behind the wheel after even a few drinks, and an overwhelming majority (83.3%) of respondents said that using a mobile while driving is risky. Of long-distance cyclists, just 16% fully adhere to traffic laws, whereas 76% always use a helmet. Pillion riders didn't wear helmets, and nearly a quarter of drivers were drunk. The most common reported reasons for not wearing a helmet were discomfort (59.8%), laziness (37.5%), a reduced field of vision (30.3%), hair loss (22.3%), and a lack of a style quotient (18.7%).

DISCUSSION

Eighty-one percent of the research participants were between the ages of 17 and 19, and the majority (74.2%) were male. Because they represent the population of the future, young people need to be especially vigilant about being safe around traffic. Eighty-one percent of the people surveyed in this study were aware that, as stated by the MVA, a driver's licence must be obtained at the age of eighteen. A similar survey found that 99.1% of Chennai school children recognised the legal driving age because it was asked to them by Mary et al. & Mathew et al. found that 81.4% of students in Kerala who were under the age of 18 had driven at least once. The new traffic legislation 2022 has raised the punishment for driving without a licence, even though most of them understood the legal age of acquiring a licence in India. A possible factor in the high occurrence of RTAs involving pedestrians is the fact that only 6.8% of those surveyed in this study were aware of the proper side of the road on which to walk. When asked by Ranjan et al. which side of the road should be utilised to reduce accidents, 54.2% of college students in Raichur responded correctly. Similar to a research conducted in Pakistan by Riaz and Shahid, where 47% of participants believed that passing from the left is not a good practise for drivers, 46.9% of participants in the current study were aware that the right side of the road must be utilised to overtake the car. ⁷ Nearly 99.3 percent of the current study's participants were aware that helmet use while operating a scooter or motorcycle in India is mandated by law. Siviroj et al. found that only 55.8% of participants in their study were aware of the risks associated with not wearing a helmet. Similar to a research conducted by Singh et al. among road accident victims in Lucknow, only 21.6% of motorcyclists in the present study were aware of the average speed limit to be maintained by motorbikes while travelling in Telugu states. ⁹

The current survey found that only 6.8% of participants were aware of the legal blood alcohol limit for drivers/riders in India. According to Bachani et al.'s research, 87.1% of participants felt that drinking increased the likelihood of RTAs. Sixty-six percent gave the

right answer a question about the maximum punishment for driving without a licence,¹⁰ but just 31.7% did so in a survey by Baniya and Timilsina. Similar to a research conducted by Ranjan et al. among college students in Raichur, only 33.8% of the participants in the present study had proper understanding of traffic signals. When asked to recognise road signs, 65.1% of respondents got at least five accurate out of ten questions, whereas in a research conducted among students in Karachi, 63.6% got all the traffic signs right. Reang and Tripura¹² found that the vast majority of Agartala medical students understood the meaning of the no U-turn, dangerous deep, and bike forbidden signs. More than half of the participants in the current survey (58.3%) have acceptable understanding of road safety legislation, but more has to be done to raise awareness about road safety measures among the general public because RTAs are becoming more commonplace. Al-Khaldi found that more than 75% of Saudi Arabian university students have at least some familiarity with the country's traffic laws.¹⁴ Eighty-three percent of the participants in the present study agreed that drivers should always obey traffic signals, but only 16 percent actually did so. Baniya and Timilsina found that around 59.2% of respondents reported always obeying traffic signs and symbols.¹¹ Similar to a study conducted among medical students in Gujarat by Kalantharakath and Iyer, in which 75% of riders agreed that helmets are more important only for those who ride bikes for long distances, the vast majority of participants in the current study (94.7%) believed that wearing helmet is necessary for long distance and 76% had followed it.¹⁵ In the current study, 58.3% of participants believed it was important to wear a helmet even for shorter distances, but only 25.9% actually did so. Jennissen et al. found that 64 percent of teen drivers in their research never wore helmets.¹⁶ In surveys conducted by Wadhvaniya et al. and Nagendra and Raghavendraswamy, around 44.5% and 25.98% of respondents said that they always wore helmets.^{17, 18}

In a manner that is analogous to a study that was carried out in Rajasthan by Mathur et al., 53.8% of individuals who were questioned for this study agreed that pillion riders should wear helmets, but none of them actually wore helmets themselves.¹⁹ This reveals that the majority of students had a high awareness; nevertheless, they did not put that awareness into action, showing that there is a significant knowledge-practice gap that has to be addressed in order to preserve road safety. Eighty one percent of those asked thought that listening to music through earphones while riding a bike was an unsafe activity, while just four percent actually did it. According to the research done by Reang and Tripura, an alarming 26.9% of medical students in Agartala who admitted to listening to music while driving were engaged in a collision.¹³ In spite of the fact that roughly 25.6% of them admitted to driving while under the influence of alcohol, around 55.3% of them stated that it is not safe to drive after consuming even a little amount of alcohol. Researchers Muthukumar and colleagues discovered that 39% of drivers engaged in RTA patients in Puducherry were under the influence of alcohol.²⁰ The great majority of participants in this study (83.3%) agreed that using mobiles while driving is harmful, and just a tiny fraction (7.2% had attended the call while driving). This finding is comparable to one that was conducted by Mittal and Garg, in which just 3.02% of participants used the phone while driving. In a research conducted in Trinidad, Gopaul et al. found that around 48.2% of drivers felt that texting while driving was highly unsafe. In contrast, a study conducted in Iran by Tajvar et al. found that approximately 42.7% of drivers acknowledged to engaging in this behaviour.^{22, 23} A fear of losing one's hair (22.3%), a fear of losing one's peripheral vision (30.3%), and a lack of regard for one's looks (18.7%) were the most prevalent reasons given for not wearing a helmet. This was followed by a fear of losing one's peripheral vision (30.3%). According to the findings of a study that was carried out by Shruthi and colleagues, customers care most about the quality of a helmet, followed by their comfort, the style or look of the helmet, the price, and the colour of the helmet.²⁴

LIMITATIONS & STRENGTH

One of the study's merits is that it lays a strong emphasis on students' knowledge of, attitudes towards, and compliance with road safety standards. This is one of the study's other strengths. This examination does not rely on any prior research, which is yet another one of the many advantages it possesses. We were not, however, able to live up to our full potential for a variety of reasons, one of which was that the research was only carried out on a particular subset of college students.

CONCLUSIONS

The vast majority of those who took part had a general understanding of the key regulations that regulate the transport system. The persons who engaged in behaviours such as drinking while driving, riding a motorbike without a helmet, or wearing a helmet while riding as a passenger all showed a lack of sound judgement in the situations in which they participated. However, despite the fact that the participants had positive attitudes towards road safety measures, their opinions were not reflected in the actual execution.

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