

A Study to Assess Knowledge Regarding Legal Aspects of Road Safety Among College Students in a Selected College, Kottayam

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Abstract

The present study was conducted in Ettumanoorappan College, Ettumanoor, and St. Thomas College, Pala to assess the knowledge regarding legal aspects of road safety among college students. The study aimed to evaluate the level of knowledge concerning legal aspects of road safety among college students and to explore any associations between this knowledge and selected demographic variables. A convenience sampling method was employed to select 202 participants, and data collection was facilitated through a structured questionnaire. A pilot study was carried out at BCM College to assess the study's feasibility. Data collection occurred between the dates of 02/08/2023 and 04/08/2023. The data underwent analysis using both descriptive and inferential statistics. Analysis reveals that 47.5% of college students have good knowledge, 47% have average knowledge and 5.4% have poor knowledge regarding legal aspects of road safety. The present study identified a significant association between the level of knowledge and various demographic variables, including age, gender, possession of a driver's license, type of vehicle driven, participation in road safety classes, and attitudes toward the latest Motor Vehicles Act (MVD Act). However, no association was found between the level of knowledge and the variables of accidents met or road safety violations. The findings of the study have implications for nursing education and nursing research. Road traffic accidents have a high prevalence rate in society which may cause a high incidence of head injury and other related health problems in people. Therefore, nurses must play a crucial role in spreading this information to the public.

Keywords: Legal aspects, road safety, college students, knowledge, accidents met and violation

INTRODUCTION

Road traffic safety encompasses strategies and actions implemented to reduce the likelihood of road users experiencing fatalities or severe injuries. Road users include pedestrians, cyclists, motorists, vehicle passengers, and passengers on public transport. The World Health Organization (WHO) reports that annually over one million individuals lose their lives in road accidents, with approximately 8000 fatalities occurring in India alone. These incidents often result from either negligence or a lack of awareness among road users regarding road safety measures. Consequently, road safety education is deemed imperative as an essential survival skill [1–8].

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Received Date: August 04, 2024

Accepted Date: September 09, 2024

Published Date: September 29, 2024

Citation: Arun G. Plathottam, Jibin Raju P., Jamie Marie Thomas, Jani Baby, Janitta Teny, Jenet Maria Joseph, Jereena Annamma Abraham, Jills Joy, Jilu Jose. A Study to Assess Knowledge Regarding Legal Aspects of Road Safety Among College Students in a Selected College, Kottayam. *Journal of Nursing Science & Practice*. 2024; 14(3): 1–5p.

As it is widely known, road accidents resulting in injuries and fatalities have become increasingly prevalent in recent times. To address this issue, the Government of India annually observes the Road

Safety Week from January 11th to 17th. This week intends to spread awareness about road safety, which is a major concern for authorities and the government. Drivers less than or equal to 30 years of age are more likely to be exposed to accidents than those above 30 years [9–15].

METHODOLOGY

A quantitative approach was used to study knowledge regarding the legal aspect of road safety among college students in Kottayam. A descriptive research design was selected for this study. This study was conducted at Ettumanoorappan College, Ettumanoor, and St. Thomas College, Pala. The study included 202 college students chosen through non-probability convenience sampling. Inclusion criteria were undergraduate and postgraduate students age group 18–25 years and those who were able to read English while willing to participate in the study. Students below 18 years, over 25 years of age, and those who were not willing to participate were excluded. One tool with two sections was used in this study. The tool consists of a structured questionnaire to assess the socio-demographic details of subjects. Section 2 included 30 questions to assess the knowledge level of college students regarding the legal aspects of road safety. Content validity was ensured by providing the tool to three college nursing faculty members with driver's licenses. Data analysis employed both descriptive and inferential statistical techniques [16–23].

RESULT

Among the sample, 170 (84.2%) belonged to the age group of 18–21, 141 (69.8%) were males, and 127 (62.9%) had driver's licenses. The number of people driving both two-wheeler and four-wheeler was 81 (40.1%), and 165 (81.7%) did not have accidents. A total of 102 (50.5%) had not taken road safety classes, and 180 (89.1%) had violated road safety rules. A total of 158 (78.2%) participants had adequate knowledge and 76 (37.6%) had very good opinions regarding the MVD Act (Motor Vehicles Act). The level of knowledge was good in 96 patients (47.5%) (Table 1). Among the 202 samples, 99 (47.5%) had good knowledge, 95 (47%) had average knowledge, and 11 (5.4%) had poor knowledge (Table 2).

Table 1. Frequency and percentage distribution of subjects according to demographic variable.

Variable	Frequency (%)	
Age	18–21	170 (84.2%)
	22–25	32 (15.8%)
Gender	Male	141 (69.8%)
	Female	61 (30.2%)
Driver's license	Yes	127 (62.9%)
	No	75 (37.1%)
Vehicle driven	Two-wheeler	48 (23.8%)
	Four-wheeler	13 (6.4%)
	Both	81 (40.1%)
	Name	60 (29.7%)
Accidents	Yes	37 (18.3%)
	No	165 (81.7%)
Road safety classes taken	Yes	100 (49.5%)
	No	102 (50.5%)
Violation of road safety	Yes	22 (10.9%)
	No	180 (89.1%)
Adequate knowledge	Yes	158 (78.2%)
	No	44 (21.8%)
Opinion regarding MVD act (motor vehicles act).	Very good	76 (37.6%)
	Very bad	63 (31.2%)
	No opinion	63 (31.2%)
Level of knowledge	Poor	11 (5.4%)
	Average	95 (47%)
	Good	96 (47.5%)

Table 2. Frequency and percentage distribution of samples based on the level of knowledge regarding legal aspects of road safety.

Level of knowledge	Frequency	Percentage
Poor	11	5.4%
Average	95	47%
Good	96	47.5%

Association Between the Level of Knowledge and Selected Socio-demographic Variables

There was a significant association between the level of knowledge regarding legal aspects of road safety and selected demographic variables such as age, gender, driver's license, type of vehicle driven, road safety class adequate knowledge, and opinion regarding the latest Motor Vehicle Act.

DISCUSSION

The present study aimed to assess the knowledge regarding the legal aspects of road safety in selected colleges in Kottayam. The assessment revealed that 96 (47.5%) participants had good knowledge, 95 (47%) had average knowledge, and only 11 (5.4%) had poor knowledge regarding the legal aspects of road safety. The present study was supported by a study conducted in Telangana State, which revealed that 58.3% had adequate knowledge and 41.7% had inadequate knowledge regarding road safety rules [24–28].

The present study revealed that there is a significant association between the level of knowledge and socio-demographic variables such as age, gender, ownership of a driver's license, type of vehicle driven, road safety classes attended, and adequate knowledge opinion regarding the latest MVD Act (Motor Vehicles Act). A study conducted by a student aimed to assess the knowledge of road safety among pre-urban schoolchildren in Kilachery. The findings revealed a significant association between the level of knowledge and demographic variables such as age, type of family, number of siblings, educational status, occupation of parents, and family monthly income.

This study was conducted on 202 samples from two different colleges. Only knowledge was assessed, and no intervention was provided. The present study findings provided an insight that the knowledge of college students should be improved and that providing information to them will improve their knowledge and reduce accidents among youngsters. Keeping in mind the findings of the present study, the following recommendations were made to conduct a study on a large sample, assess the attitude of college students regarding road safety, and assess school students' knowledge of road safety [29, 30].

CONCLUSION

This study sheds light on the importance of assessing the knowledge concerning the legal aspects of road safety among college students in a selected college in Kottayam. By understanding the current level of awareness and comprehension regarding road safety laws, appropriate interventions can be developed to enhance students' understanding and promote safer behaviors on roads. This knowledge is crucial for ensuring the well-being and safety of both students and the broader community, emphasizing the significance of ongoing education and awareness initiatives in promoting responsible road usage.

REFERENCES

1. Wikimedia Foundation. (2023) Road traffic and safety [online]. Available from: https://en.wikipedia.org/wiki/Road_traffic_safety.
2. Ministry of Road Transport and Highways. Road safety [online]. Government of India. Available from: <https://morth.nic.in/about-road-safety>.
3. Kerala. Road accidents killed 12 daily in Kerala in 2022 [study] [online]. On Manorama. Available from: <https://www.onmanorama.com/news/kerala/2023/07/24/road-accident-deaths-kerala-2022-study.html>.
4. Importance of road safety awareness [online]. Available from: <https://www.tmpatelschool.edu.in/blogs/importance-of-road-safety-awareness>.

5. Gopalakrishnan S. A public health perspective of road traffic accidents. *J Family Med Prim Care*. 2012;1(2):144–50. DOI: 10.4103/2249-4863.104987. PubMed: 24479025, PubMed Central: PMC3893966.
6. Road traffic accidents increase dramatically worldwide [online]. PRB. Available from: <https://www.prb.org/resources/road-traffic-accidents-increase-dramatically-worldwide/>.
7. WHO. Global status report on road safety 2018 [online]. Geneva: World Health Organization. Available from: <https://www.who.int/publications/i/item/9789241565684>.
8. Shrestha VL, Bhatta DN, Shrestha KM, Gc KB, Paudel S. Factors and pattern of injuries associated with road traffic accidents in hilly district of Nepal. *J Biosci Med*. 2017;5(12):88–100. DOI: 10.4236/jbm.2017.512010.
9. The Economic Times. Road accidents are the top cause of youth and kids' deaths globally; India loses 1.5 million lives every year: FICCI-EY Report [online]. Available from: <https://economictimes.indiatimes.com/news/india/road-accidents-top-cause-for-youths-kids-death-globally-india-loses-1-5-million-lives-every-year-ficci-ey-report/articleshow/101865011.cms?from=mdr>.
10. Bureau I. Tamil Nadu, Andhra, Kerala in list of India's 5 states with most highway accidents [online]. India Narrative. 2023. Available from: <https://www.indianarrative.com/india-news/tamil-nadu-andhra-kerala-in-list-of-indias-5-states-with-most-highway-accidents-120409.html>.
11. Road accidents in India 2021 – Ministry of Road Transport and Highways [online]. Available from: https://morth.nic.in/sites/default/files/RA_2021_Compressed.pdf.
12. Rentala S. Basics in nursing research and biostatistics. 1st ed. New Delhi: Jaypee Brothers Medical Publishers; 2018.
13. Jothula KY, Sreeharshika D. Knowledge, attitude, and practice toward road safety regulations among college students in Telangana state. *J Educ Health Promot*. 2021;10:25. DOI: 10.4103/jehp.jehp_442_20. PubMed: 33688534, PubMed Central: PMC7933689.
14. Lalitha D, Appala Naidu S, Devi Madhavi B. A study on knowledge attitude and practice of road safety measures among college students in Visakhapatnam city. *J Evid Based Med Healthc*. 2015;2(44):7439–44. DOI: 10.18410/jebmh/2015/1006.
15. Cacodcar JA, Naik AV. A study to assess knowledge, attitude, and practices regarding road safety among college students in Goa. *Int J Med Sci Public Health*. 2021;9:616–20. DOI: 10.5455/ijmsph.2020.02029202019012021.
16. Gunasekaran S. A study to assess the knowledge regarding road safety among periurban school children at Kilachery. *Int J Sci Res*. 2019;8:1679–81.
17. Sharma SK, Saini P. Knowledge, attitude and practices towards road traffic safety regulations among health science students in Uttarakhand: A cross-sectional study. *Int J Adv Res*. 2017;5(12):608–14. DOI: 10.21474/IJAR01/3550.
18. Reang T, Tripura A. Road safety: Knowledge, practice and determinants among undergraduate medical students of Agartala Government Medical College and Govinda Ballabh Pant hospital. *Int J Med Sci Public Health*. 2014;3(8):911–5. DOI: 10.5455/ijmsph.2014.090420143.
19. Anujalekshmi VL, Philip A. Knowledge on road safety measures among school children in selected schools, Kottayam. *Int J Adv Nurs Manag*. 2015;3:341–4. DOI: 10.5958/2454-2652.2015.00029.3.
20. Kulothungan K. A cross-sectional study on the knowledge, awareness & practice of safety rules among the young college students in Trichy City, Tamil Nadu. *Int J Inf Res Rev*. 2015;2:1162–9.
21. Shantajit T, Kumar CR, Zahiruddin QS. Road traffic accidents in India: an overview. *Int J Clin Biomed Res*. 2018;4:36-8. DOI: 10.31878/ijcbr.2018.44.08.
22. Singh SK. Road traffic accidents in India: issues and challenges. *Transp Res Procedia*. 2017;25:4708-19. DOI: 10.1016/j.trpro.2017.05.484. Available from: <https://www.sciencedirect.com/science/article/pii/S2352146517307913>.
23. Singh SK, Agrawal S, Yadav R, Gupta S. A study on prevalence of road traffic accidents and its risk factors in Jhansi and around Jhansi city (U.P.). *J Evol Med Dent Sci*. 2015;4:7499-508. DOI: 10.14260/jemds/2015/1088.
24. World Health Organization. Road traffic injuries. Geneva: WHO; [online]. Available from: <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>.

25. Shetty RS, Pahwa V, Kamath SP, Nair S. Road safety and the community: an awareness survey among the coastal population of Karnataka. *Int J Community Med Public Health*. 2017;5:116-21. DOI: 10.18203/2394-6040.ijcmph20175767.
26. Yeravdekar RC, Saraf AR, Pimple YV, Safai AA, Barve SS, Shukla SR. Road safety awareness and driving practices: perception of students at an urban Indian university. *Indian J Public Health Res Dev*. 2018;9:565. DOI: 10.5958/0976-5506.2018.00507.7.
27. Mukhopadhyay DJ. Road safety awareness among college students in a North Indian town. *J Med Sci Clin Res*. 2017;5. DOI: 10.18535/jmscr/v5i9.170.
28. Arnau-Sabatés L, Jariot Garcia M, Martínez Muñoz M, Montané Capdevila J. The relationship between awareness of road safety measures and accident involvement in pre-drivers: the basis of a road safety programme. *J Risk Res*. 2013;16:635-50. DOI: 10.1080/13669877.2012.761272.
29. Chaurasiya SK, Jain PK, Kumar S, Bajpai PK, Ali N. Awareness and behavior patterns regarding road safety measures among undergraduate medical students of western Uttar Pradesh: a cross-sectional study. *Int J Community Med Public Health*. 2020;7:933-7. DOI: 10.18203/2394-6040.ijcmph20200944.
30. Srivastava A, Gaikwad S, Pagdal P, Bhattacharya S. A study on awareness of road traffic accidents and their basic management among medical students of Government Medical College, MA, India. *CHRISMED J Health Res*. 2019;6:216-21. DOI: 10.4103/cjhr.cjhr_10_19.