International Journal of Community Medicine and Public Health
Manjula R et al. Int J Community Med Public Health. 2017 Jun;4(6):1993-1995
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20172163

Original Research Article

A study on knowledge and practice of road safety among medical students of S.N. Medical College, Karnataka

Manjula R.*, Vijaylaxmi B. H., Ashok S. Dorle

Department of Community Medicine, S. N. Medical College, Bagalkot, Karnataka, India

Received: 03 April 2017
Accepted: 28 April 2017

***Correspondence:**
Dr. Manjula R.,
E-mail: drmanjulakashinakunti@gmail.com

ABSTRACT

Background: Globally 1.25 million people die each year as a result of road traffic crashes. Road traffic injuries are the leading cause of death among young people, aged 15–29 years. 90% of the world's fatalities on the roads occur in low- and middle-income countries. Aims and objectives: to know the socio- demographic profile and knowledge, attitude and practice among medical students in S.N. Medical College Bagalkot.
Methods: A cross sectional study. Study was conducted from March-June 2016. Data collected from 90 undergraduate medical students after obtaining informed consent. It was semi- structured questionnaire.
Results: Good knowledge was seen among 74 (82.2%) of the participants. Majority had good attitude 80 (88.9%) about RTA. But the good practice is seen only among 53 (58.9%) and 37 (41.1%) have poor practice among participants. Gender is statistically significant with knowledge (p value-0.015).
Conclusions: The knowledge didn't translate into practice. Hence laws should be made stringent.

Keywords: RTA, Knowledge, Attitude, Practice

INTRODUCTION

Road traffic accident is a major public health problem. Globally 1.25 million people die each year as a result of road traffic crashes, and in India more than 5 lakh accidents occurred in 2015, killing 1,46,000 people and thrice the number injured.[1]

In 2010 a United Nations General Assembly resolution proclaimed a "Decade of Action for Road Safety (2011–2020)" with the aim of saving millions of lives by improving the safety of roads and vehicles; enhancing the behaviour of road users; and improving emergency services.[2]

Road traffic injuries are the leading cause of death among young people, aged 15–29 years. 90% of the world's fatalities on the roads occur in low- and middle-income countries. Hence this study was undertaken to know the knowledge, attitude and practice among undergraduate medical students.[3]

According to the report by the Transport Research Wing, the total number of road accidents increased by 2.5 per cent from 4,89,400 in 2014 to 5,01,423 in 2015. The total number of persons killed in road accidents increased by 4.6 per cent from 1,39,671 in 2014 to 1,46,133 in 2015.[1]

The analysis of road accident data 2015 reveals that about 1,374 accidents and 400 deaths take place every day on Indian roads which further translates into 57 accidents and loss of 17 lives on an average every hour in our country. About 54.1 per cent of all persons killed in road accidents were in the 15-34 years age group during the

year 2015. Karnataka stands 4th among the top 13 states of India with 44,011 accidents during 2015.[1]

METHODS

It was cross sectional study conducted among medical students of S. N. Medical College Bagalkot, Karnataka. Study was conducted from March – June 2016. It was semi-structured questionnaire. In a study done by Kulkarni et al the knowledge of RTA about driving in left lane was about 28.5%.[4] The sample size was calculated using this as prevalence with 10% confidence limits. The sample size obtained was 79. Data was obtained from 90 medical students after obtaining informed consent from them.

Statistical analysis

Data was entered in excel sheet. It was analyzed using SPSS software 11 version. Data is presented in the form of percentages, chi-square test is applied and p value <0.05 is considered statistically significant.

RESULTS

The majority of the participants are male 63 (70%) and females are 27 (30%). Majority belonged to urban area 68 (75.6%) and 22 (24.4%) belonged to rural area. Majority belonged to the age group of 18-22 years 80 (88.9%) and 12 (11.1%) belonged to 23 years- 26 years. 36 participants (40%) owned 2 wheeler, 10% owned car. About 12 (13.3%) had met with an accident last year (Table 1).

Table 1: Distribution of participants according to RTA met and owning vehicle.

	No	%
RTA met during last year		
No	78	86.7
Yes	12	13.3
Own Vehicle		
2 wheeler	36	40
4 wheeler	9	10
No	30	33.3
Both	15	16.7
Total	90	100

Table 2: Distribution of participants according to knowledge and practice regarding RTA.

Knowledge	No.	%
Legal age for driving	82	91.1
Speed limit	56	62.2
Knowledge about Renewal of DL	16	17.7
Practice		
Driving license (DL) taken	38	42.2
Wear helmet every time	21	23.3
Use mobile while driving	20	22.2
Use of mobile while driving is punishable	73	81.1

Table 3: Distribution of knowledge, attitude and practice regarding RTA among participants according to gender.

Gender	Knowledge				Chi-square value
	No.	Percentage (%)	No.	Percentage (%)	
Male	10	15.9	53	84.1	0.550*
Female	16	17.8	74	82.2	
Attitude					
Male	9	14.3	54	85.7	0.271*
Female	1	3.7	26	96.3	
Practice					
Male	22	34.9	41	65.1	0.101
Female	15	55.6	12	44.4	
Knowledge regarding Traffic rules					
Male	9	14.3	54	85.7	0.015**
Female	10	37	17	63	
Knowledge regarding contents Tool kit					
Male	22	34.9	41	65.1	0.393
Female	12	44.4	15	55.6	
Knowledge regarding legal limit of Alcohol					
Male	34	54	29	46	0.612
Female	13	48.1	14	51.9	

* indicates fisher-exact test; **indicates p value <0.05- significant.

91.1% had correct knowledge regarding legal age for driving. 42.2% have driving license. Only 17.7% knew about renewal of DL. The majority of them didn't know the legal limit of alcohol 47 (52.2%). Majority of the participants knew the contents of tool kit 56(62.2%). Only 23.3% wear helmet every time and 22.2% reported using mobile phone while driving (Table 2).

Good knowledge was seen among 74 (82.2%) of the participants. Majority had good attitude 80 (88.9%) about RTA. But the good practice is seen only among 53 (58.9%) and 37 (41.1%) have poor practice among participants. Gender is statistically significant with knowledge (p value=0.015). Attitude, practice, traffic rules are not statistically significant with gender (Table 3).

DISCUSSION

Majority had good attitude 80 (88.9%) about RTA. Good knowledge was seen among 74 (82.2%) of the participants. But the good practice is seen only among 53 (58.9%). Gender is statistically significant with knowledge (p value-0.015). Attitude, practice, traffic rules are not statistically significant with gender.

In this study only 42.2% had driving license and only 23.3% always used helmet similar to Christopher et al of 37% and 24.3% respectively.[5]

In this study13.3% had met with an accident last year. But study by Zaidi et al 4.73% got injured in past.[6]

In this study only 43 (47.8%) knew the legal limit of alcohol for driving. Similarly by Kulkarni et al awareness regarding road safety measures was observed to be considerably low regarding certain important issues such as alcohol.[4] But in study by Zaidi et al overall knowledge appeared to be satisfactory except on few determinants like mobile use and the condition of vehicle.[5]

In this study 22.2% reported using mobile phone while driving similar to Christopher of 21.7% but Kulkarni et al 44 participants and Reang 8.2% used mobile phones.[4,7]

In this study 36 (40%) owned 2 wheeler, 10% owned car similar to Reang et al of 43% owned two wheelers, 16% four wheelers and Zaidi et al 58% owned vehicle.[6] But in Christopher et al 55.4% had 2 wheeler and 8% owned car.[5,7]

CONCLUSION

Majority had good knowledge and attitude about RTA. But the good practice was seen only among 50% of participants. The knowledge didn't translate into practice. Hence laws should be made stringent.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. WHO- Road traffic injuries. Available at: http://www.who.int/mediacentre/factsheets/fs358/en/. Accessed on 3 March 2017.
2. World Health Organization. Global Status Report on Road Safety, 2015.
3. Ministry of Road Transport & Highways. Government of India. Road accidents in India. Available at: http://pib.nic.in/newsite/PrintRelease.aspx?relid=146093. Accessed on 7 March 2017.
4. Kulkarni V, Kanchan T, Palanivel C, Papanna MK, Kumar N, Unnikrishnan B. Awareness and practice of road safety measures among undergraduate medical students in a South Indian state. J Forensic Leg Med. 2013;20(4):226-9.
5. 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 Information Res Rev. 2015;2(09):1162-9.
6. Zaidi SHN, Paul PC, Mishra P, Srivastav A. Risk perception and practice towards road traffic safety among medical students. Int J Community Med Public Health. 2017;4:9-14.
7. Reang T, Tripura A. Road Safety: knowledge, practice and determinants among undergraduate medical students of Agartala Government Medical College & Govinda Ballabh Pant Hospital. Int J Med Sci Public Health. 2014;3:911-5.

Cite this article as: Manjula R, Vijaylaxmi BH, Dorle AS. A study on knowledge and practice of road safety among medical students of S.N. Medical College, Karnataka. Int J Community Med Public Health 2017;4:1993-5.