

Traffic Rules Awareness: A Study among Medical Students in Karachi Pakistan

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Abstract

The present cross-sectional study of 250 medical students led at Jinnah Sindh Medical University of Karachi from March to April 2017 was aimed to assess the knowledge and practice of current road safety measures/rules and regulations and raise awareness towards the importance of traffic rules with respect to driving among the college students of Karachi. A self-administered questionnaire after obtaining written consent from the students was distributed. All information was dissected through SPSS version 20. Among participants, 54.4% were Males, 12.8% got professional training to learn driving/riding while only 31.2% had driving license. In students who used bikes for traveling, most of them did not wear helmets, 54.3% used to ride with female pillion and 73.9% knew the clothing hazards. In students who used car, 41.3% wore seat belts and 93.4% of them agreed that seat belt is compulsory. 88.4% of students knew about traffic rules and 85.6% followed those. 62.8% students used to stop when traffic signal is red, 78.4% used wrong side for short cuts and only 63.6% correctly interpreted all the traffic signs. Nearly 21% did not identify correctly any of the signs. The knowledge regarding the safety and traffic rules among the medical students was found to be inadequate. This study finding will be useful for planning future accident prevention programs and emphasize on the need to generate awareness among medical students through training and awareness activities.

Introduction

United Nation general assembly announced the period from 2011 to 2020 as “Decade of Action for Road Safety”, since real reason for dismalness and mortality is street car crashes, particularly among the moderately aged gathering and grown-ups, who constitute most beneficial age bunches monetarily in the public eye. In this manner this presentation holds significance.

In Karachi, as the days pass, the quantity of mishaps, wounds and fatalities because of street auto collisions is expanding, yet certain security measures including wearing safety belts and head protectors that must be taken after amid driving and riding respectively are not taken by the general community. Specifically, the more youthful era is not willing to wear the protective caps or safety belts while riding bicycles or driving four wheelers. Real general medical problem in Karachi is Road wellbeing and a huge number of individuals are killed and harmed each day on our streets. Developing general medical problem is road activity accidents, affecting general population especially poor people. Study directed in Karachi demonstrates high rate of street auto collisions in Karachi generally by engine bicycle mishaps. Frequency of street car crash causes roughly minor wounds 65/day, genuine 15/day and lethal

3/day [1]. Youthful age bunch in the vicinity of 15 to 44 years constitutes the greater part of the general population murdered in activity crashes usually the family breadwinners. The financial results have been assessed of engine vehicle crashes in the vicinity of 1% to 3% of the separate world nation's Gross national product, coming to over an aggregate of \$500 billion [2]. Diminish enduring by decreasing street setbacks and fatalities, will free assets and unlock development for more gainful usage [2].

In a few nations, risky age gather for street wellbeing are known to be youthful drivers and there are exceptionally outstanding regular explanations behind the mishaps. In any case, there are reluctances amid riding to take after certain security measures in general population that must be followed [3].

Simply after age of 16 years and clearing the thorough driving tests, youngsters can get their driving permit. In any case it is disagreeable that in consolidating the learning about driving measures and wellbeing measures how far their preparation is powerful. It is the students, the more youthful age group who drive more number of bicycles and four wheeler vehicles generally. Henceforth, among the undergrads there is a pressing need to learn about the information, practice and familiarity with traffic rules in driving/riding.

Students taught in road security will develop to be pioneers of groups shaping suppositions. To a huge degree, the odds of road side accidents can be turned away, if medical students who will be specialists of tomorrow are made mindful of street security measures. Therefore, this Study was centered on students to concentrate the impact of educational intervention in enhancing their hazard elements relating learning to street side mishaps. Due to the significance of mindfulness and learning of the movement controls in the lessening of street mishaps, the target of this study is to assess the information of activity signs among youthful drivers.

Methods

A cross-sectional study of 250 medical students was conducted to understand

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the attitudes and practices regarding awareness of traffic rules. The survey was conducted at Jinnah Sindh Medical University of Karachi from March to April 2017.

Information or data from the participants was gathered with the assistance of an institutionalized pretested proforma which was sufficiently examined by the specialists and pre-decided phrases were chosen to lessen blunders. In the wake of getting earlier authorization from the head of the concerned department, a reasonable time settled for the data collection. Normally this time will be a free period for the understudies. The information was gathered after acquiring proper informed consent. Secrecy of the respondents was guaranteed and kept up by the specialists.

All information was entered and examined through SPSS version 20. Cross-tabulations were performed to get relations between study factors. Chi Square test was utilized to watch the noteworthy relationships between categorical variables. P-value<0.05 was considered as statistically significant.

Results

Among study participants 54.4 % were males. Average age was between 19-23

Gender	Males: 54.4 %
	Females: 45.6 %
Marital status	Single: 97.2 %
	Married: 2.8 %
Vehicle used	University Bus: 38.4%
	Car: 36.8%
	Bike: 18.4%
	Public Bus: 6.4%
Driving training	Yes: 12.8%
	No: 87.2%
Driving license	Yes: 31.2%
	No: 67.8%

Safety Measures	Helmet usage while riding	Yes: 43.48%
		No: 56.52%
	Agreed that helmet is compulsory	Yes: 80.43%
	Knows the hazards of not wearing helmets	Yes: 95.65%
	Seat belts wearing while driving	Yes: 41.3%
		No: 58.7%
Traffic rules	Agreed that seat belts is compulsory	Yes: 93.4%
	Think they know about traffic rules	88.4%
	Follow traffic rules	85.6%
	Stops when light turns red	62.8%
	Use wrong side for short cuts	78.4%
	Average speed	52 km/hour
	Correctly interpreted all the traffic signs	63.6%
Did not identify correctly any of the signs	21%	

years. Majority was single. University bus was used by most students. (Table-1)

12.8% were professionally trained drivers/riders and 31.2% had driving license. In students who used bikes for transportation 56.5% did not wear helmets although most of them agreed that helmet is compulsory and were aware of the hazards of not wearing it. Only 32.6% had side mirrors on their bike and 21.7% used them. 54.3% used to ride with female pillion and most of them knew the clothing hazards so they guided the females to sit in a proper way to prevent those hazards. In students who used car for transportation, 41.3% wore seat belts although most of them agreed that seat belts are necessary. Among those who used to travel via public transport, 87.5% of them traveled on daily basis and 43.7% did not feel comfortable while traveling. 62.5% were not satisfied with driving of bus driver, 31.2% did not feel easy to get in and out of public transport. Among those who used university transportation, 94.7% used it on daily basis, 22.9% were not satisfied with driving of university transport drivers, 17.7% did not feel easy to get in and out of vehicle. 88.4% of student's thought that they know about traffic rules and 85.6% followed those. 62.8% of the participants used to stop whenever signal light turned red. 78.4% used wrong side for short cuts. Approximate speed on average was 52 km/hour. 13.6% got fined in the last one year. Only 63.6% correctly interpreted all the traffic signs showed to them during the study. (Table- II)

49% of the participants thought that vehicle in front should be overtaken by its left side and 13% did not know which side to be used. Only 22% participants knew about the speed limits that had to be followed in school/hospital zones, village roads, townships and highways. While driving, 58% of the participants agreed to not using cell phones, while 22% of them told that they don't mind using it. 60.9% of the members told that they did not go to the approaching calls while driving while 35.4% of the members told that they answered the call while driving. Another matter of concern is that around 46% of the respondents hear music in cell phone while driving.

Many variables were cross tabulated with each other. But some strong variables were found to be age and training. On combining all safety and traffic rules variables, positive association was found between age and awareness of traffic rules ($p=0.032$), older the participant, more knowledge of traffic rules. The participants having professional training were more fully aware of the traffic rules ($p=0.045$) and safety measures ($p=0.003$).

Discussion

In most of the studies, more accidents were reported in the urban areas [2]. According to our study, only 31.2% of the study participants had a driving license while only 12.8% were professionally trained for driving, so license in our country is not an indication that they are well trained in driving/riding. There are many reports that show some of the driving schools without a license and they are providing below expectations facilities. Studies have exhibited that driving without legitimate driving permit is related with higher danger of accidents [4]. There are still exceptionally youthful members in our review that are in the early phase of their driving profession. This could be one reason for the low rates of driving permit ownership

Adherence to security guidelines is a key in prevention of accidents. However in our review the rate of respondents who follow the security guidelines was lacking. This finding connects well with a prior study, which demonstrated the neglect of traffic lights by medical students [5, 6]. Around one-third of the respondents didn't consistently follow the security guidelines. These elements contribute a ton to accidents.

The most extreme driving velocity in which the members drive their vehicle on average was found to be 52 km/hour while around 12% of the respondents told that they drive their vehicle at paces more than 100 km/hr. Our discoveries corresponded with different other studies proving that over speeding is one of the real hazard [4].

Unfortunately, 56.5% % respondents told that they never utilized helmet while riding and 42% of the respondents felt that the utilization of helmets

is awkward and uncomfortable. A few studies have shown the advantageous impacts of protective helmets in counteracting mortality in riding motorbikes [1, 7].

Only 41.3% of the respondents told that they always utilize seat belts while driving and 93.4% believed that seat belts are obligatory during car driving. A few studies have shown that significant mortality and morbidity is associated with non-usage of seat belt [7]. About 21.1% of the respondents felt that the usage of seat belt is awkward and uncomfortable.

Among females the general learning and consciousness of street security measures was insignificantly higher than males ($p=0.04$). Article directed by Swamy et al. in Chandigarh watches comparative finding [8]. Be that as it may, in another review directed by Raj et al. the information levels were higher among males [9]. Purposes behind the better execution of females in our study may be because of everyday introduction to traffic in urban areas and better presentation to media source. Traffic signs shown to the respondents were effectively identified by about half of them. Mindfulness about the traffic signs though better than the road safety measures, it is still much less than the normal attractive levels. In a study led in Saudi Arabia by Gharaibeh et al there were comparative findings [10]. While making a trip, expanded everyday introduction to billboards might be the reason of better learning of traffic signs among respondents. Utilization of cell phones without hands free gadgets during driving was conceded by almost 1/4th of the respondents. Besides, surpassed speed limits during driving were agreed by about two-third of the responders. These findings are like a study led by Gharaibeh et al. in Saudi Arabia [10]. The practices concerning cell phone usage and over-speeding are perilous to the driver as well as to others. Consequently, through legitimate authoritative and educative measures, these conduct designs should be tended to. Attempts on identifying street security ought to be urged to reduce the morbidity and mortality identified with RTAs.

Diverse studies review student's consciousness of traffic guidelines and signs. A study finished in India [11] was started with the motivation of deciding the level of school students learning about traffic guidelines and to build/improve it by 30%. The post overview was found to be the same as the pre-review (done again to know the upgrades of the students). The overview concentrated on the basic traffic guidelines and signs. It was discovered that 54% of the respondents knew about the fundamental rules for traffic and this rate expanded to 82.2% after some intervention.

In study directed in Saudis, it was found that a little portion of the respondents followed traffic rules; as 26% of them agreed and complied with the speed limit, 13% utilized their driving safety belts, and 41% of the students reported to have used their mobile phones while driving. Then again, 82% completely conformed to the traffic light signals [10].

Occasional trainings among the medicinal students ought to be done to build mindfulness and introduction towards street security issues. In connection to lessen street auto collisions, the measures for expanding street security measures ought to be fortified through billboards, notices and broad communications, to diminish mortality. To survey the current circumstance with respect to street safety measures, additional inquiry should be directed over different sets of population as this study was just limited to one set of population i.e. medical

students. By referencing the results of study, further investigation can be done to inquire other factors responsible for low awareness and increased number of accidents, and in other areas to have a broad based outcome.

Conclusion

The learning and information about the safety principles and routine with regards to the security rules among the medical understudies was observed to be exceptionally lacking. This review finding will be valuable for arranging future accident counteractive action programs and stress on the need to create mindfulness among medicinal understudies through preparing and mindfulness exercises so that the epidemic of RTAs can be controlled.

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