

Study of Knowledge, Attitude and Practice Regarding Road Safety among Peri-Urban School Children

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ABSTRACT

Objective: To study the knowledge, attitude and practices of school children about road safety and hazards.

Study Design: Cross sectional study.

Place of Study: Amal School, a private sector institution in Tulpura, Lahore.

Duration of Study: December, 2012.

Methodology: A structured questionnaire was used to obtain data from 100 children in classes four to ten. SPSS version 20 was used for data entry, cleaning and analysis.

Results: Among the respondents, 58% were males and 90% were between the age of 9=13 years. Major representation was from classes 4 (22%) and seven (21%). Most of the study participants (88%) had driven bicycles while motorbikes were used by only 27%. The students of class 4, 5, 6 were not able to recognize the road signs (56%) but the rest of the students easily identified the road sign. The awareness regarding traffic signs was 52% among males and 51% females. The knowledge level of study participants regarding road signs was considerably high especially in case of what do the traffic signal lights indicate (94%), not to horn (79%) zebra crossing (95%) and pedestrian prohibited (75%). Students agreed that driving without a valid license is an offence (69%) and chance of accidents increase when driving bikes and motorcycles without a helmet (89%) and using mobiles while driving (92%). Among the respondents, 86% had driven a cycle and 27% had driven a motorcycle but only 10% wore a helmet while riding. Valid license was present with 4% students and 29% of school children had been involved in a roadside accident.

Conclusion: Good knowledge about road safety did not translate into prudent traffic practices by students.

Key words: knowledge, attitude, practices, road safety, hazards, school children

INTRODUCTION

Road traffic accidents (RTAs) are considered as one of the important public health problems around the world. According to Global Status Report on Road Safety-2009, over 1.2 million people die each year on the roads worldwide and between 20 and 50 million suffer non-fatal injuries. Currently, road traffic accidents are the 9th leading cause of death and are predicted to become the 5th leading cause of death by the year 2020¹. Globally road traffic injuries are the leading cause of death among young people aged 15-19 years and second leading cause among 5-14 year olds². Ninety percent of world's road traffic fatalities occur in developing countries. It is in this background that the UN General Assembly has declared 2011 to 2020 as the "Decade of Action for Road Safety" which seeks to halt the increasing trends in road traffic deaths and injuries worldwide³.

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The starting point for any intervention aiming to bring about a greater sense of responsibility and safety among the precious but restless young generation would be to first know about their current level of knowledge and behaviour regarding road safety and build on it, hence this study was undertaken to assess the knowledge and behaviour regarding road safety, traffic rules and risk factors associated with road accidents among school students. Based on the results of the study, behavioural change communication programmes on road safety should be considered.

Bringing about behavioural change among young adults with regards to road safety starting from their school years would go a long way in bringing down morbidity and mortality due to road accidents. Literature search revealed very few studies conducted, especially from Pakistan in the area of road safety among school children.

METHODOLOGY

This cross sectional survey was carried out at Amal school, a private sector institution in Tulpura, Lahore on all registered students in Amal school in classes 4

to 10 (137) in December 2012. One hundred students volunteered to participate in the study. Independent variables were age, class, gender, knowledge, attitude and practices regarding road signs, road safety and hazards. Data was entered and cleaned in SPSS Version 20. Data was presented in the form of table and graph. Descriptive statistics was used in terms of percentages. Data collection tool was a structured questionnaire.

RESULTS

Out of 137 students in classes 4 to 10, 100 agreed to participate in the study (response rate = 73%).

Background Information

Table 1: Background Characteristics of 100 students of Amal school participating in the study

Characteristics	%age
Gender	
Male	42
Female	58
Age (years)	
7-8	06
9-10	27
11-12	38
13-14	25
15-16	04
Class	
04	22
05	19
06	15
07	21
08	18
09	01
10	18

Table 1 shows that among the respondents, 42% were females and 58% were males and 90% were between the age of 9=13 years. Major representation was from classes 4 (22%) and seven (21%) while only child participated from class 9. Most of the study participants (88%) had driven bicycles while motorbikes were used by only 27%.

The students of class 4, 5, 6 were not able to recognize the road signs (56%) but the rest of the students easily identified the road sign. The awareness regarding traffic sign was found to be slightly higher among males (52%) than females (51%).

Knowledge: As depicted in Table 2, the knowledge level of study participants regarding road signs was considerably high especially in case of what do the traffic signal lights indicate (94%), not to horn (79%) zebra crossing (95%) and pedestrian prohibited (75%).

Practice: Figure 1 also depicts the driving practices of school children. Around 88% of children have driven a bicycle but only 10% wore a helmet. The use of helmet among 27% of students who had driven a motorbike was 16%. Among the study participants, 29% had been involved in a road side accident.

Attitude: Figure 1 shows that 69% of students agreed that driving without a valid license is an offence. Majority of them agreed that chance of accidents increased when riding bikes and motorcycles without a helmet (89%) and using mobiles while driving (92%).

Practice: Among the respondents, 86% had driven a cycle and 27% had driven a motorcycle. However, only 10% wore a helmet while driving and 4% had a valid license at that time. Over a quarter of school children interviewed had been involved in a roadside accident (Figure 1).

Figure 1: Attitude and Practices of 100 students about driving

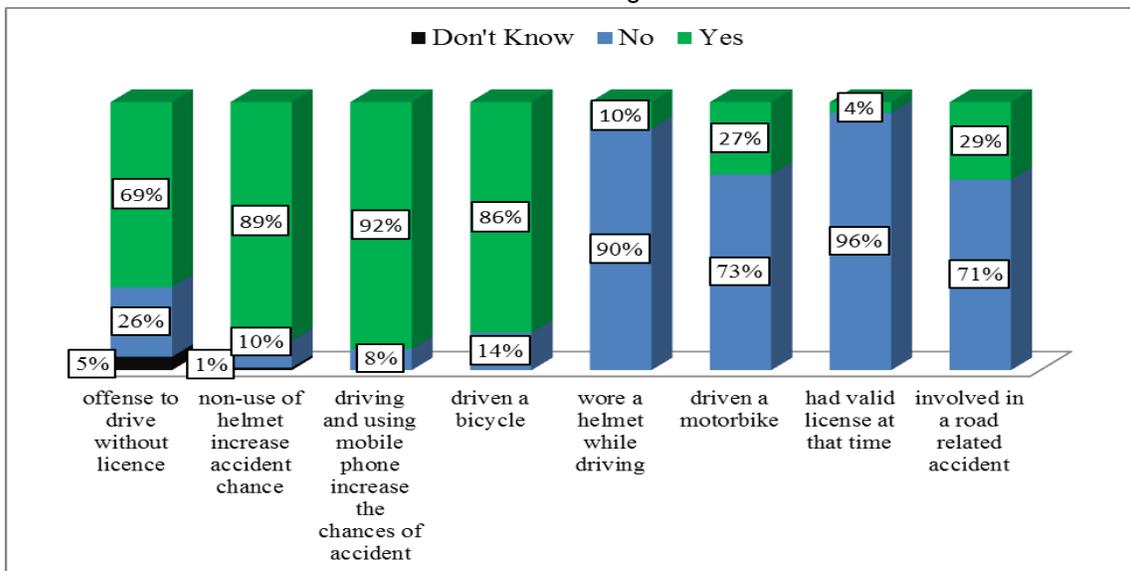


Table 2: Knowledge of 100 students about selected road signs

Traffic signs	Response	%age
	Stop, Wait, GO Others	94 6
	Cycles prohibited Others	90 10
	Hospital ahead Hotel ahead Others	80 11 9
	Bus Stop Buses Only Others	85 10 5
	Horn Prohibited Silence Zone Others	79 13 8
	Zebra Crossing Others	95 5
	Pedestrian Crossing Pedestrian Prohibited Others	14 75 11
	Minimum Speed Limit Maximum Speed Limit Distance to destination Compulsory	19 54 2 25
	No Parking Others	90 10
	Playing Area Pedestrian Crossing Others	75 19 6

DISCUSSION

The present study revealed that 56% of students could not identify road signs, compared to 55% reported from Tamil Nadu in India⁴.

In the present study, awareness was high about increased chance of accidents by not use of helmets (89%) and using mobiles (92%) while riding two wheelers. However, only 10% of children used helmets which was comparable with 13% of helmet use in Texas USA⁵. The use of helmet in our study was lower than helmet use by children from Tamil Nadu (21%)⁴ and Hyderabad, India (30%)⁶.

In our study, 69% of children were in agreement that it is an offence to ride a cycle or motorcycle without a valid license, 86% had used bicycles and 27% have been riding motorcycles, but only 4% had a license. Raj et al reported similar behavior from Tamil Nadu in India, where 33% of students had been riding motor cycles but only four had license⁴.

In the present study, 29% of children had been involved in road accidents, compared to 11% of children in Tamil Nadu⁴ and China⁷. Though there was adequate knowledge among our study participants regarding road safety, their practices did not match their perceptions. Our study was limited to only one peri-urban school of Lahore. Such studies must be replicated in other schools.

CONCLUSION & RECOMMENDATIONS

The present study concluded that there was good knowledge among school children in a peri-urban area of Lahore, regarding traffic signs. Their knowledge regarding risk factors associated with road accidents was found to be adequate. However this study also revealed that good knowledge does

not necessarily translates into prudent traffic practices. In our study helmet use among cyclist was lower than among motorcyclists.

Recommendations: The importance of road safety measures need to be emphasized by teachers, parents and media in order to inculcate safe practices and prevention of accidents among young children.

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