

## ASSESS KNOWLEDGE AND PRACTICES OF A ROAD SAFETY MEASURES AMONG HIGH SCHOOL STUDENTS IN VIEW OF DEVELOPING INFORMATION BOOKLET FROM SELECTED HIGH SCHOOLS

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Received date: 10 December 2022

Revised date: 31 December 2022

Accepted date: 20 January 2023

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### ABSTRACT

Road traffic accidents cause considerable economic losses to individuals, their families, and to nations. Children work, play & or live on the road and this exposure along with other risk factors inherent to childhood makes them particularly vulnerable in traffic. The result is millions of fatal or disabling injuries each year. Road traffic accident if it occurs on a road or in a place to which the public have access and it include footpaths and bridge ways. Objective: To assess pre-existing knowledge of high-school students regarding road safety measures. To assess reported practices regarding road safety measures of high school students. To develop information booklet regarding road safety measures of high school students. Research methodology: The quantitative approach and cross-sectional descriptive design was used. Were enrolled 52 high school students from selected high schools from 8<sup>th</sup> and 9<sup>th</sup> standard with purposive sampling technique was selected. Major findings identify regarding knowledge on road safety measures in high school students 13 (25%) having good knowledge, 27 (51.9 %) students having average knowledge and 12 (23%) having poor knowledge regarding road safety measures. About major findings related to practices on road safety measures 38 (73%) students having good practices, 14 (26.9%) students having average practices regarding road safety measures. No student was having poor practices regarding road safety measures. Conclusion: The high school students may be having pre-existing knowledge but that may be a constructed one. The findings of present study showed that in spite of giving education through lectures, the high school students may prone to forget the rules and regulations of road traffic and safety measures while crossing roads. The knowledge of high school students is going hand in hand with practices. There were constraints due to Covid-19 pandemic situation, that the investigator could not collect data on offline mode, so for the present study the data was collected by the virtual mode by the investigator.

**KEYWORDS:** Assess, knowledge, practices, high school student, information booklet.

### INTRODUCTION

Children who have acquired the appropriate skills, knowledge and attitude through various training programs are then able to share those assets with other children, in a variety of venues and using a variety of mediums.<sup>[1]</sup> Every year the lives of approximately 1.35 million people are cut short as a result of a road traffic crash. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability because of their injury. Road traffic crashes cost of most of the country's 3% of their gross domestic product.<sup>[2]</sup>

In 2019, India has total 151,115 people were killed in 480,652 road accidents across India. The report presented in 2019, by Megha Soodin the Hindustan Times, an average of 414 a day or 17 an hour, India continued to have the most road fatalities in the world.<sup>[4]</sup> According to accidental research cell, Maharashtra, the most developed State in India, has the largest road network. Over 99.5% of the villages in the State were connected by all-weather roads as of March 2018. Maharashtra has over 7,500 Km of National Highways, 35,000 km of State Highways and an impressive network of Expressways. In the year 2019, the total number of road traffic accidents were 32,925 which is a decrease by

8% over 2018. These accidents were responsible for a death toll of 12,788 in the year 2019. As compared to 2018, in 2019, Satara district shows an alarming increase in accidents by 83% and fatalities by 120%.<sup>[5]</sup> Children who are able to effectively share their skills with other children generally are good leaders, role models and facilitators.<sup>[1]</sup> Road Traffic Accidents (RTA) have become a major cause of morbidity and mortality, especially among the adults and middle-aged individuals. During the school years, co-ordination improves and also develops a sense of balance and rhythm allows without knowing the traffic rules and regulation. They expose themselves to such hazards and due to those the children's get into the accidents.<sup>[7]</sup> Younger children are more vulnerable indoors, while older ones are more at risk outdoors. Middle school children, roughly spanning ages 11 to 13, vary tremendously in their levels of maturity. Children work, was to play & or live on the road and this exposure along with other risk factors inherent to childhood makes them particularly vulnerable in traffic.<sup>[1]</sup>

### NEED FOR THE STUDY

In the India the family size is big due to that the mother cannot give attention to the vital role in nuclear family every child to school due to her work burden. Due to this reason the investigator thinks that there is need to give directly education to the children's so they can educate self as well as they can teach to their other siblings. It will reduce the burden over the teacher as well as family members to teach them about road safety measures and the traffic rule.

The students are the future of the nation. It is our responsibility to teach them and make their future better. The aim of the present study aim was to assess the knowledge and reported practices of the students and develop an information booklet for the high school students. Before administering any intervention to student's investigator must have to check there preexisting knowledge. So, the investigator thought for checking the idea about their existing knowledge and practices. Hence this study was undertaken to assess the knowledge and practices about road safety measures in schools.

### AIM OF THE STUDY

To assess the knowledge and practices of road safety measures and develop information booklet among the high school students in selected high schools of Karad city.

### OBJECTIVES OF RESEARCH STUDY

1. To assess pre-existing knowledge of high-school students regarding road safety measures.
2. To assess reported practices regarding road safety measures of high school students.
3. To develop information booklet regarding road safety measures of high school students.

### RESEARCH METHODOLOGY

After ethical institutional committee approval research study was started. The present study a quantitative approach and Cross sectional descriptive design was used in Karad taluka, Maharashtra. There is total 08 high school are there but only 2 high school were permitted for the study on virtual mode due to covid-19 situation. In each high school there are 3 classes of 8th and 9th were enrolled by using purposive sampling technique up to complete sample size. Inclusion criteria: The students who are willing to participate in the study. The students who are attending of 8<sup>th</sup> and 9<sup>th</sup> standard of selected school in Karad city. Exclusion criteria: Students who are suffering with mental illness. Independent variable: Independent variable -Booklet on road safety measures. Dependent variable -Knowledge and practices related to road safety measures. Data as analyzed in respect to the objectives of the study by using descriptive statistics. The plan of data analysis and interpretation was developed under the excellent direction and guidance of statistician, the data were entered into excel sheet; data clean up and cross checked was done and it was analyzed.

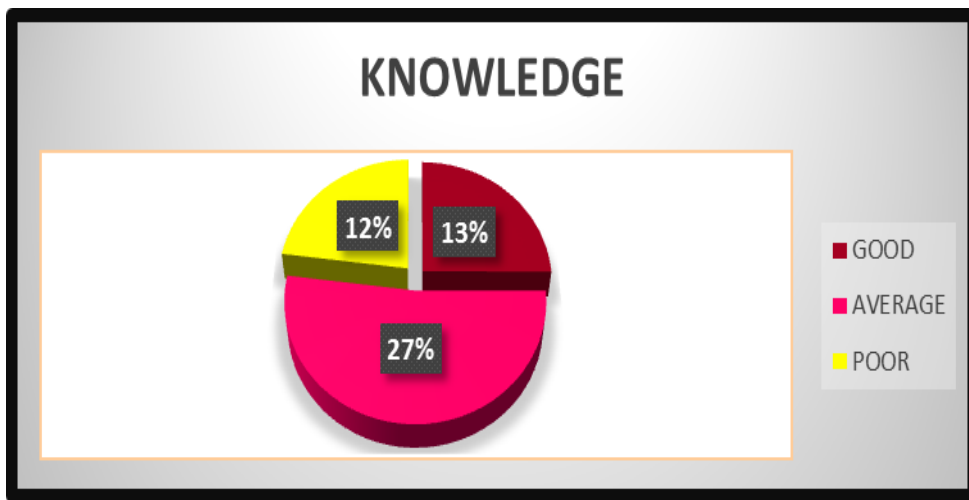
### RESULT

The data presented in table no. 1 indicates that majority of samples 20 (38.4%) were belongs from age group of 14, among the Standard (Level of class)i.e., 8th and 9th 26 (50%) majority were female. Majority of students 35 (67.3%) were Hindu. The majority of student having 21 (40.3%) had their monthly family income of Rs. 2000 and above. Majority of student having 33 (63.4%) joint family. Majority students father education 13 (25%) having professional degree whether mother having some having professional degree in education, graduate, diploma and middle school i.e., 10(19%) equally. Whether occupation of father and mother are professional 20 (38%) and 13 (13%) professional and semiprofessional. Most students 29 (55.5%) having 3-5 member in the family, regarding residence majority of students 22 (42.3%) are from rural area. Majority of students 12 (23%) had mode of travelling to school was with parents. 43 (82.6%) play outdoor games and having previous knowledge about road safety. Majority of students 26 (50%) were got knowledge from teachers.

Table no. 1: distribution of subject according to socio demographic variables.

Sr. No.	Characteristics	Category	Respond	
			F	%
1.	Age in year	12	8	17.3
		13	11	21.1
		14	20	38.4
		15	12	23
2.	Standard (Level of class)	8 <sup>th</sup>	26	50
		9 <sup>th</sup>	26	50
3.	Sex	Male	0	0
		Female	52	100
4.	Religion	Hindu	35	67.3
		Muslim	12	23.0
		Cristian	5	9.6
5.	Monthly family income	Rs, 2000 and above (12)	21	40.3
		Rs. 1000-1999 (10)	18	34.6
		Rs. 750-999(6)	7	13.5
		Rs. 500-749(4)	3	5.7
		Rs. 300-499 (3)	1	1.9
		Rs. 101-209(2)	2	4
6.	Type of family	Joint	33	63.4
		Nuclear	19	36.5
7.	Education of father:	Professional degree(7)	13	25
		Graduate(6)	10	19.2
		Diploma(5)	11	21.1
		High school(4)	6	11.5
		Middle school(3)	7	13.4
		Primary school (2)	4	7.6
8.	Education of mother	Illiterate(1)	1	1.9
		Professional degree(7)	10	19.2
		Graduate(6)	10	19.2
		Diploma(5)	10	19.2
		High school(4)	6	11.5
		Middle school(3)	10	19.2
9.	Occupation of father	Primary school (2)	4	7.6
		Illiterate(1)	2	3.8
		Professional	20	38.4
		Semi professional	16	30.7
		Clerical/ shop owner/ farmer	6	11.5
		Skilled worker	7	13.5
10.	Occupation of mother	Semi skilled worker	1	1.9
		Unskilled worker	2	3.8
		Unemployed	0	0
		Professional	13	25
		Semi professional	13	25
		Clerical/ shop owner/ farmer	6	11.5
11.	Number of family member	Skilled worker	7	13.4
		Semi skilled worker	1	1.9
		Unskilled worker	2	3.8
		Unemployed	10	19.2
12.	Residence	Less than 3	3	5.7
		3-5	29	55.7
		6-10	17	32.6
		More than 10	3	5.7
12.	Residence	Urban	20	38.4
		Rural	22	42.3
		Semi urban	10	19.2

13.	Mode of travelling to school	With parents	12	23.0
		Cycle	7	13.4
		School vehicle	8	15.3
		Public transport	10	19.2
		Private transport	6	11.5
		Walking	9	17.3
14	Do you play outdoor games?	Yes	43	82.6
		No	9	17.3
15	Any previous knowledge about road safety:	Yes	43	82.6
		No	9	17.3
16	If yes, source of information	Parents	18	34.6
		Teachers	26	50
		Friends	5	9.6
		Media	3	5.7



Graph no. 1: showing area wise percentage distribution of students according to knowledge score.

Graph no. 1 Depicts that the 13 (25%) students having good knowledge, 27 (51.9%) students having average knowledge and 12 (23.0%) having poor knowledge

regarding road safety measures in selected high schools of Karad city.



Graph no. 2: showing area wise percentage distribution of students according to reported practices score.

Graph no. 2 Depicts that the 38 (73%) students having good practices, 14 (26.9%) students having average practices. No student is having poor practices regarding

road safety measures in selected high schools of Karad city.

**Table no. 4: Frequency and distribution of knowledge and reported practices.**

Area of analysis	Particular	Score	Mean	Median	SD	“p” value	“t” value
SECTION II: Knowledge Questionnaire	GOOD	13	17.333	13	8.386	0.0699	3.580
	AVERAGE	27					
	POOR	12					
SECTION III: Reported Practices Checklist	GOOD	38	17.333	14	19.218	0.2587	1.562
	AVERAGE	14					
	POOR	0					

S= Significant, NS=Not Significant

Table no. 4 depicts that the knowledge of road safety measures in high school students the mean score (17.333) and median score (13) whereas practices of road safety measures in high school students mean score (17.333) and median score (14).

### DISCUSSION

The price paid for mobility is too high, especially because proven measures exist. Drastic action is needed to put these measures in place to meet any future global target that might be set and save lives. Every year the lives of approximately 1.35 million people are cut short because of a road traffic crash. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury.<sup>[2]</sup>

The findings of the knowledge reveals that those 4 (7.6%) students having good knowledge, 44 (90.3%) had average knowledge and 1 (1.9%) had poor knowledge. The knowledge mean score was 17.3 with SD of  $\pm 8.6$ . There was statistically significant association between knowledge and sex ( $p < 0.01$ ) level of significance regarding road safety measures in high school students.

The study findings of reported practices depicts those 38 (73%) students having good practices, 14 (26.9%) students having average practices. No student is having poor practices. The reported practices mean score was 17.3 with SD  $\pm 19.2$ . There was statistically significant association between reported practices and standard ( $p = 0.0124$ ), sex ( $p < 0.01$ ), education of mother ( $p = 0.0130$ ) level of significance regarding road safety measures in high school students.

### CONCLUSION

The high school students may be having pre-existing knowledge but that may be a constructed one. The findings of present study showed that in spite of giving education through lectures, the high school students may prone to forget the rules and regulations of road traffic and safety measures while crossing roads. The knowledge of high school students is going hand in hand with practices. There were constraints due to Covid-19 pandemic situation, that the investigator could not collect data on offline mode, so for the present study the data was collected by the virtual mode by the investigator. The findings of present study revealed that among all other demographic variables only sex of high school students showing statistically significant association with

knowledge. Among the practices the demographic variables viz- sex of high school students, Standard, mothers' education is showing statistically significant association with practices. The study reveals that there is need to give information about road safety measures through developing information booklet in view to give re-enforcement to the high school students as they are prone to forget the rules and regulation of road safety measures.

### Ethical approval

Ethical approval was obtained from ethical institutional committee of KIMSUDU, Karad on April 2021 and approval number was KIMSUDU/ IEC/02/2021.

### Conflict of interest

The author certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

### Funding resource

There is no funding source for this study.

### ACKNOWLEDGEMENT

I most sincerely convey my deep sense of gratitude to my guide/organization for her/their remarkable guidance and academic support during this study.

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