# Assess the Knowledge and Practice On Road Safety Regulations among Primary School Children in Rural Community

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## Abstract

**Introduction:** Road accidents are 9<sup>th</sup>leading cause of deaths and are estimated to become the 5<sup>th</sup> leading cause of death by 2020. 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 olds, according to WHO road traffic accidents stands as 6<sup>th</sup> rank of leading causes of death in children. School children who are going to be adults of tomorrow are made aware of road safety measures. and adolescent.

*Aim:* The aim of the study was to assess the knowledge and practice on road safety regulations among primary school children in rural community.

Materials and methods used: Cross sectional research design was used to conduct the study with 50 samples in primary school of rural community. Collected socio demographic variables followed by assessed the knowledge on road safety regulations by using multiple choice questions and the practice level was assessed by checklist. Collected data were analysed by using descriptive and inferential statistics.

**Result:** With regards knowledge regarding road traffic regulations, out 50 samples, 16 (32%) of them had inadequate knowledge, 20(40%) of them had moderately adequate knowledge and 14 (28%) of them had adequate knowledge. Regarding practice on road traffic regulations Out 50 samples, 22 (44%) of them had poor practice, 24(48%) had good practice and 4 (8%) had best practice.

**Conclusion:** The study findings concluded that the primary school children have lack of knowledge on road traffic regulations and few students though they have the knowledge but have poor practice in day today life.

**Keywords:** Road traffic regulations, road safety, primary school children, road traffic accident, rural community.

## I. INTRODUCTION

Road accidents are 9<sup>th</sup>leading cause of deaths and are estimated to become the 5<sup>th</sup> leading cause of death by 2020. 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 olds, according to WHO road traffic accidents stands as 6<sup>th</sup> rank of leading causes of death in children and adolescent. The death toll is on the higher side for the countries where pedestrians, motor cyclists and passengers are vulnerable and vehicles lack the safety norms like India. Tamil Nadu accounts for 14.5% of total road accident cases in the country. Every day one person dies every 6 minutes on Indian roads, by 2020 the rate is expected to be more than one every 3 minutes.

According to the Indian injury report 2005, Injury is the third cause of mortality in India. Bringing about awareness and behavioural change among young adults with regard to road safety starting from their schooling years would go a long way in bringing down morbidity and mortality due to road accidents. 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 worldwide. India has the dubious distinction of the country with the highest number of road accident fatalities.

Road safety is very important for people of all age group to be safe and secure as well as reduce the number of road accidents and injury cases. So, everyone should strictly follow all the rules, regulations and signs of road traffic lights. Children should be well practiced from the end of their parents at home and get proper study by the teacher in the school.

Road safety is must to be paid proper attention by each and every population on the earth whether using vehicle or not. Children and students are the most vulnerable group towards the road accidents, minor or major injuries and even death because of the lack of adult supervision. There should not be late in making children well aware about the road safety rules and measures in their early age.

We have had great success in fighting diseases that kill and claim children. We cannot now sit and

watch children die or severely disabled due to injuries that can be prevented, it is time to take an active approach to prevent child injuries. Children are the future road users most effective strategies in developing road safety awareness. We have a duty to protect children from injury and violence, children live in world designed for adults that they have special needs and are vulnerable to forces on their body than adults. Children are the biggest assets of a nation. They represent country's future. They continue to learn those values and competencies, they will bring into the adult world in the family. School children learn to think themselves as persons in their own right and desire to engage in tasks in the real world. move from primary school to secondary The school gives a new independence to school children of 10-12 year. But greater independence brings increased risk of being killed or injured in a road traffic accident

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 practice regarding road safety and build on it, hence this study was undertaken to assess the knowledge and practice regarding road safety regulations among school students. There is limited literature available regarding road safety related practice in developing countries, especially from India in the area of road safety among school children. The chances of road accidents can be averted to a large extent, if school children who are going to be adults of tomorrow are made aware of road safety measures. Hence Investigator was motivated to conduct the study to assess the knowledge and practices regarding road safety measures among school children.

C K Priyanka Raj, (et.al); (2011), had conducted the study of knowledge and behavioural patterns with regard to road safety among high school children in a rural community in Tamil Nadu, India Overall the study revealed poor knowledge regarding traffic rules and road signs among the school children, whereas students had good knowledge regarding risk factors associated with road accidents.

O John, SM John, A Bose, (2012), had conducted the study on road safety features and awareness in selected schools in Vellore. A school transport safety checklist was prepared based on robust recommendations. A questionnaire was administered to 146 students, aged 13–17 years. Six schools were selected by convenience sampling. The findings of the study reveals that None of the schools had speed breakers, traffic redistribution arrangements, pedestrian crossings or median islands. 66.67% had no school zone board or traffic lights at intersections near the school. Eighty-seven of 146 questionnaire respondents were boys. About 22–25% of students reported having either collided with, or been involved in a crash with a two-wheeler in the previous month. A total of 49% of the two-wheeler users rode motorised vehicles to school, despite being under-age for licence. None of the cyclists wore helmets. Only 16% students could not identify even one of four common road signs. Significance Findings revealed near non-existent safe features near schools and inadequate awareness regarding road safety among students.

HumayunMizra, SeemaDaud,(2012), had conducted the study to assess the Knowledge, Attitude and Practice Regarding Road Safety among Peri-Urban School Children. 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. 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.

Investigator also come across many road traffic accidents among school children and during clinical posting received more children who undergone road traffic accidents within the age group of 5 to 10 years and many of them died and had major disabilities. Because of lack of knowledge and awareness regarding road safety regulations many buds who are going to blossom and become our nation's assets are losing their precious life. Those experiences influenced to do this study among primary school children, and Investigator felt as a nurse it is the urgent need to assess the knowledge and practice regarding road safety regulations.

## II. MATERIALS AND METHODS USED

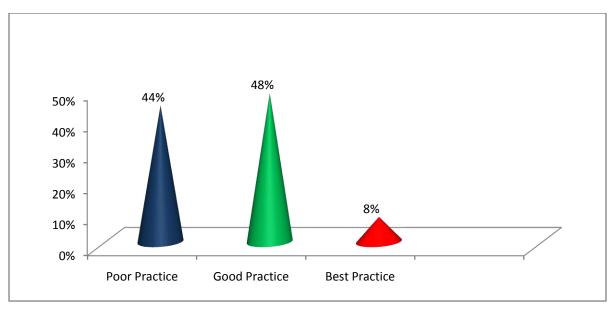
The research approach used in the study was quantitative approach by using cross sectional researchdesign. The study was conducted in primary school of rural community after obtaining formal permission from the authoritywith 50 samples. The samples who met the inclusion criteria were selected by simple random sampling technique. Ten samples were selected from each class of 1<sup>st</sup> standard to 5<sup>th</sup> standard by lottery method. Explained the study in detail and obtained informed consent from the mothers. Data were collected by interview method on one to one basis, collected socio demographic variables followed by assessed the knowledge on road safety regulations by

using multiple choice questions and the practice level was assessed by checklist. Each sample took 15-20 minutes to complete the interview. Confidentiality was maintained throughout the procedure. Collected data were analysed by using descriptive and inferential statistics.

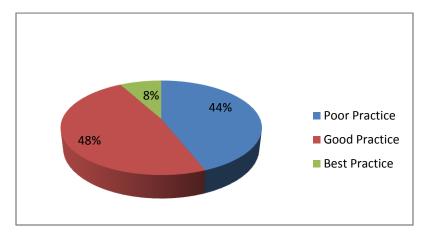
S .No	Socio Demographic Variables	Classification	Frequency	Percentage(%)
1	Age In years	5-6 years	17	34
		7-8 years	20	40
		9-10 years	13	26
2	Sex	Male	26	52
		Female	24	48
3	Education	1 <sup>st</sup> std	10	20
		2 <sup>nd</sup> std	10	20
		3 <sup>rd</sup> std	10	20
		4 <sup>th</sup> std	10	20
		5 <sup>th</sup> std	10	20
4	Mode of transport to school	Own by walk	27	54
		Accompany with parents	17	34
		Two wheeler	6	12
		By school bus	-	0
5	Information obtained through	Parents	27	54
		Teachers	18	36
		Peer group	1	2
		Media	4	8

III. RESULTS Distribution of Socio Demographic Variables of Primary School Children

With regards knowledge regarding road traffic regulations, out 50 samples, 16 (32%) of them had inadequate knowledge, 20(40%) of them had moderately adequate knowledge and 14 (28%) of them had adequate knowledge.the mean score of knowledge level was 12.3 with 4 standard deviation.



Regarding practice on road traffic regulationsOut 50 samples, 22 (44%) of them had poor practice, 24(48%) had good practice and 4 (8%) had best practice. The mean score of practice level was 6 with 1.7 standard deviation.



Correlation co-efficient test reveals that there is a positive correlation between the level of knowledge and level of practice on road safety regulations at the level of P<0.05.Chi square test reveals that there is significant association between the age, education, mode of transport, information obtained through at the level of P $\leq 0.001$ 

#### **IV. CONCLUSION**

The study findings concluded that the primary school children have lack of knowledge on road traffic regulations and few students though they have the knowledge but have poor practice in the day today life. Parent and teachers create awareness regarding road safety regulations by video presentation or conducting exhibition. Prevention of road traffic accidents and road traffic regulations should be incorporated in the curriculum which enables the students to develop advanced knowledge thereby road traffic accident can be prevented.

### V. RECOMMENDATIONS

- A similar study can be undertaken to assess the attitude of the children.
- A similar study can be undertaken on larger scale.
- A comparative study can be done between the urban and rural areas.
- A comparative study can be done between the primary school and high school children.

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