

A Study to Assess the Knowledge Regarding Road Safety among Peri-Urban School Children at Kilachery

Sathyabama¹, Vijayaprasath²

¹Assistant professor, Department of obstetrics and gynecology, Saveetha College of Nursing, SIMATS, Chennai, India

²B.Sc (nursing) IV year, Saveetha College of Nursing, SIMATS, Chennai, India

Abstract: According to world health statistics-WHO 2010 on road traffic injuries, more than a million people were killed on the world's road each year. It is estimated that some 1.2 million people were killed and 50 million injured in traffic collision on the roads around the world each year and was the leading cause of death among school children 6-12 years of age. Presently on the Indian road there is one death every six minutes, which predicted to risk to one death every 3 minutes by 2020. Safety is the condition or the state of the safe, freedom from danger or hazard exemption for the hurt injury or loss. The term road safety is about the risk of a person is being killed or injured while using the road as a pedestrian, cyclist, motorist, or user of public transport. And the road safety practices and focusing on the strategies for the prevention. So the present study is done to assess the knowledge regarding road safety among the peri-urban school children at Kilachery. A descriptive research design was done in urban area of Kilachery. 100 boys were selected for the study who study in St Joseph Boys Higher Secondary School at Kilachery from 6th to 8th standard. Simple random sampling technique was used in selecting the samples. Self-structured questionnaire was used to assess the knowledge regarding road safety among selected peri-urban school children. While comparing the level of knowledge of the study participants that is inadequate knowledge is 50%, moderate knowledge is 49% & adequate knowledge is 1%.

Keywords: Knowledge, Road safety and Peri-urban school children

1. Introduction

Accidents currently form the third leading causes of morbidity and mortality in the developing and developed countries (World Health Organization). Safety is the condition or the state of being safe, freedom from danger or hazard exemption for the hurt injury or loss. The term road safety is about the risk of a person is being killed or injured while using the road as a pedestrian, cyclist, motorist, or user of public transport. And the road safety practices and focusing on the strategies for the prevention of serious injury and death crashes. It is a well-known that the road traffic crashes are one of the world's largest public health and injury prevention problems. Accidents currently form the third leading causes of morbidity and mortality in the developing and developed countries (World Health Organization). 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 2020. Globally road traffic injuries are the leading causes of death among young people aged 15-19 years and second leading cause among 5-14 year olds. Ninety percent of world's road traffic fatalities occur in developing countries. It is in this background that the UN General Assembly has declared 2011-2020 as the "Decade of Action for Road Safety" which seeks to halt the increasing trends in road traffic deaths and injuries worldwide.

According to world health statistics- WHO 2010 on road traffic injuries, more than a million people were killed on the world's road each year. It is estimated that some 1.2 million people were killed and 50 million injured in traffic collision on the roads around the world each year and was the leading cause of death among school children 6-12 years of age. The report also noted that the problem was most severe in developing countries and that simple prevention measures could have the number of deaths. Road traffic accidents remain a real scourge. Despite improved road safety, particularly in developed countries, every year, road accidents claim the lives of 1.3 million people worldwide. Children are active, creative and interested to explore the world. In this process, they are neglecting their safety. Making aware of road safety measures to them is effective in reducing accidents in children. As prevention and educating people is an important function, nurses can teach the students regarding road safety measures and can help in reducing child mortality and morbidity rates to some extent. So, the need for the knowledge on road safety among school children is required.

2. Objectives

- 1) To assess the frequency and percentage distribution of demographic variables among peri - urban school children.
- 2) To assess the knowledge regarding road safety among peri-urban school children.
- 3) To associate the selected demographic variables with knowledge regarding road safety among peri-urban children.

3. Materials and Methods

The research design selected for the study is descriptive research design. This study is conducted in St. Joseph Boys Higher Secondary School at Kilachery. The sample for the study taken is who all are studying 6th to 8th standard at St Joseph Boys Higher Secondary School at Kilachery who fulfill the inclusion criteria. The total study samples will be 100 students. A sample of 100 students who are all studying in St Joseph Boys Higher Secondary School at Kilachery who fulfill the inclusion criteria will be selected using simple random sampling technique. The investigator had developed the tool by going through the literature and with the help of the nursing and medical experts and guides. Questionnaire method is used to assess the knowledge regarding road safety among the peri-urban school children. The tool was prepared by the investigator after reviewing the literature and in consultation with experts. The instrument consists of two sections. Information regarding socio-demographic variables such as age, education of the child, type of family, placement of the child, number of siblings in the family, educational status of the father, educational status of the mother, occupation of the father, occupation of the mother, family's monthly income from the students and then self-structured Questionnaire was used to assess the knowledge of children regarding road safety. Questionnaire was related to knowledge on road safety, purposes, importance, guidelines while crossing the road and going by bus and the traffic signs of the road. The questionnaire consists of 20 multiple choice questions. For correct answer, score was given as one and for the wrong answers, the score was given as zero. The maximum total score was 20. The obtained scores were evaluated as below (0-10), average (11-15), good (16-20). To assess the level of knowledge regarding road safety; scores were categorized as <50% (inadequate knowledge), 50-75% (moderately adequate knowledge), >75% (adequate knowledge). After the questions were verified and validated data collection procedure were made. The main study was conducted at St Joseph Boys Higher Secondary School, Kilachery. The formal permission was obtained from the principal of that particular school. After an introduction and rapport with the children studying in 6th, 7th & 8th standard, purpose of the study was explained to the students. Then, the sample was selected by simple random sampling technique who fulfill the inclusion criteria. The assessment of knowledge was done for 25 students per day on 4 consecutive days. The socio-demographic variables of the study participants is collected and then the self-structured questionnaire is given to the students and allowed them to select the option to assess the knowledge regarding the road safety. Thus, the data was collected. After the data collection procedure, the collected data was tabulated and analyzed using descriptive and inferential statistics. Mean and standard deviation were used to assess the knowledge of road safety among peri-urban school children. Chi-square test was used to associate the socio-demographic variables with the knowledge regarding road safety in peri-urban school children.

4. Results

Table-I. Shows that the level of knowledge of the study participants that is inadequate knowledge is 50%, moderate knowledge is 49% and adequate knowledge.

Table-II Shows that the mean of the knowledge of the students is 10.53 and the standard deviation of the knowledge of the students is 2.174.

Table I: Frequency and percentage distribution of level of knowledge among the peri-urban school children

| Level Of Knowledge | Frequency (N) | Percentage (%) |
|----------------------|---------------|----------------|
| Inadequate knowledge | 50 | 50 |
| Moderate knowledge | 49 | 49 |
| Adequate knowledge | 1 | 1 |

Table II: Frequency and percentage distribution of mean and standard deviation of the scores obtained by the study participants to assess the knowledge regarding road safety

| Knowledge Regarding Road Safety among Peri-Urban School Children | Frequency |
|--|-----------|
| Mean | 10.53 |
| Standard deviation | 2.174 |

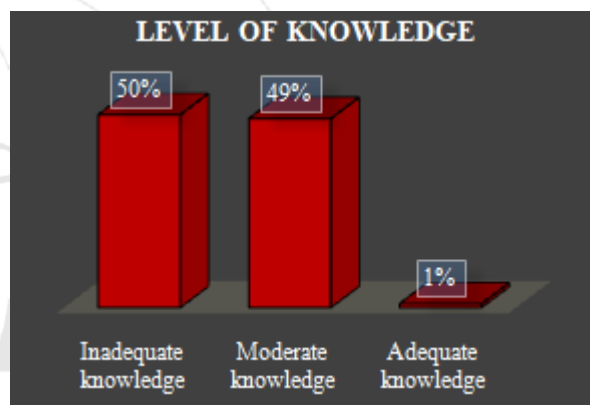


Figure I: This column graph represents the level of knowledge of the study participants: inadequate knowledge is 50%, moderate knowledge is 49% & adequate knowledge is 1%

5. Discussion

The present study is to assess the knowledge regarding road safety among peri-urban school children. The results obtained from the study are the level of knowledge of the study participants: inadequate knowledge is 50%, moderate knowledge is 49% & adequate knowledge is 1%. This study is supported by the study conducted by **Humayun Mirza, et al.**, among the respondents, 58% were males and 90% were between the ages of 9-13 years. Major representation was from classes 4(22%) and 7(21%). Most of the study participants (88%) had driven bicycles while motorbikes were used by 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 signs. The results were associated with the demographic variables and knowledge regarding road safety among peri-urban school children. The table-iv shows that there is significant association between the knowledge regarding road safety and demographic variables such as age, type of family, number of siblings in

the family, educational status of father & mother, occupation of the father & mother and family's monthly income. Also that there is non-significant association between the knowledge regarding road safety and demographic variables such as education of the child and placement of the child.

[10] Humayun M, Seema D: Study of Knowledge, Attitude and Practice Regarding Road Safety among Peri-Urban School Children PJMHS 2013; 7(3):658

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