CERTIFICATE

Certified that the thesis titles "**A study to assess the knowledge and practice on road safety among the primary school children at selected primary schools of Kanyakumari District, Tamil Nadu."** is a bonafide work by Nathia Jeba Dany. K, II Year M.Sc., Nursing student of Christian College of Nursing, Neyyoor submitted in partial fulfillment of requirements of the Master of Science in Nursing under the Tamil Nadu Dr. M.G.R. Medical University, Chennai, March 2011.

Date: **Signature of Principal**

DECLARATION

Investigator, II Year M.Sc., Nursing student of Christian College of Nursing, Neyyoor do here by declare that this thesis, "**A study to assess the knowledge and practice on road safety among the primary school children at selected primary schools of Kanyakumari District, Tamil Nadu."** has not been submitted by me for the award of M.Sc(N), Title or recognition before.

Neyyoor, Investigator

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"I can do all things through Christ which strengthen me". **(Philippians 4:13)**

The journey from the basic search from dissertation up to this bound book is solitary. In a project like this, the investigator requires assistance encouragement and support from many; I am fortune to have an abundance of all the requisites at every step.

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ABSTRACT

A study to assess the knowledge and practice on road safety among the primary school children at selected primary schools of Kanyakumari District, Tamil Nadu in partial fulfillment of the requirement for the degree of Master of Science in Nursing, Christian College of Nursing, Neyyoor, which is affiliated to Dr. M.G.R. University, Chennai.

OBJECTIVES

- To assess the knowledge regarding road safety among primary school children.
- To assess the practice regarding road safety among primary school children.
- To find the correlation between knowledge and practice regarding road safety among primary school children.
- To find out the association between knowledge and selected demographic variables such as age, sex, education of father, education of mother, type of family, residence of children and media of information.
- To find out the association between practice and selected demographic variables such as age, sex, education of father, education of mother, type of family, residence of children and media of information.

HYPOTHESES

All hypotheses were tested at 0.05 level of significance.

- There will be a significant relationship between knowledge of primary school children and selected demographic variable.

- There will be a significant association between practice of primary school children and selected demographic variable.

The study was conducted in schools. The approach was quantitative approach and design was descriptive design. 100 samples were selected by using convenience sampling technique on the basis of inclusion criteria. The knowledge of students was assessed by multiple choice question and the practice was assessed by check list. The data obtained were analyzed in terms of both descriptive and inferential statistics.

SIGNIFICANT FINDINGS

1. Regarding the knowledge score of primary school children 63% of children had moderately adequate knowledge on road safety. The mean knowledge of primary school children was 12.2 ± 2.6.
2. Regarding practice score of primary school children 49% of children had adequate practice on road safety. The mean value for practice level was 10.4 ± 2.7.
3. The data analysis reveals a degree of positive correlation between knowledge and practice on road safety among primary school children.
4. The analysis shows that there was association between knowledge and demographic variables.

CHAPTER – I

INTRODUCTION

It is said that if home is without child
The human being may turn wild
The flowers of different colors are like children'
White. Whitish and black colors are seen often
The smile worn by child remain same and heavenly
We got to enjoy it and accept evenly

- Hasmukh Amathalal

Children are not small adults and childhood is more than just the period before a person is considered to be an adult. Ensuring that every child who is born grows up to fulfill his/her potential is the responsibility of the adults who take care of the child. Children can not vote and legislators. Children account for nearly 40% of the population. India has crossed 1 billion population mark, and is home to 11% of the world's children. Every year, 26 million children children are born in India. India also has the highest numbers of childbirth for any country and accounts for 23% of the world's under 5 death and 34% of the world underweight children (Achar, 1989).

Children between 6 and 12 years of age should have widened their social horizons and beyond the confines of their own home. School children learn to think of themselves as persons in their

own right and may resent limits that parents continue to oimpose on their behavior. Parents need help in understanding the normal growth and development of their child when such conflicts arise (Marlow, 2005).

Accidents are the common unintentional injuries that taken heavy toll of human life and cripple many lives. Road traffic accidents are the most common type of accidents that leads to death of children. On our states these can occur on a pedestrian or a passanger. But most of the time Road traffic Accidents occur to children as pedestrian. Boys between the ages of 5 and 12 years are mostly confronting this type of accidents in our place. Children of this age group are school going and will not able to estimate the speed of vehicles or dangers of traffic while crossing roads. Though the school curriculum emphases the need of road safety, the practical aspects of road safety is road safety is not followed properly (Assuma, 2009).

Accidents represent a major epidemic of non-communicable disease in the present century. They are no longer considered accidental. They are part of the price we pay for technological progress. Accidents have their own national history and follow the same epidemiological patterns as any other diseases – that is, the agent the host and the environment interacting together to produce injury or damage. They occur more frequently in certain age

groups, at certain times of day and week at certain localities. Some people are more prone to accidents than others and susceptibility is increased by the effect of alcohol, other drugs and physiological state such as fatigue (Park, 2010).

Accident is an unplanned, unexpected event leading to injury. It involves a sequence of events which produce unintended injury, death or property damage (Kulkarni, 1998).

Fatal road traffic accidents in childhood constitute a significant public health problem. Young children are extremely vulnerable to such injuries which are vastly preventable. 59 cases of fatal road traffic accidents in children aged below 16 years, autopsied during 1 year period were studied. Males accounted for 83.1% cases with male-female ratio of 4.9. The most common age group involved was 13-16 years. The most frequent victims of road traffic accidents were pedestrians (61%) followed by cyclists (13.6%). More than half of the cases occurred in winter season and majority occurred at 12-4 PM. Children themselves were at fault in majority of cases. Head injury alone was fatal in 72.9% cases. None of the victim received any treatment or first-aid at the site of accident. 72.9% of victims died with in 6 hrs of accident. The study highlights the pattern of fatalities due to road accidents in children

and suggests suitable preventive measures to reduce burden of childhood mortality due to road accidents (Singh, 2001).

Over 1-2 million people will die every year on the world's roads, and between 20 and 50 million suffer non-fatal injuries. In most regions of the world this epidemic of road traffic injuries are still increasing. In the past five years most countries have endorsed the recommendations of world report on road traffic injury prevention which give guidance on how countries can implement a comprehensive approach to improve road safety and reduce the death toll on their roads (WHO, Global status report on Road Safety, 2009).

More than 10,000 persons can be saved every year in India by following road safety precautions. Some of these precautions are use of helmet, use of scooter light during day time, use of proper glass in wind screen, pneumatic door, use of seat belts. The risk of accident related to death in five times higher in two-wheeler riders compared to 1000 drivers (Mahajan, 2006).

Children of primary school age should understand the principle of road safety and the danger of using roads. Some key points to remember include, recognizing, safe places for crossing the road, being careful at all times including play time, wearing

bright clothing during day time, encouraging the use of florescent clothing in poor lighting conditions - armbands or reflective strips on school bags, encouraging good road sense by sharing example (David Cooke, 1996).

Fatal road accidents are a major cause of childhood mortality up to 16 years of age involving mostly males. Children are themselves at fault in majority of cases. To prevent these early childhood deaths, children should be educated about traffic rules. They should be separated from high-speed highways and safe playgrounds should be developed for their recreation. The cyclists should have proper training and should be encouraged to obey traffic rules. Wearing of safety helmets should be made compulsory even for the cyclists. Smaller children should not be left unattended by parents near the roads. Special restraining devices should be installed in cars and buses. Walking should be encouraged in children rather than cycling for good health and safe journey (Aggarwal, 2003).

NEED FOR STUDY

Statistics for the last few years shows that there is a large increase in the number of accidents from year to year. Broadly 30 percent of persons dying in road accidents are below the age of 30

years. This means that the proportion of those dying in the prime of their life is quite large (ABBAS, 1996).

Starting school exposes children to danger on the road more than even before and so safety is more important. They younger they are exposed to this, the better pedestrian or motorist they grow up to be and safer they are on the road (Alan, 2009).

Since the increased incidence of road traffic accidents have becomes a great problem in the community and the investigator developed an interest to find the knowledge and practice on road safety among primary school children. So the investigator selected this study with a view to promote awareness on road safety among primary school children.

STATEMENT OF THE PROBLEM

A study to assess the knowledge and practice on road safety among the primary school children at selected primary schools of Kanyakumari District, Tamil Nadu.

OBJECTIVES

- ❖ To assess the knowledge regarding road safety among primary school children.
- ❖ To assess the practice regarding road safety among primary school children.
- ❖ To find the correlation between knowledge and practice regarding road safety among primary school children.
- ❖ To find out the association between knowledge and selected demographic variables such as age, sex, education of father, education of mother, type of family, residence of children and media of information.
- ❖ To find out the association between practice and selected demographic variables such as age, sex, education of father, education of mother, type of family, residence of children and media of information.

HYPOTHESES

All hypotheses were tested at 0.05 level of significance.

- There will be a significant association between knowledge of primary school children and selected demographic variables.
- There will be a significant association between practice of primary school children and selected demographic variable.

OPERATIONAL DEFINITION

Knowledge

In this study knowledge refers to increased score in the knowledge questionnaire on road safety among primary school children.

Practice

In this study practice refers to follow the rules of safety on roads in the day to day life among primary school children.

Road safety

In this study road safety refers to following measures like stop look and listen, walking the left side on the road while using the road.

Primary school children

In this study primary school children refers to children in the age group of 5 to 11 years studying in the primary school.

ASSUMPTIONS

- Primary school children may have some knowledge regarding road safety.
- Primary school children may differ in their knowledge and practice regarding road safety.

PROJECTED OUTCOME

The study will help the children to become aware of road traffic accidents and practice of road safety measures.

CHAPTER – II

REVIEW OF LITERATURE

This chapter deals with review of literature related to knowledge and practice of primary school children on road safety. Literature review can serve a number of important functions in the research process as well as the important functions for students seeking to develop an evidence based practice.

A literature review helps to lay the foundation for a study and can inspire new research ideas. A literature review also play role at the end of the study when the researchers are trying to make sense of the findings. A literature review provides the readers with a knowledge on the topic and illuminates the significance of the new study.

For the purpose of logical sections the chapter is divided into two parts.

Part – I : Deals with studies on road safety.

Section A : Knowledge regarding road safety.

Section B : Practice regarding road safety.

Section C : Road safety and school children.

Part – II : Deals with conceptual frame work.

Part – I

Section A : Knowledge regarding road safety

Maring and Schagen. (2002) had done a study on "age dependence of attitudes and knowledge in cyclists" in Netherland among 300 school children. The study revealed that the knowledge of school children regarding road safety measures was inadequate. The older cyclists and the 9 to 11 years old, the groups that are most at risk, were deficient regarding knowledge while showing the most positive attitudes.

Dong et al (2010) conducted a study "The Association of road safety knowledge and risk behavior with paediatric road traffic injury in Guanghou", China, among 3747 school children. The study revealed that the children with low and medium road safety knowledge have 1.5 to 3 times of injury compared with students with high road safety knowledge. The study highlighted that more

injury prevention programmes are needed to improve road safety knowledge and reduce risk behaviour.

Zhonghua (2009) had done a study on “evaluation on the effects of education regarding road safety” among 250 students in grade I and grade II from seven junior and senior middle schools in Jinan city. The study revealed that the program on road safety education significantly improved the relative knowledge for middle school students. However, no significant effect was found in the improvement of their behavior. The study revealed that the importance of carrying out newer effective intervention approach in the early stage of childhood.

Ramirez (2007) conducted a study “road safety and drink-driving: the knowledge and opinions of male and female school ages” in Hingkon among 400 school children. The study revealed that the students had obvious deficiency of knowledge concerning important cities drunken driving.

Wallace (2001) had done a study on “children and road safety: increasing knowledge does not improve behavior” in scotland among 120 primary school children. The study showed that increased knowledge did not result in improved traffic behavior. They need to distinguish between children’s road safety and their behavior, particularly for teachers and parents, who may

mistakenly believe that children who know more will be safer on the road.

Section – B : Practice regarding road safety

Puri (2004) had done a study "road safety awareness and practices" among 847 school children in Chandigarh. The report showed that 40% of children lacked correct knowledge of traffic safety rules and around 60% of school children had correct knowledge of risk factors. The study revealed the need for road safety awareness programme among school students.

Klaus (2007) conducted a study "Best practices for road safety" in among 300 school children in Austria. The report showed that 67% of children lacked correct knowledge, 20% of children had adequate knowledge and 13% of school children had moderate level knowledge. The results have been synthesized into3 core products. The hand book for measures at the country level" addresses road safety measures, which can be implemented by member states governments, by regional or local authorities. Measures more or exclusively suitable for implementation at supra-national level were summarized within the "Hand book for measure at "The European Level".

Ogninni (2005) conducted a study on "knowledge, attitude and practice of Nigerian commercial motor cyclists in the use of

crash helmet and other safety measures" among commercial motor cyclists in Nigeria. The report showed that, there were 224 male respondents aged 15-58 years. Their peak age was 25-29 years and mean 35.1; 8.4% had no formal education. 10.3% received formal training but the majority (34.6%) were either trained by self or an acquaintance only 20% applied a crash helmet as known safety device and 23.8% had a helmet on, at the time of study. The majority 67.3% favored in crashes at one time or the other. Most of the crashes occurred with a motor vehicle or most of the accidents with bad roads and failure to observe road signs. They lack adequate knowledge and practice of road safety measures, additionally, bad roads appear to also contribute to frequent crashes. However, the need to enforce all existing laws related to motor cycling is evident.

Section – C : Road safety and school children

Cross and Laughlin (2002) had done a study "child pedestrian prevention project: student results" among 1063 children in Pensylvanio. The study reveals the ability to identify safe and dangerous road-crossing sites and performance on the attention. Tests were found to improve with increasing age. The correct identification of safe/dangerous road crossing sites were related to selective attention and this emphasized that road safety training should take into account the development of these skills in children.

Wen (1998) conducted a study, “Managing non-response rates for the National Child Safety Seat Survey in Canada. The study revealed that high non-participation rates introduced bias into the raw estimates of correct safety seat use. Correct use estimates also varies substantially depending on which criterion for correct use, estimates were higher than when more stringent criteria of child height and weight were applied to estimate rates of correct use. This study identifies the importance of managing high rates of non-response in safety seat observation studies using statistical techniques. The criteria for correct use may provide more accurate estimates of the correct use of safety seats. Studies of child seat use in vehicle may benefit from the use of naturalistic observation to capture non-participants use of child occupant restraints, as it may more accurately estimate the rates of correct use in populations.

Sharma and Chaturvedi (2000) had done a study “Health risk behaviours related to road safety” among adolescent students in South Delhi. The result showed that more than 52.4% reported not always wearing a seat belt. About 72.1% of two wheeler riders reported not always and 23.3% reported never wearing a helmet. Nearly 20% students rode with a driver not possessing a diving license, in the past 30 days. Such ‘road-hazard’ behavior were found to be significantly more in males and in lower-age groups.

Logistic regression analysis revealed that the significant correlates of such behaviours were gender of the respondent and living status of the parents. Almost 77.5% of the respondents were 'at risk' as for as behaviours related to safety on roads are concerned. The results should evoke earnest responses from the government, policy makers and all personnel concerned with adolescent welfare on how best.

Shekar and Reddy (2002) conducted a study 'A five-year Retrospective statistical analysis of road traffic accidents met in school children among two hospitals of Mysore city. The study reported that road traffic accident was the common cause for injuries. Men sustained more injuries compared to women. The injuries were mostly sustained in the age group of 11-40 years. Two wheelers were the most commonly involved compared to other vehicle types. Influence of alcohol at the time of injury was found in about 58% of the patient with facial injuries. Road traffic accidents are the most common cause for injuries.

Akgul (2008) had done a study on children and school pedestrians safety, among school children in Linkoping University. The result showed that age factor generally is flexible but as the child grows older, mobility increases and risks become larger. The risk factors also include the social and economical environment, that children living in good life standards suffer less than those are

not. Education is also crucial on adopting the sense of road safety, on children's perspective. Simulation based studies have proved to be effective in order to draw child's attention to the subject, however it should be combined with field trips to gain a more realistic and solid idea about the matter. Besides, engineering measures rise up as another milestone where roadside and land use planning is important. Traffic calming measures have proved to be effective to warn road users and thus form a safer traffic environment for children.

Hetsen (2004) had done a study, Engaging policy makers in road safety research in Malaysia. The study reported that road traffic injuries are a growing public health problem that must be addressed through evidence-based interventions including policy-level changes such as the enactment of legislation to mandate specific behaviours and practices. Policy makers need to be engaged in road safety research to ensure that road safety policies are rounded in scientific evidence. The study of collaborative intervention trial for the prevention of motorcycle crashes and deaths in Malaysia serves as a model for policy engagement by road safety and injury researchers. The analytic description of this research process in Malaysia demonstrates that the framework, through its stages, can be used as a tool to guide the integration of

needed research evidence into policy for road safety and injury prevention.

Hung and King (2005) had done a study on road safety strategies in Hong Kong University. Through the analysis, padestrains and motorcyclists are identified to be the highest risk groups in traffic accidents. The road safety works in these administrations observed that vision, target, evaluation, quantitative modeling and tending are the common weakness in developing road safety strategy in these administrations. In order to improve accident records and develop a road safety strategy towards the advanced stages, it is recommended that the stakeholders can explore in areas such as establishing a data system, safety performance indicators, exploring funding sources, upgrading in trauma services and conducting researches in a border area.

Mulla and Misiri (2004) conducted a study, “Physical trauma experience among 217 school children in Periurban Blantyre, Malauri. Eight of them reported to have ever been hit by a motor vehicle, 87 had witnessed a road accident where a pedestrian had been hit and 83 had witnessed a pedestrian having been hit by a motor vehicle. Of those that reported to have ever been hit by motor vehicle 2 reported that they had been hospitalized as a result of injury, 41.9% of the study participants were able to report the

correct procedure of crossing the road despite the fact that the majority 80% reported having been taught road safety at home or school. Through this study, many school children in Blantyre, Malauri have been exposed to trauma either involving themselves or someone they observed. Prevention, including education, supervisor and management of trauma must receive the necessary attention they deserve in terms of resources, survillence and impact mitigation.

Rathinam and Bansal, (2004) conducted a study 'self-reported motor cycle riding behavior among school children in India. A questionnaire was used to evaluate those factors among 1760 subjects in 38 schools. Fifteen percent of subjects had an accident while riding motor cycle. Most of the behavioural and all the non behavioural factors have a statistically significant influence on accident proneness. It also explain how these children behaviourally take up adult roles and seek adult risk taking attitudes. The implications of child motorcycle rider upon children themselves and on the society are discussed for a great discourse on road safety motorcycle riding policy and to highlight the behavioural and non-behavioural factors that are associated with traffic accidents.

Hoque (2004) conducted a study of the "road to road safety" in Bangaladesh. The study reported that nearly 82% were involved as pedestrians with the dominant age group of 5-10 years. Indeed,

about one-third of the total pedestrian totalities are children under the age of 15 years. They are the dominant age group of pedestrian fatalities. The female child pedestrians are disproportionately higher than the male child pedestrians. The risk to children in the traffic situation is greatly increased today than in the past. Modern technological developments have imposed greater pressure on today's children to adapt to new situations at home, at school and most of all on our roads.

CONCLUSION

The above mentioned facts and studies helped the investigator to understand about the assessment important road safety measures carried out by school children. This will help the school children to practice the road safety measures.

CONCEPTUAL FRAME WORK

Conceptual framework formalizes thinking process, so that others may read and know the frame reference, based on research problem. The conceptual frame work also enlighten the investigation to read relevant questions on the phenomen a under study.

The conceptual framework for this study was derived from 'Rosenstrok's Becker and Maiman's Health Belief Model.

- Individual perception
- Modifying factors
- Likelihood of action

Individual perception

The individual perception may include the perception of the school children regarding the increased susceptibility to road traffic accidents.

Modifying factors

The modifying factors like demographic characteristics of the children like age, sex, educational status of father, educational

status of mother, type of family, residing of children and media of instruction, perceived threat of the effects of road traffic accidents and cues to action which include television, radio, news paper, poster, films and accidents met by family members and others may modifies the behavior of the school children.

Likelihood action

The individual perception of the benefits, perceives threat and the modifying factors may results in improvement of the knowledge of the children regarding safety measures which interm which promote practice of road safety measures in children.

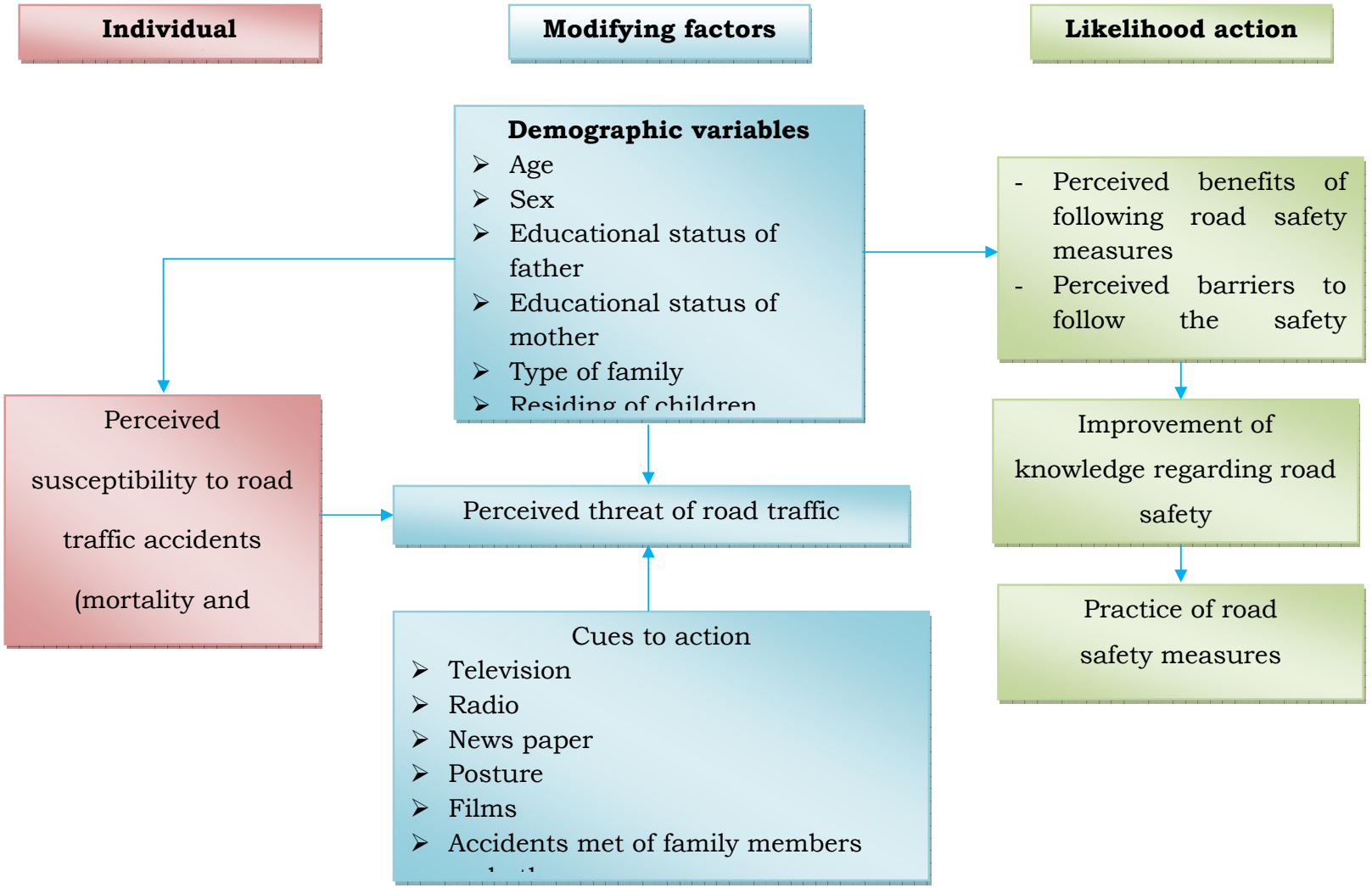


FIG. 1 ROSENSTOK'S BECKER AND MAIMAN'S HEALTH BELIEF MODEL. (1975)

CHAPTER – III

RESEARCH METHODOLOGY

Research methodology involves orderly procedures by which the researcher starts from an initial identification of a problem to its conclusion (Sharma, 1990).

Methodology of research indicate the general pattern of organizing the procedure for gathering valid and reliable data. The investigator described various phases of the study, through methodology.

This chapter provides a brief description of different steps taken to conduct the study. It includes the research approach, the research design, the setting, the sampling technique, data collection procedure, pilot study and plan for data analysis.

RESEARCH APPROACH

The aim of this study is to assess the knowledge and practice on road safety among primary school children. Quantitative approach was used for this study.

RESEARCH DESIGN

Research design is the conceptual structure within which research is conducted. Research design facilitates the smooth

sailing of the various research operation, thereby making research as efficient as possible, yielding maximum information with minimal expenditure of effort, time and money. A descriptive research design was adopted for the study.

VARIABLES

Variables are the inherent characteristics of research subjects (Polit. 2008).

The study variables were knowledge and practice of road safety among primary school children.

SETTING OF THE STUDY

Setting is the physical location and condition in which data collection takes place in study (Polit, 2008).

The setting for the study is Government primary school, Attoor and Government primary and middle school, Villuniconam.

POPULATION

Population is the entire set of individuals or objects, having some common characteristics, some time referred to as universe (Polit, 2008).

The target population consisted of all the primary school children between the age group of 5 to 11 years of the selected rural primary schools.

SAMPLE

Sample refers to a fraction or portion of the elements in a universe drawn out deliberately in a planned representative manner for studying interested characteristics of a larger group of population (Polit, 2004)

In this study, primary school children who fit into the criteria were selected as samples.

SAMPLE SIZE

Sample size is the total number of study participants participating in a study (Polit, 2008)

The sample size of this study was 100 primary school children.

SAMPLING TECHNIQUE

It is the process of selecting a portion of the population to represent the entire population. Convenience sampling entails using the most conveniently available people as study participant (Polit, 2008).

Convenience sampling technique was adopted for this study.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria

Primary school children

- between the age group of 5 to 11 years.
- who are present at the time of study.

Exclusion criteria

Primary school children

- who do not wish to participate
- who are not able to read and write Tamil.

RESEARCH TOOLS

The tool consisted of demographic variables, structured questionnaire and check list to assess the practice to identify knowledge and practice road safety measures among primary school children.

DESCRIPTION OF THE TOOL

Section - I

It consisted of demographic data which includes age, sex, education of the father, educational status of mother, type of family, residence of children and media of instruction.

Section – II

It consisted of 20 structured questionnaire to assess the knowledge level. The scoring ranges from.

0 – 50 : Inadequate

51 – 75 : Moderate

76 – 100 : Adequate

Section – III

It consisted of 20 checklist to assess the practice level. The scoring ranges from

0 – 50 : Inadequate

51 – 75 : Moderate

76 – 100 : Adequate

CONTENT VALIDITY

The structured questionnaire was prepared for interviewing the subjects and the prepared tool was given to experts for content validity and suggestions from the experts were taken to finalize the tool.

RELIABILITY

Reliability is the degree of consistency of dependendability with which an instrumental measures the altribute it is designed to measures (Polit, 2008).

The reliability of the tool was elicited by using test-retest method. The interval coefficient was calculated using Karl Pearson's method and 'r' value was 0.7 which was highly positively correlated. Therefore the instrument was found to be reliable.

PILOT STUDY

Pilot study is a small preliminary investigation of the same general character of the study which is designed to acquaint the investigator with problems that can be corrected in preparation for the larger research project.

The pilot study was conducted for a period of 1 week after getting permission from the Head Master of Government primary school, Attoor among ten samples.

The investigator introduced self and explained about the nature. The study and obtained consent from the authorities and the students. A convenient time and data was fixed and 20 multiple choice questions on knowledge and 20 check list on practice, a time limit of 45 minute was given to complete the questionnaire. The data collected from subjects were grouped and analysed by using descriptive and inferential statistics. The pilot study revealed, that it was feasible to continue the main study.

DATA COLLECTION PROCEDURE

Data was collected for a period of six weeks. Data collection was done for a period of 6 weeks. The purpose of the study was explained to the concerned authorities of the school. The headmistress of the both schools and the class teachers of the respective classes were approached by the investigator. The investigator introduced self and explained about the nature of the study and obtained consent from the authorities and the students. A convenient time and date was fixed and informed to the participants. As there were 20 questions on knowledge and 20 checklist on practice, a time limit of 45 minutes was given to complete the questionnaire.

DATA ANALYSIS

The data collected from subjects were grouped and analysed by using descriptive and inferential statistics. The demographic characteristic study of subjects were analyzed by mean and percentage. The association between the demographic variables were analysed by chi-square test.

DATA COLLECTION PROCEDURE

Since no problem was faced during pilot study, same method of data collection was used for final study. Data was collected

within the given period of six weeks. A written permission was obtained from each school's Headmaster. After a self introduction about the researcher and the study, the data was collected from the samples in Attoor. The samples were co-operative and no problem was encountered.

PROTECTION OF HUMAN RIGHTS

Pilot study and data collection was done after the approval of the dissertation committee. Permission was obtained from the concerned authorities of the schools to conduct the study. Consent was obtained from the study subjects and confidentiality of the data was assured.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data collected from 100 primary school children to assess the knowledge and practice on selected rural primary schools in Kanyakumari District.

The term analysis refers to the computation of certain measures along with searching for pattern of relationship that exists. The data after collection has to be processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research plan.

Descriptive and inferential statistics were used for analyzing the data on the basis of objectives of the study. The interpretation has been tabulated and organized as follows.

Section I : Demographic variables of primary school children.

Section II : Assess the knowledge regarding road safety

Section III : Assess the practice regarding road safety.

Section IV : Correlation between knowledge and practice regarding road safety.

Section V : Association between knowledge and selected demographic variables.

Section VI : Association between practice and selected demographic variables.

Statistical Analysis

The knowledge and practice regarding road safety of primary school children were assessed interms of percentages. The relationship between the knowledge and practice was analysed by pearson correlation coefficient. The association between the knowledge and practice with demographic variables were analyse by χ^2 (chi-square) test. The alone statistical procedures were performed by the statistical package namely S.P.S.S (13.0). The

level of significant was 5%. the P value P<0.05 was considered as significant.

SECTION – I

DEMOGRAPHIC VARIABLE OF PRIMARY SCHOOL CHILDREN.

TABLE 1 : DESCRIPTION OF THE PRIMARY SCHOOL CHILDREN.

The table describes subjects primary school children with respect to demographic characteristics such as age, sex, father's education, mother's education, family type and media of information.

TABLE 1 : PRIMARY SCHOOL CHILDREN DESCRIBED ACCORDING TO THEIR DEMOGRAPHIC VARIABLES.

(N=100)

S.No	Demographic variables	No	Percentage (%)
1.	**Age**		
	6 years	11	11.0
	7 years	11	11
	8 years	14	14
	9 years	18	18
	10 years	20	20
	11 years	26	26
2.	**Sex**		
	Males	53	53
	Females	47	47
3.	**Education of Father**		
	Illiterate	31	31
	Primary	50	50
	Higher secondary	8	8
	Graduates	11	11
4.	**Education of Mother**		
	Illiterate	24	24
	Primary	57	57
	Higher secondary	11	11
	Graduates	8	8
5.	**Type of family**		
	Nuclear	61	61
	Joint	39	39
6.	**Residence of children**		
	With parent	82	82
	With Guardian	18	18
7.	**Media of information**		
	Television	64	64
	News paper	9	9
	Radio	25	25
	Postures	2	2

Regarding the age group, 11% of school children were in 6 years, 11% of were in 7 years, 14% of were in 8 years, 15% of were in 9 years, 20% were in 10 years and 26% were in 11 years.

Regarding the sex 53(53%) school children were males, and 47(47%) school children were females.

Regarding the educational status of the father, 31(31%) were illiterates, 50(50%) studied upto primary school, 8(8%) had higher secondary education and 11(11%) of were under Graduates.

Regarding the educational status of the mothers 24(24%) were illiterates, 57(57%) of mothers have completed primary school education, 11(11%) have completed higher secondary education and 8(8%) of mothers were graduates.

Regarding the type of family of the primary school children, 61(61%) belonged to nuclear family and 39% belonged to joint family.

Regarding residence of children 82(82%) were residing with parents and 18(18%) were residing with guardians.

Regarding the media of information, the television was playing a major role, since 64% of children had got the information. From it the other medias were radio (25%), newspaper 9% and postures 2%.

FIG - 2 : PERCENTAGE DISTRIBUTION OF PRIMARY SCHOOL CHILDREN AGE IN YEARS

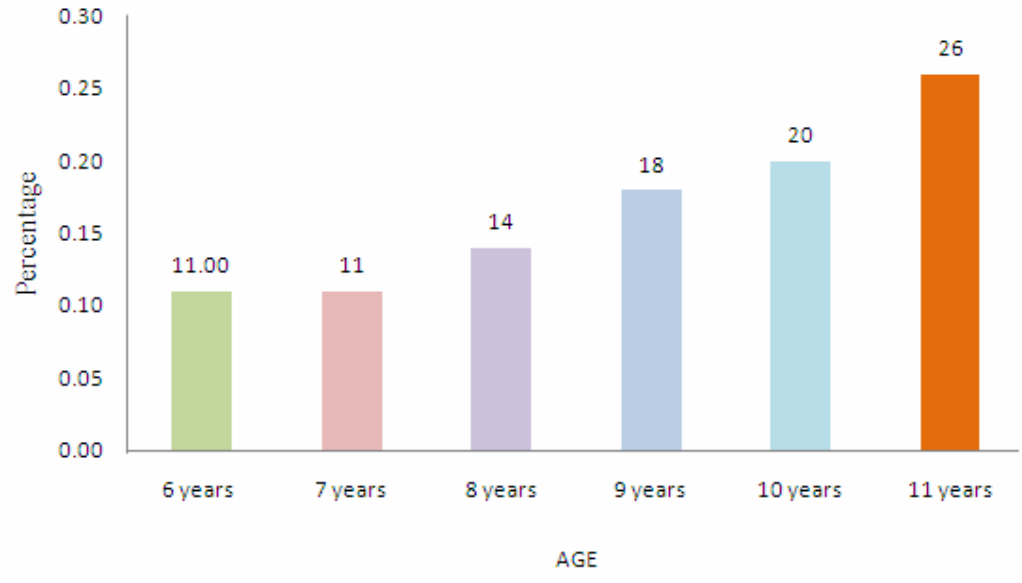


FIG - 3 : PERCENTAGE DISTRIBUTION OF PRIMARY SCHOOL CHILDREN SEX.

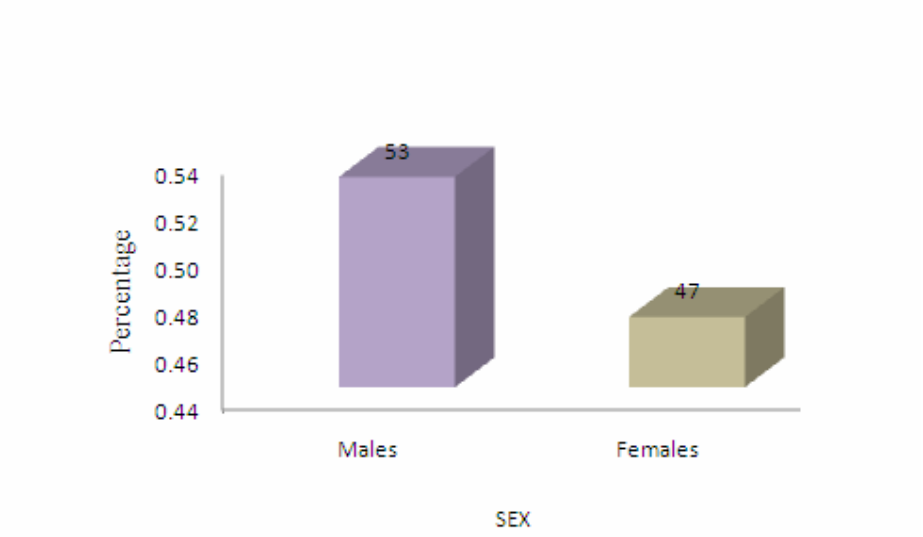


FIG - 4 : PERCENTAGE DISTRIBUTION OF PRIMARY SCHOOL CHILDREN EDUCATION OF FATHER.

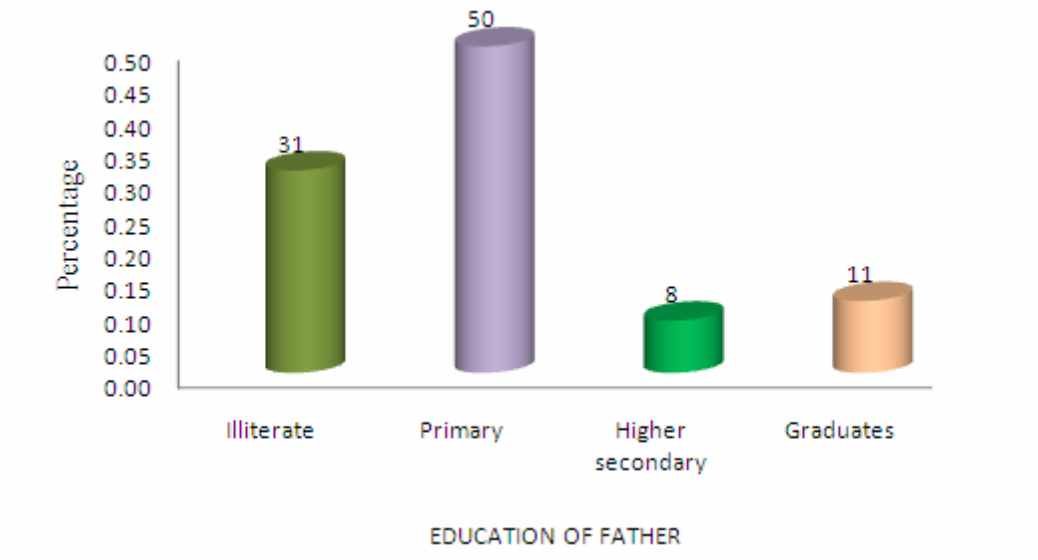


FIG - 5 : PERCENTAGE DISTRIBUTION OF PRIMARY SCHOOL CHILDREN EDUCATION OF MOTHER

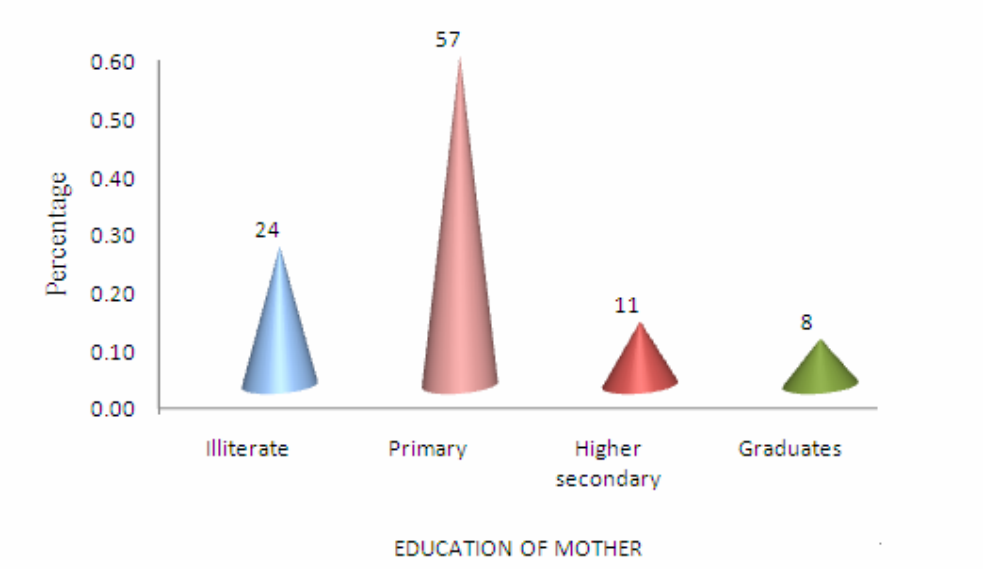


FIG - 6 : PERCENTAGE DISTRIBUTION OF PRIMARY SCHOOL CHILDREN TYPE OF FAMILY.

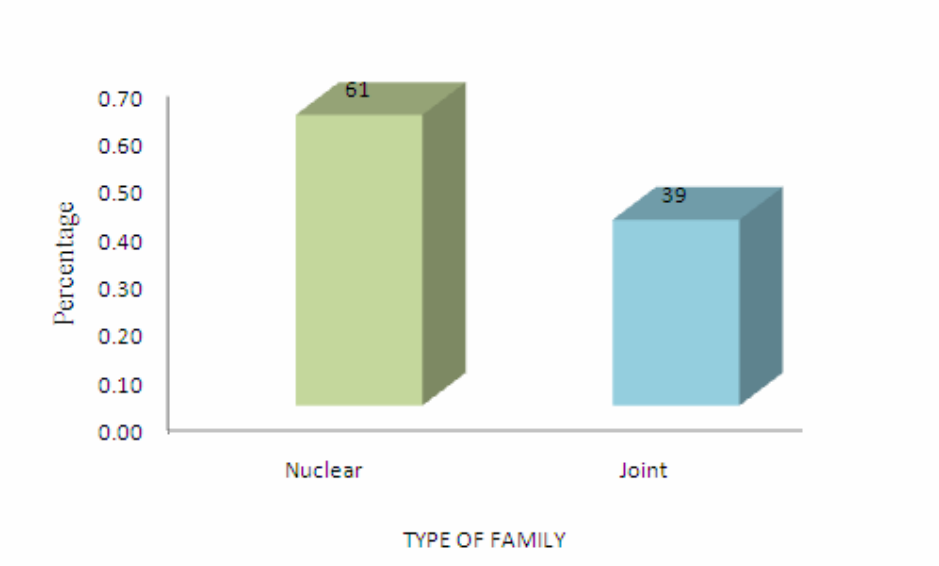


FIG - 7 : PERCENTAGE DISTRIBUTION OF PRIMARY SCHOOL CHILDREN RESIDENCE OF CHILDREN.

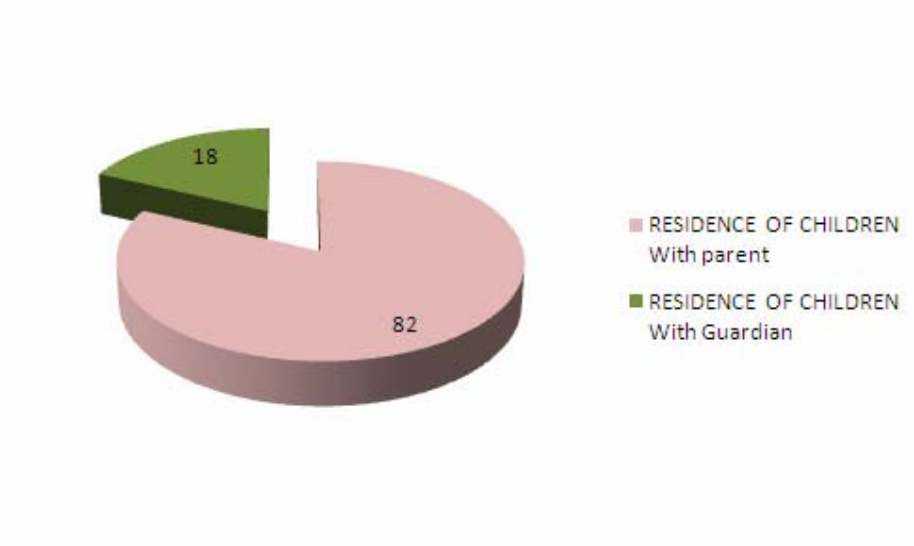
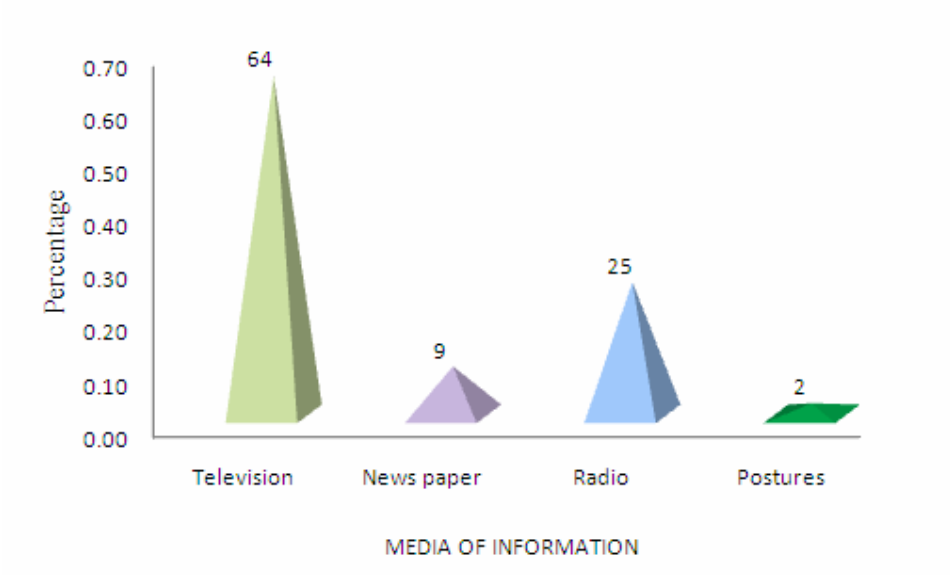


FIG - 8 : PERCENTAGE DISTRIBUTION OF PRIMARY SCHOOL CHILDREN MEDIA OF INFORMATION



SECTION – II

ASSESSMENT OF KNOWLEDGE OF ROAD SAFETY

The road safety knowledge was assessed by classifying the score into three categories namely adequate knowledge, moderate knowledge and inadequate knowledge.

TABLE - 2 : ASSESS THE KNOWLEDGE REGARDING ROAD SAFETY.

Scores	Percentage of scores	Level of knowledge	No. of children	Percentage of children
0 – 10	0 – 50	Inadequate	28	28%
11 – 15	51 – 75	Moderate	63	63%
16 – 20	76 – 100	Adequate	9	9%
Total			**100**	**100**

The above table 2 explains the assessment of knowledge regarding road safety of primary school children. It was found that among the 100 children 28 had inadequate knowledge, 63 had moderate knowledge and only 9 had adequate knowledge.

SECTION – III

ASSESS THE PRACTICE REGARDING ROAD SAFETY

TABLE - 3 : ASSESS THE PRACTICE REGARDING ROAD SAFETY

Scores	Percentage of scores	Level of practice	No. of children	Percentage of children
0 – 10	0 – 50	Inadequate	47	47%
11 – 15	51 – 75	Moderate	49	49%
16 – 20	76 – 100	Adequate	4	4%
Total			**100**	**100**

Table 3 describe the practice of road safety described measures in the primary school children. It was found that 47% of children were following the safety measures, 49% were practicing moderately and only 4% were practicing to safety measures adequately.

The knowledge and practices were described in terms of percentage. The relationship between them was assessed by correlation coefficient (χ).

SECTION – IV

CORRELATION BETWEEN KNOWLEDGE AND PRACTICE OF ROAD SAFETY.

TABLE - 4 : CORRELATION BETWEEN KNOWLEDGE AND PRACTICE OF ROAD SAFETY.

Variables	Mean	S.D	Relationship between knowledge with practice	Significance	χ^2	Determination of practicing knowledge
knowledge	12.2	2.6	0.921	P<0.01	0.848	84.8%
Practice	10.4	2.7				

The mean knowledge and practice regarding road safety of primary school children were 12.2 ± 2.6 and 10.4 ± 2.7 respectively as shown in the above table 4. The knowledge and practice regarding road safety was positively correlated (χ=0.921, n=100 and P<0.01).

SECTION – V

ASSOCIATION BETWEEN KNOWLEDGE AND SELECTED DEMOGRAPHIC VARIABLES

The level of knowledge of road safety was associated with the selected demographic variables like age, sex, educational status of father, education of mother, type of family, residence of children and media of information.

TABLE - 5 : ASSOCIATION BETWEEN KNOWLEDGE AND SELECTED DEMOGRAPHIC VARIABLES.

Demographic variables	No. of children with				χ^2	df	Significant
	Inadequate knowledge	Moderate knowledge	Adequate knowledge	Total			
Age							
6 years	5	5	1	11	8.791	10	P>0.05
7 years	4	7	0	11			
8 years	4	9	1	14			
9 years	3	11	4	18			
10 years	4	15	1	20			
11 years	8	16	2	26			
Sex							
Male	17	34	2	53	4.115	2	P>0.05
Female	11	29	7	47			
Education of father							
Illiterate	15	14	2	31	31.655	6	P<0.001
Primary	12	37	1	50			
Higher secondary	0	7	1	8			
Graduates	1	5	5	11			
Education of mother							
Illiterate	9	14	1	24	29.942	6	P<0.001
Primary	17	37	3	57			
Higher secondary	1	9	1	11			
Graduates	1	3	4	8			

Demographic variables	No. of children with				χ^2	df	Significant
	Inadequate knowledge	Moderate knowledge	Adequate knowledge	Total			
Type of family							
Nuclear	16	42	3	61	3.921	2	P>0.05
Joint	12	21	6	39			
Residence of children							
With parents	25	50	7	82	1.412	2	P>0.05
With guardian	3	13	2	18			
Media of information							
Television	17	41	6	64	9.660	6	P>0.05
News paper	2	4	3	9			
Radio	8	17	0	25			
Postures	1	1	0	2			

The above table 5 states the associations of knowledge with the age of the primary school children regarding road safety. The results revealed that there was no significant association of knowledge and practice with age (P>0.05).

Regarding the sex of primary school children, no association was found between knowledge and sex (P>0.05).

Regarding educational status of father of primary school children, the association shown in the above table 5 revealed that the knowledge of road safety was very highly associated with father's education level.

Regarding mother's educational level, there was statistically very highly significant association between mother's education with knowledge of road safety (P<0.001).

Regarding the type of family of primary school children. The result reveal that there was no significant association between the type of family with knowledge.

Regarding the residence of children, there was no significant association between the residence of children and knowledge (P>0.05).

The media of information regarding the knowledge of primary school children regarding road safety were associated with knowledge. The results on the above shows that there was no association between the media of information and knowledge (P>0.05).

SECTION – VI

ASSOCIATION OF PRACTICE WITH SELECTED DEMOGRAPHIC VARIABLES

The level of practice of road safety was associated with the selected demographic variables like age, sex, educational status of the father and mother, type of family, residence of children and media of information.

TABLE - 6 : ASSOCIATION OF PRACTICE WITH SELECTED DEMOGRAPHIC VARIABLES.

Demograp	No. of children with	χ^2	df	Significa

	Inadequate practice	Moderate practice	Adequate practice	Total			
Age							
6 years	8	3	0	11			
7 years	7	4	0	11			
8 years	7	7	0	14	18.125	10	P>0.05
9 years	4	11	3	18			
10 years	11	8	1	20			
11 years	10	16	0	26			
Sex							
Male	27	25	1	53	1.709	2	P>0.05
Female	20	24	3	47			
Education of father							
Illiterate	24	7	0	31			
Primary	22	27	1	50			
Higher secondary	0	8	0	8	39.675	6	P<0.001
Graduates	1	7	3	11			
Education of mother							
Illiterate	15	9	0	24			
Primary	28	28	1	57			
Higher secondary	3	8	0	11	30.695	6	P<0.001
Graduates	1	4	3	8			
Typed of family							
Nuclear	29	30	2	61	0.214	2	P>0.05
Joint	18	19	2	39			
Residence of children							
With parents	40	38	4	82	1.842	2	P>0.05
With guardian	7	11	0	18			
Media of information							
Television	28	33	3	64			
News	3	5	1	9	4.276	6	P>0.05

Demographic variables	No. of children with				χ^2	df	Significant
	Inadequate practice	Moderate practice	Adequate practice	Total			
paper							
Radio	15	10	0	25			
Postures	1	1	0	2			

The practice was associated with the demographic variables like age, sex, educational status of father and mother, type of family, residence of children and media of information.

The above table 6 states the association of practice with the primary school children regarding road safety. The results revealed that there was no significant associations of practice with age ($P>0.05$).

Regarding the sex of primary school children, there was no associations found between practice and sex ($P>0.05$).

Regarding the educational status of father of primary school children, the practice was very highly associated with the father's education ($P<0.001$).

Regarding the mothers educational status of primary school children the results revealed that there was a statistically very highly significant association between mother's education and practice of road safety ($P<0.001$).

Regarding the type of family of primary school children, the result reveal that there was no significant association between the type of family with practice.

The stated association into the above table 6 reveals that there was no significant association between the residence of children with practice (P>0.05).

Regarding the media of information of primary school children, the results of the above table 6 show that there was no association of media of information with practice (P>0.05).

CHAPTER – V

DISCUSSION

This chapter discuss the findings of the study derived from statistical analysis with its pertinence to the objectives.

The first objective of the study was to assess the knowledge regarding road safety among primary school children.

It was evident that 9% of children had adequate knowledge, 63% had moderate knowledge and 28% had inadequate knowledge.

The study reveals maximum 63% of primary school children has moderately adequate knowledge.

The second objective was to assess practice regarding road safety among primary school children.

Data finding in the table 6 reveals the practice of primary school children.

It was evident that, 47% of primary school children are practicing adequately. The prevalence of moderate and inadequate practice were 49% and 47% respectively.

The study reveals that 49% of the primary school children had adequate practice on road safety.

The third objective was to find the correlation between knowledge and practice regarding road safety among primary school children.

The data analysis reveals a degree of positive correlation between knowledge and practice of road safety among primary school children.

The fourth objective is to find out the association between knowledge and selected demographic variables.

The study reveals the association between knowledge and demographic variable.

The mean age of the study subjects was 9.03 ± 1.7 years. The median age was 9 years. The sex wise participation of children was more or less equal (M-53% and Fe-47%). The education status of father as well as mother were also significant. The nuclear family children were more (61%) than the joint family children (39%). The children residing with parents (82%) was significantly greater than the children who were reside with guardians. The television was the powerful media (64%) in disseminating the messages to the children than the other medias like news paper (9%) radio (25%) and postures (2%).

The fifth objective is to find the association between practice and selected demographic variables.

The mean practice of road safety measures was 10.4 ± 2.7. There was perfect positive relationship between the knowledge with practice (χ=0.921 n=100 and P<0.01). The knowledge regarding road safety determined (84.8%) practice of road safety by the primary school children.

From the above results and discussions, the educational level of the parents was one of the most important factors of determinant of knowledge and practice of primary school children regarding road safety.

RESEARCH HYPOTHESES

The first hypotheses framed was that, there will be a significant relationship between knowledge of primary school children and selected demographic variables.

The study revealed that there was a relationship between the knowledge and practice of road safety among primary school children.

The second hypothesis framed was that, there will be significant association between practice of primary school children and selected demographic variables.

The study revealed that there was no significant association of knowledge with age, type of family, residence of children and media of information. There were very high associated with education of father and mother and sex.

The third hypothesis framed that there is no association between practice of road safety among primary school children in selected rural primary school.

The study revealed that there was no association between practice of road safety among school children and the demographic variables like age, type of family, residence of children and media of information.

CONCLUSION

The study findings reveals that there was a relationship between the knowledge with practice of road safety among primary school children.

There was no significant association between knowledge of road safety among primary school children and selected demographic variables.

There was no association between practice of road safety among primary school children and selected demographic variables.

CHAPTER – VI

SUMMARY AND RECOMMENDATION

This chapter deals with the summary and implications of the study in the field of nursing. This also presents the recommendations for future research.

The purpose of the study is to assess the knowledge and practice of road safety among primary school children. The samples were 100 primary school children from primary schools.

The data was analyzed and interpreted in terms of objectives and research hypothesis. Descriptive and inferential statistics were used for data analysis.

The tool used for the study was a questionnaire and check list. It consists of three parts. Part I consisted of demographic data of primary school children, part II consisted of multiple choice questions, to assess the knowledge of primary school children regarding road safety, part III consisted of check list to assess practice.

The investigator has distributed the questionnaire after giving instructions and it was filled by the primary school children. Then the practice was assessed by the investigator and it was filled by the primary school children by means of a check list.

The study revealed the knowledge and practice of road safety among primary school children. It was found that most of the primary school children were having moderate knowledge regarding road safety. The study also reveals that the primary school children moderately practing the road safety measures on the road.

SIGNIFICANT FINDINGS OF THE STUDY

5. Regarding the knowledge score of primary school children 63% of children has moderately adequate knowledge on road

safety. The mean knowledge of primary school children was 12.2 ± 2.6.

6. Regarding practice score of primary school children 49% of children had adequate practice on road safety. The mean value for practice level was 10.4 ± 2.7.
7. The data analysis reveals a degree of positive correlation between knowledge and practice on road safety among primary school children.
8. The analysis shows that there was and some association between knowledge and demographic variables.

IMPLICATIONS

The study has several implications for the following fields.

IMPLICATION FOR NURSING PRACTICE

1. Health is not the concern of health care system alone, both in schools and in community areas.
2. Thus gives a great insight to community health nurse and motivates them to arrange health educational programme and there by helps to reduce the morbidity and mortality due to road traffic accidents by improving knowledge of primary school children and teachers.

IMPLICATION FOR NURSING EDUCATION

1. The nursing students must actively participate in educating primary teachers regarding road safety who in term will educate the children.
2. The nurse should be equipped with upto date knowledge on road safety of children. So that they can be able to impart appropriate knowledge.

IMPLICATION OF NURSING ADMINISTRATION

In the administrative level periodic conferences, seminars, symposium, exhibition can be arranged regarding road safety of children. School health program has to be focused on the identification and management of children regarding road safety.

IMPLICATIONS OF NURSING RESEARCH

It is essential to identify the present level of knowledge regarding road safety among primary school children, to know what is the required information. This study can be a baseline for the future studies to build upon.

RECOMMENDATIONS

Comparative study can be done between effectiveness of self instructional module versus structured teaching programme.

A descriptive study can be done to assess the knowledge among parents of primary school children

CONCLUSION

The study revealed that there was relationship between knowledge and practice of road safety among primary school children.

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APPENDIX – I A

COPY OF LETTER SEEKING PERMISSION TO CONDUCT RESEARCH STUDY

CHRISTIAN COLLEGE OF NURSING
C.S.I. KANYAKUMARI DIOCESE
(Affiliated to the Tamil Nadu Dr. M.G.R. Medical University, Chennai)
Approved by Indian Nursing Council New Delhi and Tamil Nadu Nurses and Midwives Council, Chennai
NEYYOOR - 629 802
KANYAKUMARI DISTRICT, TAMIL NADU, INDIA.

Principal
Prof. (Mrs.) SANTHI APPAVU, M.Sc.(N),M.Phil.
Phone : Per : 04651-221599, Off : 04651-221411

Fax : 04651-224382
E-mail : ccn.neyyoor@yahoo.com
Web : www.ccnneyyoor.org

Date : **26.04.20**

60/M.Sc.(N)20

To

The Head Master,
Government Primary School,
Attoor.

Respected Sir,

Sub: Requisition for getting permission to do research study **to assess**

the knowledge and practice on road safety among the primary school children at selected primary schools of Kanyakumari District, Tamil Nadu

This is to introduce Ms. K. Nathia Jeba Dany, II year M.Sc. Nursing student of this College. She is to conduct a research project which is to be submitted to the Tamil Nadu Dr. M.G.R. Medical University, Chennai in partial fulfillment of University requirements for the award of M.Sc. degree in Nursing.

Topic:

A study to assess the knowledge and practice on road safety among the primary school children at selected primary schools of Kanyakumari District, Tamil Nadu

This student is in need of your esteemed help and co-operation as she is interested in conducting her research study in your well esteemed school.

This is to request you to kindly extend necessary facilities to her work on her proposed study during the month of May and June 2010.

Thanking you

Yours Faithfully,

PRINCIPAL
CHRISTIAN COLLEGE OF NURSING
NEYYOOR - 629802
K.K.DIST., TAMILNADU

APPENDIX – I B

COPY OF LETTER SEEKING PERMISSION TO CONDUCT RESEARCH STUDY

CHRISTIAN COLLEGE OF NURSING
C.S.I. KANYAKUMARI DIOCESE
(Affiliated to the Tamil Nadu Dr. M.G.R. Medical University, Chennai)
Approved by Indian Nursing Council New Delhi and Tamil Nadu Nurses and Midwives Council, Chennai
NEYYOOR - 629 802
KANYAKUMARI DISTRICT, TAMIL NADU, INDIA.

Principal
Prof. (Mrs.) SANTHI APPAVU, M.Sc.(N),M.Phil.
Phone : Per : 04651-221599, Off : 04651-221411

Fax : 04651-224382
E-mail : ccn.neyyoor@yahoo.com
Web : www.ccnneyyoor.org

Date : **26.04.20**

61/M.Sc.(N)20

To

The Head Master,
Government Primary and Middle School,
Villuniconam.

Respected Sir,

Sub: Requisition for getting permission to do research study **to assess**

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Thanking you

Yours Faithfully,

PRINCIPAL
CHRISTIAN COLLEGE OF NURSING
NEYYOOR - 629802
K.K.DIST., TAMILNADU

APPENDIX – I C

LETTER SEEKING EXPERTS OPINION FOR VALIDITY OF TOOL

From

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To

Respected Sir / Madam,

I am doing II year M.Sc Nursing in Christian College of Nursing, Neyyoor. As a partial fulfillment of the course, I have chosen a topic of my interest **"A study to assess the knowledge and practice on road safety among the primary school children at selected primary schools of Kanyakumari District, Tamil Nadu."** I have prepared demographic data, multiple choice questionnaire to assess knowledge and check list to assess practice of primary school

children regarding road safety. I hereby kindly request you to evaluate the tool based on the evaluation criteria. Your opinion and suggestions will help me to the successful completion of my study.

Thanking You,

Yours Truly,

APPENDIX – II

EVALUATION CRITERIA CHECK LIST FOR TOOL VALIDATION

Instruction

The expert is requested to go through the following criteria for evaluation of questionnaire and check list. Three columns are given for response and a column for remarks. Kindly place a tick mark in the appropriate column and give remarks.

Interpretation of columns

Column I - Meets the Criteria

Column II - Partly meets the Criteria

Column III - Does not meet the criteria

S.No	Criteria	I	II	III	Remarks
1.	***Scoring*** • Adequacy • Clarity • Simplicity				
2	***Content*** • Logical sequence • Adequacy • Relevance				
3	***Language*** • Appropriate • Clarity • Simplicity				
4	***Practicability***				

	• It is easy to score • Does it precisely • Utility				

Any other suggestions ----------
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Signature :
Name :
Designation :
Address :

APPENDIX – III

THE TOOL USED FOR THIS STUDY INCLUDES THREE PARTS THAT IS PART I AND PART II.

Part I

It consisted of items related to demographic data of the primary school children included age, sex, education of father, education of mother, type of family, residence of children and media of information.

Part II

It consisted of two sections.

Section – A

It consists of 20 structured questionnaire to assess the knowledge of primary school children among road safety. The scoring ranges from

0 - 50	-	inadequate
51-75	-	moderate
76- 100	-	adequate

Section – B

It consists of 20 check list to assess the practice of primary school children among road safety. The scoring ranges from

0 - 50	-	inadequate
51-75	-	moderate
76- 100	-	adequate

Part – II

DEMOGRAPHIC VARIABLES

1. Age

a) 6 years ☐

b) 7 years ☐

c) 8 years ☐

d) 9 years ☐

e) 10 years ☐

f) 11 years ☐

2. Sex

a) Male ☐

b) Female ☐

3. Education of the Father

   a) Illiterate ☐

   b) primary school education ☐

   c) Secondary School Education ☐

   d) Graduate ☐

4. Education of the Mother

   a) Illiterate ☐

   b) primary school education ☐

   c) Secondary School Education ☐

   d) Graduate ☐

5. Type of the family

   a) Nuclear family ☐

   b) Joint family ☐

6. Residence of children

   a) with parents ☐

   b) with guardians ☐

7. Media of information

   a) Television ☐

   b) News paper ☐

c) Radio ☐

d) Posters ☐

Part – III
IT CONSISTS OF TWO SECTIONS

SECTION A

Questionnaire related to knowledge

1. What is the commonest age group in which the accidents occur?

a) Adolescence [ ]

b) Oldage

[ ]

c) Child hood [ ]

2. Where do most child pedestrain accidents happen ?

a) Near School [ ]

b) Near Park [ ]

c) Near Home [ ]

3. What is the main cause for accident?

a) Not following safety measures. [ ]

b) Normal speed

[ ]

c) Vehicle in good condition.

[ ]

4. What are the colours used in traffic signals?

a) Red, Green,Yellow [ ]

b) Blue, Black,Yellow

[ ]

c) Red, Blue.Black [ ]

5. Which colour is the indication for the vehicles to move in road?

a) Green [ ]

b) Red [ ]

c) Orange

[ ]

6. Which line is used to cross the road?

a) Zeebra line, [ ]

b) Linear line, [ ]

c) Straight line.

[ ]

8 What is the normal speed of vehicle per kilometer per hour?

a) 40km [ ]

b) 70km [ ]

c) 20km [ ]

8. Which is the safer side to walk on road?

a) Left side [ ]

b) Right side [ ]

c) Both sides. [ ]

9. What must you do before crossing a road?

a) Listen, look and cross

[ ]

b) Stop,Listen, And go

[ ]

c) Cross anywhere you look.

[ ]

10. What is the purpose of wearing helmet?

a) Avoiding accidents

[ ]

b) Protect from accidents

[ ]

c) Prevent head injury

[ ]

11. What is the measure in car to prevent from injuries?

a) Seat belt [ ]

b) Seat cover [ ]

c) Class windows [ ]

12. What is the most dangerous time of year for road accidents.

a) Winter
[ ]

b) Summer [ ]

c) Autumn. [ ]

13. When is the worst time of day for road accidents involving children?

a) As they are going to and coming from school.
[ ]

b) As they are going to get lunch. [ ]

c) Late at night.
[ ]

14. What is the dangerous time of day for accidents to occur?

a) Morning [ ]

b) Evening [ ]

c) Night [ ]

15. Which is the main part affected in road traffic accidents?

a) Head [ ]

b) Chest [ ]

c) legs [ ]

16 Which contact number should be used when road traffic accident occurs?

a) 108 [ ]

b) 100 [ ]

c) 101 [ ]

17. Which is the safe method to prevent accidents?

a) Holding hands with parents.

[ ]

b) Stop,look and listen

[ ]

c) Running across road with out looking.

[ ]

18. Which is the best method of educating the primary school children

regarding road safety?

a) Road safety awareness lesson

[ ]

b) Television [ ]

c) Education by parents.

[ ]

19. How will you prevent primary school children from dangers of accidents?

a) Know how to use safe places to crossing road

[ ]

b) Education [ ]

c) Conducting camps.

[ ]

20 Accidents prevented by

a) Follow road safety rules [ ]

b) Education [ ]

c) Conducting ralley. [ ]

ANSWER KEYS

Question Number	Answers
1.	c
2.	a
3.	a
4.	a
5.	a
6.	a
7.	a
8.	a
9.	b
10.	c
11.	a

12.	a
13.	a
14.	c
15.	a
16.	a
17.	b
18.	a
19.	b
20.	a

SECTION B

CHECK LIST RELATED TO PRACTICE

1. I will always walk on the left side of the road.
   a. Yes ☐
   b. No ☐

2. When I used to cross the road, I used to follow the 'stop look listen, signal
   a. Yes ☐
   b. No ☐

3. When I used to travel in the Car, I used to wear the seat belt
   a. Yes ☐
   b. No ☐

4. I used to cross the road, when I listen red traffic signal
   a. Yes ☐
   b. No ☐

5. I used to wear helmet when I travel in the two wheeler
   a. Yes ☐
   b. No ☐

6. I used to cross road by holding my parents hands to avoid road accident
    a. Yes ☐
    b. No ☐

7. I used to avoid walking during that
    a. Yes ☐
    b. No ☐

8. I used to play when I cross the road
    a. Yes ☐
    b. No ☐

9. When I am crossing the road, If I see the green signal, I used to wait for some times
    a. Yes ☐
    b. No ☐

10. I will be very careful to cross the road, when the Railway track and roads or meting each of her and verify the train arriving
    a. Yes ☐
    b. No ☐

11. When I am travelling in two wheeler with my parents I will not play with the nearby passing vehicle.
    a. Yes ☐
    b. No ☐

12. I will play with my pet in road near to my house
    a. Yes ☐
    b. No ☐

13. I will catch my friend hand and sun, when I cross the road
    a. Yes ☐
    b. No ☐

14. I will not encourage my friend to do harm thing will we are crossing the road
    a. Yes ☐
    b. No ☐

15. I will not travel in the bicycle without getting proper practice to ride the bicycle
    a. Yes ☐
    b. No ☐

16. I practice to walk through the pedestrian when I am walking through the road
    a. Yes ☐
    b. No ☐

17. I will not eat anything when I am. Walking through the road
    a. Yes ☐
    b. No ☐

18. In bussy places, I will not buy anything from the shop
    a. Yes ☐
    b. No ☐

19. During rainy season, I will be very careful in the drainage places and other damaged places
    a. Yes ☐
    b. No ☐

20. I will see the doors of the vehicle are closed are not which were placed hear the road side
    a. Yes ☐
    b. No ☐

APPENDIX – IV

TÏ§ 1

Uô§¬ Gi :

1. YVÕ

(A) 6 YÚPeLs [ ]

(B) 7 YÚPeLs [ ]

(C) 8 YÚPeLs [ ]

(D) 9 YÚPeLs [ ]

(E) 10 YÚPeLs [ ]

(F) 11 YÚPeLs [ ]

2. Tô-]m

(A) Bi [ ]

(B) ùTi [ ]

3. RkûR«u Lp®

(A) T¥lT±®pXôRYoLs [ ]

(B) BWmTd Lp® Lt\Yo [ ]

(C) úUp ¨ûX Lp® Lt\Yo [ ]

(D) C[eLûX ThPm ùTt\Yo [ ]

4. Rô«u Lp®

(A) T¥lT±®pXôRYo [ ]

(B) BWmTd Lp® Lt\Yo [ ]

(C) úUp ¨ûX Lp® Lt\Yo [ ]

(D) C[eLûX ThPm ùTt\Yo [ ]

5. GkR YûL ÏÓmTm

(A) R²dÏÓmTm [ ]

(B) áhÓdÏÓmTm [ ]

6. ***FHe;ijfs; trpf;Fk; ,lk;***

(A) ***bgw;nwhUld;*** [ ]

(B) ***ghJfhg;ghsUld;*** [ ]

7. RLYpLs ¡ûPdÏm Y¯Ls

(A) ùRôûXdLôh£ ùTh¥ [ ]

(B) Tj§¬dûL [ ]

(C) Yôù]ô-l ùTh¥ [ ]

(D) ®[mTW AhûPLs [ ]

TÏ§ 2
A±Üf NôokR úLs®Ls

1. GkR YVÕ ©¬®p Es[YoLs A§LUôL [ ]
®TjÕdÏs[ô¡\ôoLs
(A) Yô-ToLs
(B) Ø§úVôo
(C) ÏZkûRLs

2. TôRNô¬LÞdÏ GkR CPeL°p A§LUôL ®TjÕLs SPd¡u\]? [ ]

(A) Ts°dáPj§u AÚ¡p

(B) éeLô AÚ¡p

(C) Åh¥u AÚ¡p

3. ®TjÕ HtTÓYRtÏ Ød¡V LôWQm Gu]? [ ]

(A) NôûX®§ØûLû[©uTt\ô§ÚjRp

(B) ªRUô] úYLj§p ùNpÛRp

(C) SpX ¨ûX«p Es[Yi¥Ls KhÓYRôp

4. úTôdÏYWjÕ £u]j§p TVuTÓjRlTÓm ¨\eLs GûY? (A) £Yl×, TfûN, UgNs [ ]

(B) ¿Xm, Lßl×, UgNs

(C) £Yl×, ¿Xm, Lßl×

5. YôL]eLs ùNpYRtÏ GkR ¨\m AûPVô[UôLd LôQlTÓ¡\Õ? [ ]

(A) TfûN

(B) £Yl×

(C) UgNs

6. GkR úLôh¥u Y¯VôL NôûXûV LPdL úYiÓm? [ ]

(A) Lßl× ùYsû[úLôÓ

(B) ¿s úLôÓ

(C) úSo úLôÓ

7. JÚ U¦ úSWj§p YôL]eLs GjRû] ¡úXô ÁhPo úYLj§p ùNpX úYiÓm? [ ]

(A) 40 ¡.Á

(B) 70 ¡.Á

(C) 20 ¡.Á.

8. NôûX«u GkR TdLm Y¯VôL SPkRôp TôÕLôlTôL CÚdÏm?

(A) CPÕ ×\m [ ]

(B) YXÕ ×\m

(C) CÚ ×\Øm

9. NôûXûV LPdÏØu LhPôVUôL ùNnV úYi¥VÕ Gu]?

(A) LY², ¨p, ùNp [ ]

(B) ¨p, LY², ùNp

(C) GeúLVôYÕ TôojÕd ùLôiÓ NôûXûV LPdLXôm.

10. RûXdLYNm A¦YRu TVu Gu]? [ ]

(A) ®TjÕLs R®olTRtÏ

(B) ®TjÕL°-ÚkÕ TôÕLôdL

(C) RûX«p HtTÓm LôVjûR RÓdL

11. Lô¬p TV¦dÏm úTôÕ GÕ LôVeLs HtTPôUp RÓd¡\Õ?

(A) CÚdûL«u ThûP [ ]

(B) CÚdûL«u Eû\

(C) LiQô¥ _u]pLs

12. YÚPj§u GkR TÚYm NôûX ®TjÕLs A§LUôL [ ]
SPd¡u\]?

(A) Ï°oLôXm

(B) úLôûPdLôXm

(C) YNkR LôXm

13. ÏZkûRLs GkR úSWj§p A§LUôL NôûX [ ]

®TjÕdÏs[ô¡\ôoLs?

(A) Ts°dáPj§tÏ ùNpÛm úTôÕm, YÚm úTôÕm

(B) U§V EQÜ úSWj§u úTôÕ

(C) CWÜ úSWm

14. JÚ Sô°u GkR úSWj§u ®TjÕLs A§LUôL HtTÓ¡\Õ?

(A) LôûX [ ]

(B) UôûX

(C) CWÜ

15. ®Tj§u úTôÕ EP-u GkR TÏ§ A§LUôL Tô§lTûP¡\Õ.

(A) RûX [ ]

(B) Uôo×

(C) LôpLs

16. ®TjÕ HtThPôp GkR ùRôûXúT£ Gi¦p ùRôPo× ùLôs[úYiÓm. [ ]

(A) 108

(B) 100

(C) 101

17. ®TjÕ HtTPôUp RÓdL GkR Y¯ûV ©uTt\ úYiÓm.

(A) ùTtú\ô¬u ûLLû[©¥jÕ SPjRp [ ]

(B) ¨p, LY², ùNp ©uTt\p (C) NôûX ®§Lû[©uTt\ô§ÚjRp

18. BWmTlTs°d ÏZkûRLÞdÏ NôûX ®§Lû[lTt±V A±ûY Lt©dÏm £\kR Øû\ [ ]

(A) NôûX ®§ ®¯l×QoûY Lt©jRp

(B) ùRôûXdLôh£ ùTh¥

(C) ùTtú\ô¬u êXUôL Lt©jRp

19. BWmTlTs° ÏZkûRLû[®Tj§p GqYôß RÓdLXôm?

(A) NôûXûV LPlTRtÏ TôÕLôlTô] CPeLû[l [ ]
Tt±V A±Ü

(B) Lt©jRp

(C) ®¯l×QoÜ ØLômLs

20. ®TjÕLû[RÓlTÕ [ ]

(A) NôûX ®§Lû[©uTtßRp (B) Lt©jRp

(C) FoYXm SPjÕYRuêXm

TÏ§ 3

ùNVpØû\ úLs®Ls

1. Sôu GlúTôÕm NôûX«u CPÕ ×\UôL SPkÕ ùNpúYu?

(A) Bm

(B) CpûX

2. Sôu NôûXûV LPdÏm úTôÕ ¨p, LY², ùNp £u]jûR ©uTtßYÕ EiÓ.

   (A) Bm

   (B) CpûX

3. Sôu Lô¬p TVQm ùNnÙm úTôÕ CÚdûL«u ThûPûV A¦úYu.

   (A) Bm

   (B) CpûX

4. úTôdÏYWjÕ £u]j§p £Yl× ®[dÏ G¬Ùm úTôÕ NôûXûV LPlúTu.

   (A) Bm

   (B) CpûX

5. CÚNdLW YôL]j§p TVQm ùNnÙm úTôÕ RûXdLYNm A¦Ùm TZdLm EiÓ.

   (A) Bm

   (B) CpûX

6. NôûXL°p SPdÏm úTôÕ ®TjÕ HtTPôUp RÓdL Gu ùTtú\ô¬u ûLLû[©¥jÕd ùLôiÓ ùNpúYu.

   (A) Bm

   (B) CpûX

7. Sôu CWÜ úSWeL°p R²VôL NôûX«p SPkÕ ùNpYûR R®olúTu.

   (A) Bm

   (B) CpûX

8. NôûX«p SPdÏmúTôÕ ®û[Vô¥d ùLôiúP ùNpúYu.

   (A) Bm

(B) CpûX

9. NôûXûV LPdL ØVt£dÏm úTôÕ úTôdÏYWjÕ £u]m TfûN ®[dûL AûPVô[UôL Lôh¥]ôÛm, AYNUôL NôûXûV LPlúTu.

(A) Bm

(B) CpûX

10. W«p RiPYô[Øm, NôûXÙm Nk§dÏm CPj§p W«p YÚ¡\Rô GuTûR Eß§ ùNnÕ ùLôiúP NôûXûV SPlúTu.

(A) Bm

(B) CpûX

11. ùTtú\ôÚPu CÚNdLW YôL]j§p ùNpÛm úTôÕ TdLjÕ YôL]eLû[ùRôhÓ ®û[VôÓYûR R®olúTu.

(A) Bm

(B) CpûX

12. Åh¥u AÚ¡p Es[NôûX«p ùNpXl©Wô¦Lú[ôÓ ®û[VôÓúYu.

(A) Bm

(B) CpûX

13. NôûX«p SPdÏm úTôÕ SiToL°u ûLûVl©¥jÕd ùLôiÓ KÓúYu.

(A) Bm

(B) CpûX

14. NôûXûV LPdÏm úTôÕ SiToL°Pm BTjÕ HtTÓm ùNVpLû[ùNnV çiP UôhúPu.

(A) Bm

(B) CpûX

15. Øû\Vô] T«t£ CpXôUp ª§Yi¥«p NôûX«p ùNpX UôhúPu.

(A) Bm

(B) CpûX

16. NôûX«p SPdÏm úTôÕ TôRNô¬Ls SPlTRtÏ¬V CPj§p SPlTûR TZdLUôd¡Ùsú[u.

(A) Bm

(B) CpûX

17. NôûX«p SPkÕ ùNpÛm úTôÕ §u TiPeLs EiTûR R®olúTu.

(A) Bm

(B) CpûX

18. úTôdÏYWjÕ ùS¬NXô] CPeL°p NôûX KWd LûPL°p CÚkÕ ùTôÚhLs YôeÏYûR R®olúTu.

(A) Bm

(B) CpûX

19. UûZdLôXeL°p NôûXL°p Ri½o Lh¥«ÚdÏm Utßm úUÓ Ts[Uô] CPeL°p ùNpÛm úTôÕ LY]UôL ùNpúYu.

(A) Bm

(B) CpûX

20. NôûX KWeL°p ¨ßjRlTh¥ÚdÏm YôL]eL°u LRÜLs §\dLlTÓ¡\Rô GuTûR LY²jÕ SPlúTu.

(A) Bm

(B) CpûX

tpdh tpilfs;

tpdh vz;	tpilfs;
1.	,
2.	m
3.	m

4.	m
5.	m
6.	m
7.	m
8.	m
9.	M
10.	,
11.	m
12.	m
13.	m
14.	,
15.	m
16.	m
17.	M
18.	m
19.	M
20.	m

APPENDIX – V

MASTER SHEET OF KNOWLEDGE AND PRACTICE SCORE OF PRIMARY SCHOOL CHILDREN

Sample No	Knowledge score	Practice score	Sample No	Knowledge score	Practice score

1.	14	13	26.	12	12
2.	18	17	27.	9	7
3.	13	11	28.	8	5
4.	10	7	29.	7	5
5.	18	16	30.	8	7
6.	13	11	31.	13	12
7.	15	14	32.	12	10
8.	8	7	33.	11	10
9.	10	8	34.	12	12
10.	15	13	35.	13	11
11.	14	14	36.	13	10
12.	13	12	37.	9	5
13.	12	12	38.	10	7
14.	13	12	39.	15	12
15.	11	9	40.	15	11
16.	16	14	41.	10	8
17.	17	17	42.	10	9
18.	15	12	43.	11	7
19.	13	12	44.	12	10
20.	12	12	45.	13	11
21.	11	10	46.	15	12
22.	14	10	47.	11	9
23.	15	14	48.	16	14
24.	16	13	49.	10	7
25.	15	12	50.	9	5

Sample No	**Knowledge score**	**Practice score**	**Sample No**	**Knowledge score**	**Practice score**
51.	8	7	76.	13	11
52.	9	8	77.	11	11

53.	11	9	78.	12	10
54.	10	10	79.	17	15
55.	12	10	80.	17	14
56.	11	9	81.	15	12
57.	12	10	82.	14	11
58.	13	12	83.	13	11
59.	13	11	84.	13	12
60.	15	12	85.	12	11
61.	14	13	86.	7	7
62.	12	12	87.	9	7
63.	13	11	88.	8	7
64.	13	12	89.	13	11
65.	14	11	90.	12	11
66.	18	17	91.	13	12
67.	11	9	92.	12	12
68.	11	7	93.	8	7
69.	10	9	94.	10	9
70.	9	7	95.	15	13
71.	8	8	96.	13	11
72.	9	7	97.	12	10
73.	11	9	98.	10	9
74.	11	10	99.	9	8
75.	15	13	100.	10	9