



“A Quantitative Study To Assess The Effectiveness Of Information Booklet On Knowledge Regarding Road Traffic Rules Among Adolescent (13-18 Years) In Selected Urban Schools Of Indore (M.P)”

RESEARCH ARTICLE FOR PUBLICATION

To assess the effectiveness of booklet on knowledge regarding road traffic rules among adolescents (13 -18 years) in selected urban schools of Indore.”

Author 1 -Mr. Abhilash Kolare, Assistant Professor

Author 2 - Mr. Arnold Peter, Assistant Lecturer

BACKGROUND OF THE STUDY

Nowadays , the problem of road accidents rates is one of the most important health and social policy issues concerning the countries in all continents.

Each year nearly 1.3 million people worldwide lose their life on roads , and 20 -50 million people sustain severe injuries , the majority of which long term treatment. In march 2021 , India reported number one rank in ‘road accidents’.

In India “Provision in Indian Penal Code for Accidents” under the IPC section , they are :

Section 279 of IPC mentions rash driving or riding in a public way. It lays that who drives any vehicle or rash riding , on public way in a manner as to endanger human life or to cause hurt or injury shall be punished with imprisonment of either description for a term which may extend to six month or with fine which may extend to one thousand rupees or with both.

Section 337 under the Indian penal code 1860 , provides for the provision on causing hurt by an act that endangers life or personal security of others . it states that who drives any vehicle or rash riding , on public way in a manner as to endanger human life or to cause hurt or injury shall be punished with imprisonment of either description for a term which may extend to six month or with fine which may extend to five hundred rupees or with both.

Section 338 of IPC provides for the provision on causing grievous security of others .it states that whoever causes grievous hurt to any person by doing any act or to cause hurt or injury shall be punished with imprisonment of either description for a term which may extend to two month or with fine which may extend to one thousand rupees or with both.

The objective of the study is to aware all the people about the traffic rules and regulations aiming at improving safety on local and global levels..

The number of fatal accidents and severe injuries , resulting from road accidents may be reduced through applying an integrated approach to safety on roads .The strategies and programs for improving road traffic should include the following measures:

- Reducing the risk of exposure to an accident.
- Prevention of accidents.
- Reduction in bodily injuries sustained in accidents
- Reduction of the effects of injuries by improvement of post accident medical care.

That's why Traffic lights are one of the most important components on the roads. Apart from managing the smooth flow of traffic , the lights also ensure the safety of the vehicles as well as the pedestrians.

When driver follows the rules and obey the traffic lights ,accidents are lowered and thereby fewer car insurance claims are made too.

In recent years, the law enforcement and government authorities have emphasized bringing strict rules when it comes to granting of driving licenses and imposing penalties on traffic violations. Cities like Mumbai, Bangalore, New Delhi, and others have serious problems with respect to the implementation of traffic regulations and it is important for people to make the right use of road signs to navigate through roads with ease. There are primarily three types of traffic signs that everyone should be aware of. The same are as follows

- Mandatory signs
- Caution signs
- Informatory signs

These rules are especially helpful when reducing road accidents. The government makes sure to change the rules whenever necessary. They use this to keep up with current road safety standards and concerns. Therefore , new traffic rules are always being made and enforced.

NEED FOR THE STUDY

Traffic accidents have long been known as one of the critical issues , killing nearly 1.3 million people every year and causing tremendous economic and social loss worldwide.(WHO 2011)

According to the US department of states statistics , Thailand is among the worst countries where the majority of road fatalities of US citizens abroad occurred with 16.49 deaths per million trips , followed by Vietnam and Morocco.

Under the new rules , it will now be mandatory for children to wear a helmet and a safety belt while travelling on two – wheelers.

Apart from this , the ministry has also said that the speed of the motorcycle should not exceed 40 KMPH while carrying a child up to four years of age in the back seat.

The Global Status report on road safety 2018 , launched by WHO in December 2018 ,highlights that the number of annual road traffic deaths has reached 1.35 million. The report suggested that price paid for mobility is too high.

In September 2020 , the UN General Assembly adopted resolution A/RES/74/299”Improving Global Road Safety” , proclaiming the Decade of Action for Road Safety 2021-2030 ,with the ambitious target of preventing at least 50% of road traffic deaths and injuries by 2030.

As per statistics provided by the government , 400 accidents occur in India every day.

Traffic signs are the salient speakers .preventing drivers and pedestrians from fatal risks on the road. More than 400 road accidents occur daily in Indian roads that cost lives and 3% of total annual GDP.

There were 4,12,432 unfortunate incidents of road accidents during 2021 in India, which claimed 1,53,972 lives and caused injuries to 3,84,448 persons. During the previous year 2020, the country saw an unpredictable decrease in accidents , fatalities and injuries. This was due to the unusual outbreak of the COVID -19 pandemic and nation – wide lockdown during March – April 2020 followed by the gradual unlocking and phasing out the containment measures.

The latest NCRB report say that in 2021 : 48,219 road accident cases were registered in MP ,leading to 12,480 deaths . The averages to around 34 deaths a day or one road fatality every 42 minutes.

The number of road accidents across the Indian state of Madhya Pradesh in 2020 was around 45 thousand . Traffic discrepancies have been a major source of death , injury and damage to property every year.

As recently we saw on date 15 Jan 2023 that 47 passenger got injured , 10 passengers severely injured refer to Indore MY hospital , 4 passenger died due to overtaking of bus by driver ,Local travelling bus Indore to Khandwa.

Also the road condition is the main cause of road accidents and most of the places the roads are having one way road transport.

Road traffic injuries are the eighth leading cause of death globally. Every community has its own set of traffic regulations .Traffic rules are an essential tool used to make our streets safer.

1.4 RESEARCH PROBLEM STATEMENT

A Pre Experimental study to assess the effectiveness of planned teaching program on knowledge regarding road traffic rules among adolescents (13 -18) years in selected urban schools of Indore

1.5 OBJECTIVES:

- 1.To assess the pre- test knowledge score regarding road traffic rules among adolescents.
2. To estimate the post – test knowledge score regarding road traffic rules among adolescents.
- 3.To determine the effectiveness of planned teaching program on knowledge regarding road traffic rules among adolescents.
4. To find out the association between pre test knowledge score regarding road traffic rules with selected socio demographic variables.

1.6 HYPOTHESIS:

H0 (Null Hypothesis) :There is no significant difference between pre test and post test knowledge score regarding road traffic rules among adolescents.

H1 : There is significant difference between pre- test and post-test knowledge score regarding road traffic rules among adolescents.

H2 : There is significant association between pre test knowledge scores regarding road traffic rules among adolescents with selected socio demographic variable.

1.7 OPERATIONAL DEFINITIONS

Effectiveness : It refers to the individual capabilities of adolescents in between 13-18 years of age , significant increase in their knowledge regarding road traffic rules .

Planned Teaching Program : It refers to the way imparting knowledge on adolescents 13-18 years of age regarding road traffic accidents through PPT on road traffic rules.

Knowledge: It refers to the level of understanding of road traffic rules by the adolescents (13-18 years using questions on road traffic symbols.

Road Traffic Rules : The law or rules made by parliament of India to prevent unpredicted accidents , which comes under Motor Vehicles Act 1988 .

Adolescents : It refers to the age group who are in between the (13 – 18 years)of selected urban schools of Indore .

Urban School : The schools which are located in the district or city areas.

1.8 ASSUMPTION

Planned teaching program enhance the knowledge of adolescent (13-18years) of age students.

1.9 CONCEPTUAL FRAMEWORK

The conceptual framework is a theoretical approach to the study of problem that in scientifically based and which lays emphasis of the selection . Arrangement and clarification of the concept . The conceptual framework provide a foundation for suggestion and relationship among variables. It is developed to explain which concept contribute to the partially cause and outcome . The presentation of framework study , give the careful , thoughtful work require to arrive at the point. The conceptual frame work prove as certain frame work of

reference for clinical practice and research education. A conceptual framework states functional relationship event and is not limit to statically relationship.

DELIMITATION OF THE STUDY

- 1.This study was limited to the adolescent students studying in urban school at Indore.
- 2.Sample size was limited to 40 Adolescent students studying in urban school at Indore.

RESEARCH APPROACH

QUANTITATIVE APPROACH

RESEARCH DESIGN

Research design was used in this - Pre Experimental one group Pre and Post design.

VARIABLES

Independent Variables

In the study planned teaching program regarding road traffic rules among adolescents (13 -18years) in selected urban schools of Indore 2021-2022 knowledge regarding road traffic rules is a independent variable.

Dependent Variable

In present study, dependent variables is a knowledge of adolescents (13 -18years) in selected urban schools.

SETTING

In this study , setting at urban schools of Indore.

Shashkiya High secondary school Chitawad Indore (M.P) is the data collection setting.

Population

In the present study the population comprised of **Adolescents in between 13 -18 years of age of Shashkiya High Secondary School Chitawad , Indore (M.P).**

TARGET POPULATION

The target population was selected 40 Adolescent student from **Shashkiya High Secondary School Chitawad , Indore (M.P).**

ACCESSIBLE POPULATION

The accessible population for the study was in selected Shashkiya High Secondary School Chitawad, Indore (M.P).

Sample- In the present study sample comprises of **adolescents in between (13 -18 years) of age**

SAMPLE TECHNIQUE

Non – Probability Purposive sampling technique was found to be appropriate for adolescents (13 -18 years) in selected urban schools of Indore.

SAMPLE SIZE

The sample size of present study the sample comprises of selection of **40 students of Shashkiya High Secondary School Chitawad , Indore (M.P).**

DESCRIPTION OF TOOL

Structured questionnaire consist of the following sections

SECTION A

SOCIO DEMOGRAPHIC DATA :- First section consist of 7 items for obtaining information about socio demographic factors such as age in years , religion , education level , types of family, parent education, previous knowledge about road traffic rules, occupation of parent , source of information ,source of transportation source of driving vehicle , residence area .

1. Age in years
2. Religion
3. Education level
4. Type of family
5. Previous Knowledge about road Traffic rules
6. Parent Education
7. Occupation of parent

SECTION B : Structured questionnaires to assess knowledge regarding road traffic rules among adolescents (13 -18 years) of age in selected urban schools of Indore.

Each item in the tools consist of multiple choice question , the respondent requested to tick mark () against one single answer for each question and each question carried one score .

The maximum total score of questions will be 32 .The score graded as follows :-

- Excellent (25-32)
- Good (17-24)
- Average(9-16)
- Poor(0-8)

PROCEDURE FOR DATA COLLECTION

The main study was conducted at selected school of **Shashkiya High Secondary School Chitawad , Indore (M.P)**. The formal written permission was taken from concerned authority informed consent was obtained from the respondent prior to questionnaire. Data collection was done for sixteen days . Structured knowledge questionnaire and attitude scale were used for collecting the data for the study.

- The investigator introduced herself to the subjects to explain the purpose of the study.
- Written consent from the subject was taken and they were made assured about the confidentiality of the results.
- Pre test knowledge and practice was assumed using structured knowledge score to assess the existing knowledge of adolescent (13-18years) of age students.
- On the same day information booklet was administered to enhance the knowledge of students and the date for the post test was priory informed to them.
- Post test was done using the same questionnaire after 1month, self structured knowledge was administered among the adolescent (13-8years) of age students.
- Duration of data collection is six weeks.
- The investigator thanked and appreciated all participants for their co-operation.

MAJOR FINDINGS OF THE STUDY

SECTION A : Frequency and percentage distribution of adolescent (13-18years) of age receiving knowledge through booklet based on their demographic variables.

Majority of adolescent student got poor knowledge Score 38(95%) were between the age of (13-18years) of age , none of them had excellent knowledge score.

Then a information booklet knowledge was given to adolescent students (13-18years) of age and the same set of knowledge questionnaire was re-administered.

EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING ROAD TRAFFIC RULES AMONG ADOLESCENT STUDENT (13-18YEARS) OF AGE

The data presented in the table shows that effectiveness of the information booklet knowledge score regarding road traffic rules was evident in the post – test score of adolescent students (13-18years) of age .

In pre test 38(95%) adolescent had poor knowledge score , 02 (5%) had average knowledge score and none of had good and excellent knowledge score.

In post test none of adolescent had poor, average , good knowledge score and 100 (100%) had excellent knowledge score.

ANALYSIS OF ASSOCIATION OF PRE TEST KNOWLEDGE SCORE WITH SELECTED SOCIO DEMOGRAPHIC VARIABLE AND ADOLESCENT STUDENTS (13-18YEARS) OF AGE REGARDING ROAD TRAFFIC RULES

X^2 value computed between the pre – test levels of knowledge with selected socio demographic variables. Variables of age ($x^2 = 13.40$), religion ($x^2 = 44$), educational level ($x^2 = 26.4$), family type ($x^2 = 16$), parent education ($x^2 = 13.6$), previous knowledge ($x^2 = 10$), parent occupation ($x^2 = 13.6$) were found to be significant at 0.05 levels.

The following conclusions were drawn based on the data analysis:

- Majority of adolescent student had poor knowledge Score 38(95%) were between the age of (13-18years) of age, none of them had excellent knowledge score.
- Then a information booklet knowledge was given to adolescent students (13-18years) of age and the same set of knowledge questionnaire was re-administered.
- In pre test 38(95%) adolescent had poor knowledge score, 02 (5%) had average knowledge score and none of had good and excellent knowledge score.
- In post test none of adolescent had poor, average, good knowledge score and 100 (100%) had excellent knowledge score.
- The pre test mean knowledge score was 3.22 with standard deviation of 0.5.
- The post test mean knowledge score was 28.22 with standard deviation of 59.20.

The overall mean knowledge score of pre test was found 25.00 with standard deviation of 0.5 of pre test and with standard deviation of 59.20 of post test. The 't' value is 44.71 is greater than the table value 0.05 at level of significance. Therefore 't' value is found to be significance. It shows that the post test level of knowledge significantly higher than the pre test level of knowledge regarding on road traffic rules among adolescent(13-18years) of age. Therefore research hypothesis(H_1) is accepted.

X^2 value computed between the pre test level of knowledge with selected socio demographic variables. Variables of age ($x^2 = 13.40$), religion ($x^2 = 44$), educational level ($x^2 = 26.4$), family type ($x^2 = 16$), parent education ($x^2 = 13.6$), previous knowledge ($x^2 = 10$), parent occupation ($x^2 = 13.6$) were found to be significant at 0.05 levels.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations have been made for study:

- A similar study can be done to assess the attitude and practice of adolescent students receiving knowledge regarding road traffic rules.
- The study can be replicated on larger samples for the better generalization.

CONCLUSION

This chapter deals with the conclusion , nursing implications such as nursing practices , nursing education , nursing research , nursing administration , limitation of the study , suggestions , recommendations .

The focus of the study was to assess the knowledge level of the adolescent student (13-18years) of age receiving knowledge on road traffic rules through booklet in selected urban schools of Indore

SUMMARY

This chapter deals with the various aspects of the study in brief. The purpose of the study was to assess the effectiveness of planned teaching program on knowledge regarding road traffic rules among adolescents (13 - 18) years in selected urban schools of Indore in the year 2021-2022. The study was conducted in urban schools of Indore , 40 adolescent students receive knowledge regarding road traffic rules were selected by using convenient sampling technique. The investigator obtained the permission from the Principal of Shashkiya High secondary school Chitawad Indore (M.P)

Pre – experimental one group pre test post test design study was adopted to assess the effectiveness of planned teaching program on knowledge regarding road traffic rules among adolescents (13 -18) years in selected urban schools of Indore. Self administered knowledge questionnaire was prepared and used to collect the data and to assess the knowledge of adolescent students receiving knowledge regarding road traffic rules.

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