

A Study To Evaluate The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Road Traffic Accident And Its Prevention Among Higher Primary School Children In Selected Schools At Mysore

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Abstract: Road Traffic Accidents are one of the major incidences of injury and death in children of school age. Accidents are often due to ignorance, carelessness, thoughtlessness and over confidence. Indian roads witness one accident every minute and one death in road mishaps every four and a half minutes, according to the latest report of the Road Transport and Highway Ministry.

Objectives of the study: To assess the pre test level of knowledge regarding road traffic accident and its prevention among higher primary school children. To assess the post test level of knowledge regarding road traffic accident and its prevention among higher primary school children. To evaluate the effectiveness of structured teaching programme on knowledge regarding road traffic accident and its prevention among higher primary school children. To find out the association between gain in knowledge scores with selected demographic variables.

Methodology: The research design used for this study was quasi experimental design and the 30 samples were selected by using simple random sampling technique using lottery method and the data were collected by using knowledge questionnaire regarding road traffic accidents and its prevention and were analysed by using descriptive and inferential statistics.

Results: The result showed that there was a significant difference between the mean post-test knowledge score (22.57) and mean pre-test knowledge score (14.33). The computed 't' value 16.62 showed a significant difference between the mean post-test knowledge score and pre-test knowledge score at 5 % level of significance ($t(29)=2.05$), hence H_1 was accepted. Also there was significant association between gain in knowledge score with the demographic variables like sex and occupation of father at 5% level of significance, hence H_2 was accepted.

Conclusion: The findings of the study has lead the conclusion that the structured teaching programme was effective in increasing the knowledge of primary School Children.

Keywords: Effectiveness, structured teaching programme, road traffic accident, higher primary school children.

I. INTRODUCTION

It has been estimated that 1 million deaths and 15 million Road Side Accidents (RSA) occur on roads worldwide every year. Globally, RSA is 10th and in South East Asian Region (SEAR), 7th leading cause of death in all age groups. According

to WHO estimates, RSA is the 9th leading cause of death as per on the basis of Disability Adjusted Life Year (DALY). However, this is likely to reach at no.3 by 2020.

Each year RTAs claim some 6,00,000 lives and thirty times this number. Two third of these victims are from the third world countries.

As per a recent epidemiological study on road accidents in Bangalore every year 800 persons are killed and 14000 persons are injured on the roads of Bangalore. Victoria hospital in Bangalore medical college reports an average 1400 to 1600 cases of road traffic injuries are admitted every year.¹⁰

As per the Mysore Road Traffic Office (RTO) report approximately 1100 accident cases are reported annually and 10 percent of the accidents are fatal.¹¹

India has the highest road traffic accident rate worldwide with over 140,000 deaths annually, beating even China every hour.. More than 40 % of the deaths are caused by trucks and two-wheelers. Most accidents occur in the afternoons and during peak hours (especially in the evening), considered an ‘unsafe’ or dangerous time to be on the road. In these accidents 67% reported head injury cases. Our traffic conditions are chaotic, the rules are broken all the time and we have no traffic sense.

STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of structured teaching programme on knowledge regarding road traffic accidents and its prevention among higher primary school children in selected schools at Mysore.

OBJECTIVES

To assess the pre test level of knowledge regarding road traffic accident and its prevention among higher primary school children. To assess the post test level of knowledge regarding road traffic accident and its prevention among higher primary school children. To evaluate the effectiveness of structured teaching programme on knowledge regarding road traffic accident and its prevention among higher primary school children. To find out the association between gain in knowledge scores with selected demographic variables.

II. METHODS AND MATERIALS

HYPOTHESIS

There will be a significant difference in mean pre test and post test level of knowledge regarding road traffic accident and its prevention among higher primary school children.

RESEARCH APPROACH: An evaluative approach was adopted to accomplish the objectives of the study.

RESEARCH DESIGN: Quasi experimental study

POPULATION: In this study population consist higher primary school children.

SAMPLE: Sample selected for this study are 30 higher primary school children.

SAMPLE SIZE: A total of 30 higher primary school children.

SAMPLING TECHNIQUE: In this study Simple random sampling by using lottery method.

INDEPENDENT VARIABLES: Structured teaching programme.

DEPENDENT VARIABLES: Knowledge on road traffic accident and its prevention

METHOD OF DATA COLLECTION

TOOL USED FOR THE STUDY: The investigation developed the tool as follows

SECTION I

It consists of 6 demographic variables such as age, sex, education of father, education of mother, occupation of father, family income / month.

SECTION II

The final tool consist of 27 closed ended questions which consist of two sub areas such as the knowledge questionnaire on general concept of road traffic accident had 6 questions (22.2%), and 21 questions on prevention of road traffic accident (77.7%). Each question has one corrected response; each question has given a score of one. The maximum possible score was 27 and the minimum possible score was 0.

PLAN FOR DATA ANALYSIS

- ✓ Demographic proforma was analyzed in terms of frequency and percentage.
- ✓ The knowledge score was analyzed by using frequency, percentage, mean, mean percentage and standard deviation.
- ✓ Effectiveness of structured teaching programme was analyzed by using paired ‘t’ test.
- ✓ Association between gain in knowledge scores with selected demographic variables was calculated by using chi- square test.

III. RESULTS

Analysis of the study finding are categorized and presented under the following headings:

Section I: Description of the demographic variables of higher primary school children under study (table 1).

Section II: Distribution of samples according to their level of knowledge scores of the higher primary school children. (table 2)

Section I11: Data on effectiveness of structured teaching programme (table 3 & 4)

Section IV: Association between gain in knowledge score with selected demographic variables. (table 5)

N=30

Characteristics	Category	Higher primary school children	
		Frequency (f)	Percentage (%)
Age(years)	12-13 yrs	28	93.3
	>14 yrs	2	6.7
Sex	Male	16	53.3
	Female	14	46.7
	Primary education	2	6.7

Father education	Upper Primary Education	2	6.7
	High school PUC	1	3.3
	Degree and above	7	23.3
		18	60
Mother education	No schooling	2	6.7
	Primary education	1	3.3
	Upper primary Education	2	6.7
	High school PUC	3	10
	Degree and above	15	50
Occupation of father	Professional Government	6	20
	Employee	12	40
	Business	12	40
Family income/ Month	Rs.5001-10,000	4	13.3
	Rs.10001-15,000	11	36.7
	Rs. >15,000	15	50

Table 1: Frequency and percentage distribution of higher primary school children according to demographic characteristics

N=30

Level of Knowledge	Pre-test level of knowledge		Post-test level of knowledge	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Poor (0-9)	4	13.3	0	0.0
Average(10-18)	26	86.7	3	10.0
Good (19-27)	0	0.0	27	90.0

Table 2: Frequency and percentage distribution of pre-test and post test level of knowledge of higher primary school children

N=30

Aspects	Higher primary school children			Significant difference in level of knowledge	Student's paired t-test
	Mean	SD	Mean (%)		
Pretest	14.33	3.12	53.1	30.5%	t=16.62
Posttest	22.57	2.81	83.6		

$t_{(29)} = 2.05$ highly significant at $p \leq 0.05$

Table 3: Overall mean, standard deviation (SD), mean percentage, paired t value between pre-test and post-test

Demographic variables	Level of knowledge gain				sample	Chi square test	
	Below median (≤ 8)		Above median (> 8)				
	n	%	n	%			
Age	12-13 yrs	14	50.0%	14	50.0%	28	$c2=0.00$

	>14 yrs	1	50.0%	1	50.0%	2	(1)
Sex	Male	5	31.2%	11	68.8%	16	$c2=4.82^*$ (1)
	Female	10	71.4%	4	28.6%	14	
Father education	Primary education			2	100.0%	2	$c2=5.17$ (4)
	Upper High school PUC	1	50.0%	1	50.0%	2	
	Degree	2	28.6%	5	71.4%	7	
		11	61.1%	7	38.9%	18	
Mother education	No schooling	1	100.0%	2	100.0%	2	$c2=8.97$ (5)
	Primary education	1		2	100.0%	1	
	Upper High school PUC	7	33.3%	2	66.7%	2	
	Degree	6	46.7%	8	53.3%	3	
Occupation of father	Professional Government	1	16.7%	5	83.3%	6	$c2=6.00^*$ (2)
	Employee	5	41.7%	7	58.3%	12	
	Business	9	75.0%	3	25.0%	12	
Family income per month	Rs.5001-10,000	2	50.0%	2	50.0%	4	$c2=0.15$ (2)
	Rs.10001-15,000	6	54.5%	5	45.5%	11	
	>Rs.15,000	7	46.7%	8	53.3%	15	

Table value $c2_{(1)}=3.84$, $c2_{(2)}= 5.99$, $c2_{(3)}= 7.82$, $c2_{(4)}= 9.49$, $c2_{(5)}= 11.07$ *significant

Table 4: Association between gain in knowledge score and demographic variables

IV. DISCUSSION

The findings of this study reveal that structured teaching programme had increase the knowledge of road traffic accidents and its prevention in the community areas. The nurses should update their knowledge constantly in order to give education.

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