# A Quasi- Experimental study to evaluate the effectiveness of Structured Teaching Programme in terms of Knowledge of School Children regarding First Aid Management on Health Emergencies with a view to disseminate Self Instructional Module in selected Schools of Delhi.

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Abstract: A Quasi- Experimental study to evaluate the effectiveness of Structured Teaching Programme in terms of Knowledge of School Children regarding First Aid Management on Health Emergencies with a view to disseminate Self Instructional Module in selected Schools of Delhi. Objectives of the study were: To assess the pre-test knowledge of school children regarding first aid- management on health emergencies, to administer the structured teaching programme for the school children on first aid-management of health emergencies, to assess the post- test knowledge of school children regarding first aid management of health emergencies, to evaluate the effectiveness of the structured teaching programme for the school children on first aid management of health emergencies, to determine the association between knowledge and selected demographic variables among school children in selected schools, to disseminate Self – Instructional Module on first aid management of health emergencies. A total of 100 samples (50 in experimental group and 50 in control group) were obtained through non-probability purposive sampling technique. Self structured knowledge questionnaire were administered in the groups to enhance the knowledge of school children regarding first aid management on health emergencies. After compilation and analysis of data, findings revealed that the pre test mean knowledge score of school students regarding first aid management on health emergencies in experimental group with the Standard deviation 14±2.36, while the post test mean knowledge and Standard deviation 20.38±2.45 score enhanced after structured teaching programme. The pre test mean knowledge score of school students regarding first aid management on health emergencies in control group with the Standard deviation 13.5±2.33 also, the post test mean knowledge score and Standard deviation 16.5±2.39 value increases. There exist a significant association between knowledge score of school children with selected demographic variable in the Experimental Group such as Education of the head of the family, Occupation of the head of the family, Source of information and Opportunity to attend any first aid at 0.05 level of significance as calculated by chi square value was greater than the table value while no significant association exist between age in years, gender, residential area, socio economic class, previous knowledge about first aid, source of information, Education, Witnessed any emergencies and area where emergency was witnessed at 0.05 level of significance as calculated by chi square value was less than the table value. The association between knowledge score of school students with selected demographic variable in the Control Group such as Occupation of the head of the family, Opportunity to attend first aid classes and Area where emergency was witnessed at 0.05 level of significance as calculated by chi square value was greater than the table value, while no significant association exist between Age in years, Gender, Residential area, socio economic class, Education of the head of the family, education of the head of family, previous knowledge about first aid, source of information, Education and Witnessed any Emergencies at 0.05 level of significance as calculated.

**Background:** Globally childhood injury is a major health concern. Over 8,75,000 children of less than 18 years of age die annually in the world as a result of injuries, 80% of these occur in low income countries and middle-income countries. According to recent estimates, the death rate of unintentional injuries in low income countries and middle-income countries is 65 per 100,000 population compared to 35 per 100,000 population in high-income countries. Childhood injury is a prime concern in every country around the world, affecting both developed and developing countries, causing over 5.8 million deaths per year or 15,000 deaths per day <sup>2</sup>.

Materials and Methods: In this Quasi Experimental study Pre Test- Post Test only research design was adopted.100 Study samples were taken (50 in experimental group and 50 in control group) belonging to age group 14-18 from selected Government schools of Delhi. Tool consisting of consent form, demographic variables, Self structured knowledge questionnaire to assess the knowledge of school children regarding first aid management on health emergencies.

**Results:** The pre test knowledge scores of school regarding first aid management on health emergencies in experimental group had a mean of 14, median of 14.5 and Standard deviation 2.36. In the experimental group, after the structured teaching programme was administered to the school students, the mean and median and Standard deviation post test knowledge score increased by 20.38, 21 and 2.45.

The pre test knowledge scores of subjects regarding first aid management on health emergencies in control group had a mean of 13.5, median of 14 and Standard deviation 2.33 while the post test knowledge scores in control group had a mean of 16.5, median of 16.5 and Standard deviation 2.39.

The mean and median and Standard deviation of post test knowledge score of the experimental group was higher than the mean and median knowledge score of both pre test and post test of the control group.

There exist a significant association between knowledge score of school children with selected demographic variable in the Experimental Group such as Education of the head of the family, Occupation of the head of the family, Source of information and Opportunity to attend any first aid at 0.05 level of significance as calculated by chi square value was greater than the table value while no significant association exist between age in years, gender, residential area, socio economic class, previous knowledge about first aid, source of information, Education, Witnessed any emergencies and area where emergency was witnessed at 0.05 level of significance as calculated by chi square value was less than the table value.

The association between knowledge score of school students with selected demographic variable in the Control Group such as Occupation of the head of the family, Opportunity to attend first aid classes and Area where emergency was witnessed at 0.05 level of significance as calculated by chi square value was greater than the table value, while no significant association exist between Age in years, Gender, Residential area, socio economic class, Education of the head of the family, education of the head of family, previous knowledge about first aid, source of information, Education and Witnessed any Emergencies at 0.05 level of significance as calculated.

Conclusion: The main aim of this study was to assess effectiveness of structured teaching programme in terms of knowledge of school children regarding First Aid Management of Health Emergencies. The findings revealed that the majority of Students had average and poor knowledge regarding Health Emergencies before administration structured teaching programme. After the administration of structured teaching programme there was a significant increase in the knowledge of school children in experimental group as compared to the control group.

Key Word: Effectiveness, Structured Teaching Programme, Knowledge, First Aid Management

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## I. Introduction

Childhood injuries are health concern in every country around the world, affecting both developed and developing countries, causing over 5.8 million deaths per year or 15,000 deaths per day. <sup>3</sup> In the European countries, where injuries are the leading cause of death in children aged 5–19, nearly 42,000 children and adolescents aged 0–19 years die from unintentional injuries; five out of six of these deaths occur in low income countries and middle-income countries. <sup>4</sup> India is a home to nearly 472 million children under age of 18 years, representing 39% of the country's total population. <sup>5</sup> Mortality due to injuries was 8.2% among children aged < 14 years and injuries are the second leading cause of largest groups of school going children i.e. 472 million under the age of 18 years. <sup>3</sup> There are thousands of schools in India. Out of which, 113 million students in government school and 83 million in private school. Another critical factor in the preparedness of schools for emergencies is medical, non-medical, and students training. First aid training and teaching by safety ensuring

safety of students. <sup>6</sup> Schools should teach certain safety topics to children and help them to develop the skills, they need to manage their day to day health risks. <sup>7</sup>

First aid procedures should be learned to take necessary actions during minor and major medical emergencies on and off campus during school events or at home. This refer to training materials, skills learned, and directions on training for specific health emergencies and guidance on treatment procedures. The schoolaged child on an average spends 28% of the day and 14% of his or her total annual hours in school. Lifethreatening emergencies are increasing in schools. It is very important that schools have policies, procedures, and protocols for addressing the response to such incidents.

# II. Materials and Methods:

Quasi Experimental Pre test Post test only research design was adopted for the study. The study was conducted from 10/02/2020 to 29/2/2020 on 100 school children (50 in each experimental and control group) attending IX<sup>th</sup> standard Government Girls Senior Secondary School, Burari, New Delhi as experimental group and Government Girls Senior Secondary School, Nathupura, New Delhi as control group. Self-structured knowledge questionnaire was administered to school children of both the schools. The Structured Teaching Programme on First Aid Management on health emergencies were provided to school children in experimental group on that day 1 after providing self-structured knowledge questionnaire. On 7th day, post-test was taken from both the groups. Self instructional modules were disseminated to the school children.

Study Design: Quasi Experimental Pre test Post test only Research Design.

**Study Location:** The study was conducted in Government Girls Senior Secondary School, Burari and Government Girls Senior Secondary School, Nathupura, New Delhi.

**Study Duration:** 10 February 2020 to 29 February 2020

Sample Size: 100 Government School Students

**Sample Size Calculation:** 100 study subjects were included in the study considering the estimated population of 500 with the margin of error 5% and confidence interval 95%.

**Subject and Selection Method:** The sample of the present study consisted of consisted of Government school Students who were present at the time of data collection and those students were taken who wanted to participate in the study. Sampling technique adopted for the present study was non probability purposive sampling.

# **Inclusion criteria:**

The study includes school children who were

- in age group of 14-18.
- willing to participate in the study.
- present at the time of data collection.
- present for the pre assessment of the knowledge

# **Exclusion criteria:**

- The study excludes school children who were
- not willing to participate in the study
- not available during the time of study.
- studying in primary classes.

# **Procedure methodology**

After written informed consent was obtained, a well-designed tool was used to collect the demographic as well as the knowledge of the study subjects. The tool was developed with the help of Review of literature, Opinion of experts, Informal discussions with experts and peer groups, Discussions with guide and coguide and Personal experience of the researcher.

The tool included the sociodemographic characteristics such as age, gender, residential area, socio-economic class, education of the head of the family, occupation of the head of the family, previous knowledge about first aid, source of information, education, opportunity to attend any first aid classes, witnessed any emergencies, area where emergency was witnessed.

The school students were handed out the tool. The demographic characteristics were being entered by the school students. The knowledge of school students was assessed using the structured knowledge questionnaire in which each item had one correct answer and score of one (1) was awarded to correct response and zero (0) was given to each incorrect response. Total score of knowledge questionnaire was 30. Scoring: 0-10 (Poor),11-20 (Average),21-30 (Good).

# Statistical analysis

Data was analysed manually. The data analysis was done using both descriptive and inferential statistics. The frequency and percentage distribution of socio-demographic characteristics were analysed. The Frequency and

Percentage distribution of school students according to level of knowledge. Mean, Median and Standard Deviation of knowledge scores, Association of knowledge of school children regarding Health Emergencies with the selected demographic variables

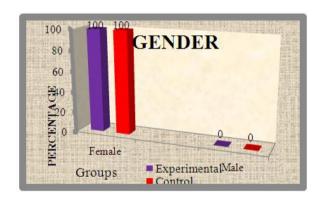
Contingency tables were made. Chi square was used to establish the association between the knowledge of school children regarding Health Emergencies with the selected demographic variables. Chi square is a non-parametric test designed to analyze the association between independent and dependent variables as chi square is robust with respect to the distribution of data. The level  $p \le 0.05$  was considered as the cutoff value or significance.

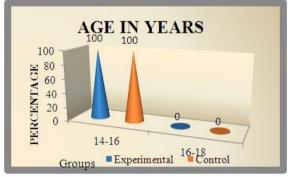
III. Result
FINDINGS ON DEMOGRAPHIC VARIABLES OF SCHOOL CHILDREN
Table no 1(a) Frequency and Percentage Distribution of School Children by Socio- Demographic Variables.

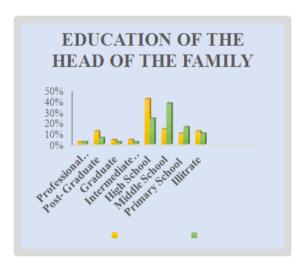
S.No	SOCIO-DEMOGRAPHIC VARIABLES		TAL GROUP		L GROUP					
		(n <sub>1</sub> :	= 50)	(n <sub>2</sub> =	= 50)					
		FREQUENCY (f)	PERCENTAGE (%)	FREQUENCY (f)	PERCENTAGE (%)					
1.	Age in Years									
	14-16 years 16- 18 years	50	100	50 0	100 0					
2.	Gender									
	Male	0	0	0	0					
3.	Female  Residential area	50	100	50	100					
	Rural	0	0	0	0					
	Urban Slum	50 0	100 0	50 0	100 0					
4.	Socio - Economic class	0	U	<u> </u>	U					
	Upper class Upper Middle class Lower Middle class Upper lower class Lower class	13 9 12 6 10	26 18 24 12 20	7 20 22 1 0	14 40 44 2 0					
5.	Education of the head of the family									
	Professional Degree Post- Graduate Graduate Intermediate/ Diploma High School Middle School Primary School Illiterate	1 6 2 2 2 21 7 5 6	2 12 4 4 4 42 14 10 12	1 3 1 1 12 19 8 5	2 6 2 2 2 24 38 16 10					
6.	Occupation of Head of family									
	Professional Clerical/ Shop/ Farm Skilled Worker Unskilled Worker Unemployed	13 12 15 3 7	26 24 30 6 14	6 14 23 6 1	12 28 46 12 2					
7.a	Previous knowledge about first Aid			T						
	Yes No	16 34	32 68	44 6	88 12					
				1	1					

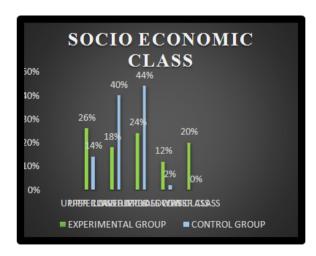
A Quasi- Experimental study to evaluate the effectiveness of Structured Teaching ..

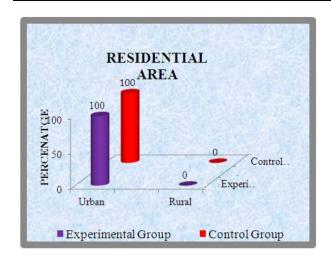
7.b	Source of information									
	Mass Media	0	0	0	0					
	Television	3	6	0	0					
	Newspaper	0	0	0	0					
	Health Education Programme outside school	0	0	0	0					
	Health Education Programme in school	9	18	44	88					
	Books	4	8	0	0					
	Others	0	0	0	0					
	Specify Others	0	0	0	0					
8.	Education	Education								
	9 <sup>th</sup> class	50	100	50	100					
	10 <sup>th</sup> class	0	0	0	0					
	11 <sup>th</sup> class	0	0	0	0					
	12 <sup>th</sup> class	0	0	0	0					
9.	Opportunity to attend any first aid o	elasses								
	Yes	9	18	44	88					
	No	41	82	6	12					
10.a	Witnessed any Emergencies									
	Yes	47	94	49	98					
	No	3	6	1	2					
10.b	Area where Emergency was Witness	ed								
	Playground	5	10	11	22					
	Classroom	9	18	3	6					
	Home	4	8	14	28					
	Road side	29	58	21	42					
	Specify others	0	0	0	0					



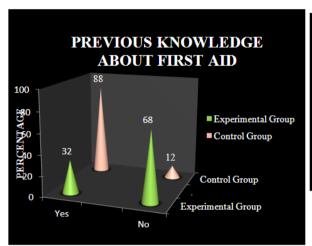


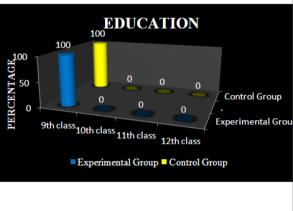


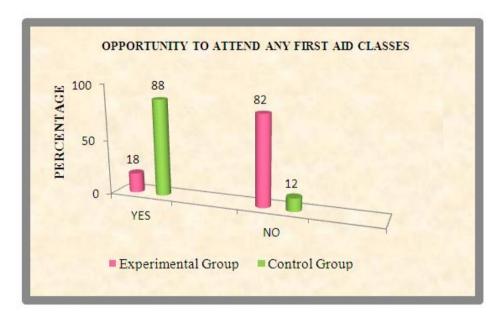


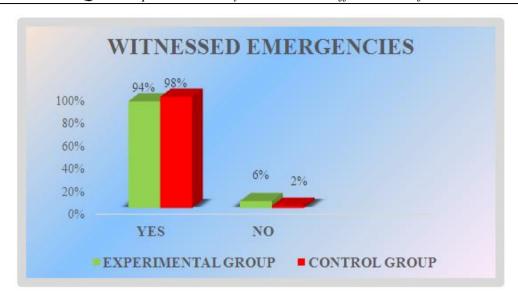


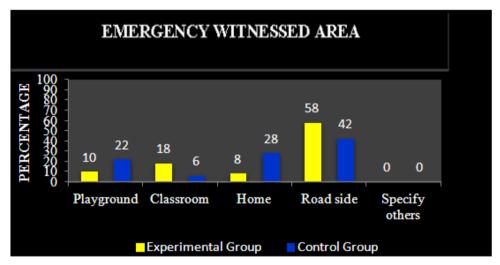










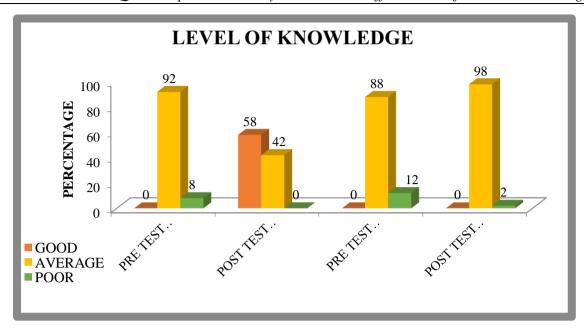


COMPARISON OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF SCHOOL CHILDREN BETWEEN EXPERIMENTAL AND CONTROL GROUP ACCORDING TO LEVEL OF KNOWLEDGE REGARDING FIRST AID MANAGEMENT IN HEALTH EMERGENCIES

n = 100

LEVEL OF KNOWLEDGE	SCORE	EXPERIMENTAL GROUP ( $n_{1} = 50$ )				CONTROL GROUP $(n_{2} = 50)$				
		Pre	Pre Test		Post Test		Pre Test		Post Test	
		<b>(f)</b>	(%)	<b>(f)</b>	(%)	<b>(f)</b>	(%)	(n)	(%)	
GOOD	21-30	0	0	29	58	0	0	0	0	
AVERAGE	11-20	46	92	21	42	44	88	49	98	
POOR	1-10	4	8	0	0	6	12	1	2	

Maximum score = 30 Minimum score = 0



Experimental Group the maximum number of school children (92%) had average pre test knowledge followed by (8%). None of the school children had Good knowledge score in the pre test. After administration of Structured Teaching Programme, majority of the school children of the Experimental group (58%) had Good knowledge score followed by (42%) with average post test knowledge score in school students. None of the school children in post test had poor knowledge in the Experimental Group.

In the Control Group, the maximum school children (88%) had average pre test knowledge score followed by (12%) school children having poor knowledge score while none of the respondent in the Control group in pre test had good knowledge score. In post test, Majority of the school children (98%) had average knowledge score, followed by (2%) had poor knowledge score while none of the school children in the post test had good knowledge in the control group.

COMPARISON OF FINDINGS RELATED TO THE KNOWLEDGE OF SCHOOL CHILDREN REGARDING FIRST AID MANAGEMENT ON HEALTH EMERGENCIES IN EXPERIMENTAL AND CONTROL GROUP.

		n=	=100								
KNOWLEDGE SCORE											
			PRE TEST		POST TEST						
	1				Lagrana Lagrana Lagrana						
GROUP	n	MEAN	MEDIAN	SD	MEAN	MEDIAN	SD				
EXPERIMENTAL	$n_1 =$	14	14.5	2.36	20.38	21	2.45				
	50										
CONTROL	$n_2=$	13.5	14	2.33	16.54	16.5	2.39				
	50										

Maximum score = 30 Minimum score = 0

The pre test knowledge scores of school regarding first aid management on health emergencies in experimental group had a mean of 14, median of 14.5 and Standard deviation 2.36. In the experimental group, after the structured teaching programme was administered to the school students, the mean and median and Standard deviation post test knowledge score increased by 20.38, 21 and 2.45.

The pre test knowledge scores of subjects regarding first aid management on health emergencies in control group had a mean of 13.5, median of 14 and Standard deviation 2.33 while the post test knowledge scores in control group had a mean of 16.5, median of 16.5 and Standard deviation 2.39.

# COMPARISON OF PRE TEST AND POST TEST KNOWLEDGE SCORE OF SCHOOL CHILDREN REGARDING FIRST AID MANAGEMENT ON HEALTH EMERGENCIES IN EXPERIMENTAL GROUP.

 $n_1 = 50$ Mean Difference Standard Error of Mean Knowledge Mean S.D 't' Value Scores Difference Pre test 14 2.36 6.38 0.09 15.80\*\* 20.38 2.45 Post test

df (49) (t value=2.00, P=0.05)

There is significant difference in the mean knowledge scores of the school children regarding First Aid Management of Health Emergencies. The obtained mean difference of knowledge scores is. 6.38 between the pre test and post test was found to be statistically significant as evident from the 't' value of 15.80 for the df (49) at 0.05 level of significance.

FINDINGS RELATED TO COMPARISON OF PRE TEST AND POST TEST KNOWLEDGE SCORE OF SCHOOL CHILDREN REGARDING FIRST AID MANAGEMENT ON HEALTH EMERGENCIES BETWEEN EXPERIMENTAL AND CONTROL GROUP.

n = 100KNOWLEDGE EXPERIMENTAL CONTROL GROUP SCORES GROUP Standard Error 't' Value Mean S.D Mean SD Mean Difference of Mean Difference Pre test 14 2.36 13.5 2.33 0.5 0.03 0.32 Post test 20.38 2.39 0.06 4.56\*\*\* 2.45 16.54 3.84

(df=98) ('t' value=1.960, p=0.05)

There is significant difference in the mean pre test knowledge scores of the school children regarding first aid management of Health Emergencies between the experimental and control groups. The obtained mean difference of knowledge scores ie. 0.03 between the experimental and control groups is not found to be statistically significant as evidenced by the calculated 't' value i.e 0.32, where as the tabulated t value is 1.960 for df (98)) at 0.05 levels of significance. Therefore, there is no increase knowledge level in the control group evidenced by pre test and post test scores.

# ASSOCIATION OF KNOWLEDGE OF SCHOOL CHILDREN ON HEALTH EMERGENCIES WITH SELECTED DEMOGRAPHIC VARIABLES IN EXPERIMENTAL GROUP.

 $N_1 = 50$ 

EXPERIM	IENTAL GROUP						
S.No	SOCIO-DEMOGRAPHIC VARIABLES	GOOD	AVERAGE	POOR	df	Chi square value	't' value
1.	AGE IN YEARS						
	14-16 years	0	46	4			
	16-18 years	0	0	0	2	0.135 <sup>NS</sup>	5.99
2.	GENDER		I.				
	Male Female	0	0 46	0 4	2	0.135 <sup>NS</sup>	5.99
3.	RESIDENTIAL AREA						
	Rural	0	0	0			
	Urban	0	46	4	4	NG	
	Slum	0	0	0		0.225 <sup>NS</sup>	9.49
4.	SOCIO - ECONOMIC CLASS	3	l		1	- I	
	Upper class	0	13	0			
	Upper Middle class	0	8	1			
	Lower Middle class	0	11	1	8	3.716 <sup>NS</sup>	15.51
	Upper lower class	0	6	0			
	Lower class	0	8	2			

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5.	EDUCATION OF THE HEAD	OF THE FAM	ILY				
3.	Professional Degree	0	0	1	14		
	Post- Graduate	0	6	0	14		
	Graduate						
		0	2	0			
	Intermediate/ Diploma	0	2	0		10.454.5	22.40
	High School	0	21	0		43.461 *	23.69
	Middle School	0	7	0			
	Primary School	0	4	1			
	Illiterate	0	4	2			
6.	OCCUPATION OF HEAD OF	FAMILY					
	Professional	0	13	0			
	Clerical/ Shop/ Farm	0	11	1			
	Skilled Worker	0	14	1	8	41.101*	15.51
	Unskilled Worker	0	3	0			
	Unemployed	0	5	2			
7 a.	PREVIOUS KNOWLEDGE A	BOUT FIRST			II.		
	Yes	0	14	2			
l	No	0	32	2	2	0.615 <sup>NS</sup>	5.99
		_					
7 b.	SOURCE OF INFORMATION		1				
	Mass Media	0	0	0			
	Television	0	2	1			
	Newspaper	0	0	0			
	Health Education	0	0	0			
	Programme outside	0	7	2	14	43.461 *	23.69
	school	0	3	1			
	school Health Education	0	3	1			
	school Health Education Programme in school						
	school Health Education Programme in school Books	0	0	0			
	school Health Education Programme in school Books Others	0	0	0			
	school Health Education Programme in school Books	0	0	0			
	school Health Education Programme in school Books Others	0	0	0			
	school Health Education Programme in school Books Others	0	0	0			
	school Health Education Programme in school Books Others	0	0	0			
9	school Health Education Programme in school Books Others Specify Others	0	0	0			
8.	school Health Education Programme in school Books Others Specify Others	0 0 0	0 0 0	0 0 0			
8.	school Health Education Programme in school Books Others Specify Others  EDUCATION 9th Class	0 0 0	0 0 0	0 0 0		a 1 - NS	40.75
8.	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class	0 0 0	0 0 0 46 0	0 0 0	6	2.45 <sup>NS</sup>	12.59
8.	school Health Education Programme in school Books Others Specify Others  EDUCATION 9th Class 10th Class 11th Class	0 0 0	0 0 0 0	0 0 0 0	6	2.45 <sup>NS</sup>	12.59
8.	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class	0 0 0	0 0 0 46 0	0 0 0	6	2.45 <sup>NS</sup>	12.59
8.	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class	0 0 0	0 0 0 0 46 0 0	0 0 0 0	6	2.45 <sup>NS</sup>	12.59
8.	school Health Education Programme in school Books Others Specify Others  EDUCATION 9th Class 10th Class 11th Class	0 0 0	0 0 0 0 46 0 0	0 0 0 0	6	2.45 <sup>NS</sup>	12.59
	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class	0 0 0	0 0 0 0 46 0 0	0 0 0 0	6		12.59
	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class	0 0 0 0 0 0 0	0 0 0 0 46 0 0 0 0	0 0 0 0		2.45 NS 14.72*	
	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class 12th class	0 0 0 0 0 0 0 0 0 0	0 0 0 0 46 0 0 0	0 0 0 0			
9.	school Health Education Programme in school Books Others Specify Others  EDUCATION  9 <sup>th</sup> Class 10 <sup>th</sup> Class 11 <sup>th</sup> Class 12 <sup>th</sup> class 12 <sup>th</sup> class 10 <sup>th</sup> Class	0 0 0 0 0 0 0 0 0 0	0 0 0 0 46 0 0 0 0	0 0 0 0			
	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class 12th class Ves No	0 0 0 0 0 0 0 D ANY FIRST A 0 0	0 0 0 0 0 0 0 MID CLASSES 8 38	0 0 0 0 4 0 0 0	2	14.72*	5.99
9.	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class 12th class No  WITNESSED ANY EMERGE Yes	0 0 0 0 0 0 0 0 D ANY FIRST A 0 0	0 0 0 0 0 0 0 0 0 0 43	0 0 0 0 4 0 0 0			
9.	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class 12th class Ves No	0 0 0 0 0 0 0 D ANY FIRST A 0 0	0 0 0 0 0 0 0 MID CLASSES 8 38	0 0 0 0 4 0 0 0	2	14.72*	5.99
9. 10 a	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class 12th class No  WITNESSED ANY EMERGE Yes No	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 46 0 0 0 0 0 MID CLASSES 8 38	0 0 0 0 4 0 0 0	2	14.72*	5.99
9.	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class 12th class No  WITNESSED ANY EMERGE Yes No  AREA WHERE EMERGENCE	0 0 0 0 0 0 0 D ANY FIRST A 0 0 0	0 0 0 0 46 0 0 0 0 MID CLASSES 8 38	0 0 0 0 4 0 0 0 0	2 2	14.72*  1.87 <sup>NS</sup>	5.99
9. 10 a	school Health Education Programme in school Books Others Specify Others  EDUCATION  9th Class 10th Class 11th Class 12th class 12th class No  WITNESSED ANY EMERGE Yes No	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 46 0 0 0 0 0 MID CLASSES 8 38	0 0 0 0 4 0 0 0	2	14.72*	5.99

NS- Non significant, \* - Significant at p<0.05

There exist a significant association between knowledge score of school children with selected demographic variable in the Experimental Group such as Education of the head of the family, Occupation of the head of the family, Source of information and Opportunity to attend any first aid at 0.05 level of significance as calculated by chi square value was greater than the table value while no significant association exist between age in years, gender, residential area, socio economic class, previous knowledge about first aid, source of

information, Education, Witnessed any emergencies and area where emergency was witnessed at 0.05 level of significance as calculated by chi square value was less than the table value.

# ASSOCIATION OF KNOWLEDGE OF SCHOOL STUDENTS ON HEALTH EMERGENCIES WITH SELECTED DEMOGRAPHIC VARIABLES IN CONTROL GROUP.

			CONTROL GRO	UP						
S.No	SOCIO- DEMOGRAPHIC VARIABLES	GOOD	AVERAGE	POOR	Df	Chi square value	't' value			
1.	AGE IN YEARS									
	14-16 years 16-18 years	0	44 0	6 0	2	0.02 <sup>NS</sup>	5.99			
2.	GENDER									
2.	Male Female	0	0 44	0 6	2	0.02 <sup>NS</sup>	5.99			
3.	RESIDENTIAL AREA									
	Rural Urban Slum	0 0 0	0 44 0	0 6 0	4	0.225 <sup>NS</sup>	9.49			
4.	SOCIO - ECONOMIC CLASS									
	Upper class Upper Middle class Lower Middle class Upper lower class Upper lower class	0 0 0 0	3 18 22 1 0	4 2 0 0 0	8	14.02 <sup>NS</sup>	15.51			
5.	EDUCATION OF THE H	EAD OF THE FA	AMILY							
	Professional Degree Post- Graduate Graduate Intermediate/ Diploma High School Middle School Primary School Illiterate	0 0 0 0 0 0 0	1 3 1 1 11 16 6 5	0 0 0 0 1 3 2	14	4.089 <sup>NS</sup>	23.69			
6.	OCCUPATION OF HEAD OF FAMILY									
	Professional Clerical/ Shop/ Farm Skilled Worker Unskilled Worker Unemployed	0 0 0 0	4 13 21 5	2 1 2 1 0	8	19.63*	15.51			
7.0	DDEVIOUS VNOW! EDG	E ADOUT EIDS	TAID							
7 a.	PREVIOUS KNOWLEDG Yes	E ABOUT FIRS	40	4	2	4.02 <sup>NS</sup>	5.99			
	No	0	4	2	_					
7 b.	SOURCE OF INFORMAT	ION								

	Mass Media	0	0	0			
	Television	0	0	0			
	Newspaper	0	0	0			
	Health Education	0	0	0			
	Programme outside				14	$2.25^{NS}$	23.69
	school						
	Health Education						
	Programme in school	0	40	4			
	Books						
	Others	0	0	0			
	Specify Others	0	0	0			
		0	0	0			
8.	EDUCATION						
	9 <sup>th</sup> Class	0	44	6			
	10 <sup>th</sup> Class	0	0	0	6	$2.02^{NS}$	12.59
	11 <sup>th</sup> Class	0	0	0			
	12 <sup>th</sup> class	0	0	0			
9.	OPPORTUNITY TO ATT	END ANY FIRS	T AID CLASSES				
	Yes	0	38	6	2	6.92*	5.99
	No	0	6	0			
10 a.	WITNESSED ANY EMEI	RGENCIES	l				l
	Yes	0	43	6			
	No	0	1	0	2	$0.33^{NS}$	5.99
10 b.	AREA WHERE EMERGE	ENCY WAS WIT	NESSED				
	Playground	0	10	1			
	Classroom	0	2	1			
	Home	0	11	3	8		15.51
	Road side	0	20	1		44.923*	
		0	0	0			
NICI NI	• • • • • • • • • • • • • • • • • • • •	4 4 .0.0	l				

NS- Non significant, \* - Significant at p<0.05

The exist a significant association between knowledge score of school students with selected demographic variable in the Control Group such as Occupation of the head of the family, Opportunity to attend first aid classes and Area where emergency was witnessed at 0.05 level of significance as calculated by chi square value was greater than the table value, while no significant association exist between Age in years, Gender, Residential area, socio economic class, Education of the head of the family, education of the head of family, previous knowledge about first aid, source of information, Education and Witnessed any Emergencies at 0.05 level of significance as calculated.

# IV. Discussion

In the present study, the investigator attempted to develop and evaluate the effectiveness of Structured Teaching Programme in terms of knowledge of school children regarding the management of health emergencies in school children and to seek its relationship with selected factors.

The results from the study indicated that school children have average knowledge regarding first-aid management in health emergencies before administering structured teaching programme as evidenced by pretest mean score (14) in the present study and this findings have been supported by the study done by **Mendonca S. I.**<sup>52</sup> where it was found that school students have deficit knowledge before administering structured teaching program as seen by pre-test mean score (13.16).

Findings related to knowledge level indicated that in experimental group, there was a significant gain in knowledge regarding first-aid management of health emergencies in school children who had undergone structured teaching programme, suggested that structured teaching programme could be used effectively in increasing knowledge of school children. These findings have been supported by the study **Goyal A.** <sup>53</sup>that there was a lack of knowledge among students regarding first aid management and the student's knowledge was improved after administration of the structured teaching programme.

The post- test knowledge of school children regarding first aid management of health emergencies has increased as evidenced by the post-test mean value and S.D value (20.38 and 2.45) from pre-test mean value and S.D (14, 2.33) in the experimental group. The findings are similar to the study conducted by **Jayalakshmi M.** <sup>54</sup> which shows pre-test mean (19.57) and S.D (4.73) and post- test knowledge scores was increased as seen by the mean scores (27.62) and S.D (3.02). This suggested that the training was effective in increasing the knowledge and hence enhance the post-test scores.

The present study also established that the structured teaching programme is effective as there is significant gain in knowledge of school children regarding first-aid management in health emergencies in the experimental group after the administration of structured teaching programme. The study was consistent with the study of Nandgaon U. M, Salimath G. 55 the study concluded that the structured teaching programme on first aid measures for selected emergencies was found to be effective in improving the knowledge of the primary school children.

A study done by ReddaTelke- Haimnot, Pierre Marie Preux. 56 also support the findings of the present study that disseminating the self-instructional module on management of health emergencies helped students to extract a great deal of information, it could change misconceptions and provide correct information about health emergencies, and can be an effective approach to first-aid awareness in health emergencies.

### V. Conclusion

On the basis of the findings of the study the following conclusions were drawn:

- The main aim of this study was to assess effectiveness of structured teaching programme in terms of knowledge of school children regarding First Aid Management of Health Emergencies.
- Majority of Students had average and poor knowledge regarding Health Emergencies before administration structured teaching programme.
- After the administration of structured teaching programme there was a significant increase in the knowledge of school children in experimental group as compared to the control group.

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