



## **Effect Of Structured Teaching Programme (STP) On Knowledge Regarding Selected First Aid Measures Among School Teachers In Selected Schools, Kamrup (M), Assam.**

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**ABSTRACT:** “Today’s children are tomorrow’s citizen”. The future pillars of the nation and future of the nation rests on the hands of the children health today. School children being more active and adventuresome, they are prone to falls, sports injury, drowning, vehicle accidents, etc. At this age, children may think they are invincible and that accidents and injuries happen to other people and not to them. First aid is the provision of initial care for an illness or injury. It is usually performed by non-expert, but trained personnel to a sick or injured person until definitive medical treatment can be accessed. It is important to know First Aid so that you can be a help to yourself or others that may be injured. Every school establishment shall have as a minimum one member of staff who is a trained first aider and two emergency first aiders in the work place. In our study Pre-experimental one group pre-test post-test research design and quantitative evaluative research approach was undertaken among school teachers in Radiant International School and Rajdhani Public School, Sonapur, Kamrup (M), Assam. The sample consisted of 62 school teachers and convenience sampling technique was adopted to select the samples. The tools used for data collection was demographic proforma and structured knowledge questionnaire regarding selected first aid measures. The objective of the study is to assess the effect of structured teaching programme (STP) on knowledge regarding selected first aid measures among school teachers. The results showed that there was marked increase in post-test knowledge. In knowledge, the mean post-test knowledge score (22.76) was higher than the mean pre-test knowledge score (13.35) and mean difference between the pre-test and post-test score was 9.41. The calculated ‘t-value’ was 4.10 and p value was 0.000062 at 0.05 level of significance. This indicates that the structured teaching programme regarding selected first aid measures was effective in improving the knowledge of school teachers. The present study concluded that structured teaching programme (STP) regarding selected first aid measures has an effect in enhancing the knowledge among school teachers. Hence, the structured teaching programme can be utilized by school teachers to provide first aid measures in emergency situation and prevent its complication among school children.

**Keywords:** First aid measures, knowledge, structured teaching programme, effect, school teachers

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## I. INTRODUCTION

“Today’s children are tomorrow’s citizen”. The future pillars of the nation and future of the nation rests on the hands of the children health today. Healthy children make healthy nation.<sup>1</sup> The school is a place where the process of socialization occurs. School children being more active and adventuresome, they are prone to falls, sports injury, drowning, vehicle accidents etc.<sup>2</sup> First aid is the initial care of the ill or injured. Its goal is to stop and, if possible, reverse harm. It generally consists of a series of simple and in some cases, potentially life-saving techniques that an individual can be trained to perform with minimal equipment.<sup>3</sup> It is important to know First Aid so that you can be a help to yourself or others that may be injured.<sup>4</sup> First aid training not only provides with knowledge and skill to give life support and other emergency care but also helps you to develop safety awareness and habits that promote safety at home, at work, during recreation, and on the streets.<sup>5</sup> Injuries are very common nowadays and can occur at any point of time in our day-to-day life. Among them, injuries in school children rank a major part.<sup>6</sup> According to World Health Organization (WHO) statistical report in 2012, about 1.3 million people die each year as a result of road traffic crashes. Injuries are the leading cause of death among adolescent. Nearly 950,000 children less than 18 years died in the world due to an injury each year.<sup>7</sup> National Crime Record Bureau data and few independent studies reveal that nearly 15 - 20% of injury deaths occur among children and total accidental deaths and suicides doubled during the 2 decades from 2,48,312 in 1990 to 4,84,172 by 2010. It is estimated that a million death occur due to injuries every year. It is estimated that nearly 1,00,000 deaths every year, 10% of total injury deaths are among children below 18 years.<sup>8</sup> Unintentional injury is the fifth leading cause of death in the United States. According to government statistics, unintentional injuries are the leading cause of death in children from age of 1 to 21.<sup>9</sup> Providing first aid in the emergency situations can be overwhelming and traumatic. Every school establishment shall have as a minimum one member of staff who is a trained first aider and two emergency first aiders in the work place.<sup>10</sup> Encouraging more people to learn basic first aid and to intervene will rely to some extent on the development of improved strategies to provide support to those who have given first aid care in an emergency and a majority of children have much close contact with teacher in the schools than health team members.<sup>11</sup> School health nurse plays an important role to provide first aid training to school teachers, staffs and school students. So, it will help to reduce health problems in schools. The study was undertaken to evaluate the “Effect of structured teaching programme (STP) on knowledge regarding selected first aid measures among school teachers in selected schools, Kamrup (M), Assam.”

## 2. MATERIALS AND METHODS

A pre-experimental one group pre-test post-test design was

adopted for the study. The study was conducted in Radiant International School, Sonapur and Rajdhani Public School, Sonapur, Kamrup (M), Assam among 62 school teachers. Ethical clearance certificate and formal permission was taken from the concerned authorities to conduct the research study. Non-probability convenience sampling technique was used for selecting samples. The sample size was calculated using Cochran formula. The tools used for the study were demographic proforma and self-structured knowledge questionnaire. School teachers who were not available during the period of data collection and who were not willing to participate in the study were excluded from the study sample. On the first day, the purpose of the study was explained and informed consent was taken from the school teachers. A pre-test was conducted using self-structured knowledge questionnaire on knowledge regarding selected first aid measures. Post-test was conducted by using the same self-structured knowledge questionnaire after 7<sup>th</sup> day of the structured teaching programme.

## 3. STATISTICAL ANALYSIS

The data obtained was analyzed in terms of objectives of the study by using descriptive and inferential statistics. Statistical analyses were done using Statistical Package for Social Survey (SPSS) for Window version 18.0. The descriptive statistics was used to describe the sample characteristics in terms of frequency and percentage. Paired ‘t’ test is used to test the significance difference in the knowledge score between pre-test and post-test performance.

The  $\chi^2$ -test was used to determine level of significance association between appropriate parameters. ‘p’ value  $<0.05$  were considered statistically significant. The results were tabulated and graphically represented using Microsoft Office for Window 2008.

## 4. RESULTS AND DISCUSSION

### 4.1 Characteristics of demographic variables of school teachers

The frequency and percentage distribution of demographic variables of the school teachers. Data analysis showed that out of 62 (sixty-two) school teachers, 24 (38.71%) were in the age group of 21-25 years and 26-30 years, 10 (16.13%) were in the age group of 31-35 years and 4 (6.45%) were in the age group of 36 years and above (Figure 1.1). In term of sex, 5 (8.09%) of the samples were male and 57 (91.94%) of the samples were female (Figure 1.2). In relation to educational status, maximum of the school teachers i.e., 26 (41.93%) were from graduate and master and 5 (8.07%) were from B.Ed. and other (Figure 1.3). With regard to previous exposure to the topic, 20 (32.26%) school teachers were exposed to the topic and 42 (67.74%) were not exposed to the topic (Figure 1.4).



Fig 1.1: Bar diagram showing percentage distribution of school teachers according to their age

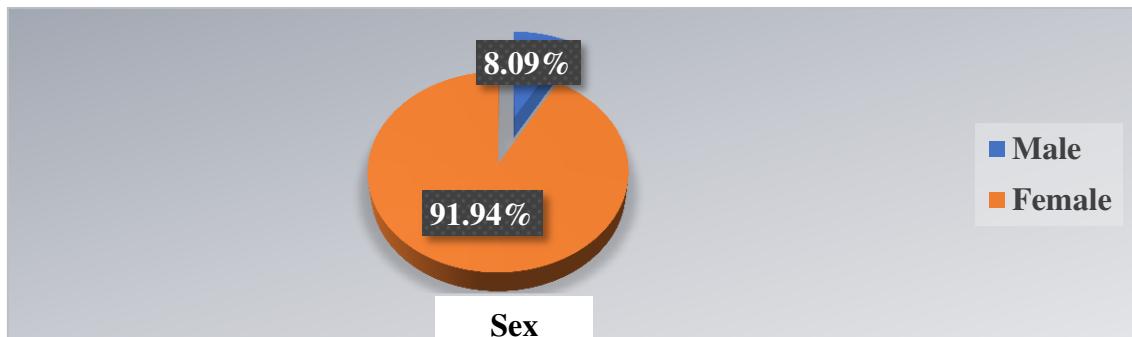


Fig 1.2: Pie chart showing percentage distribution of school teachers according to their sex

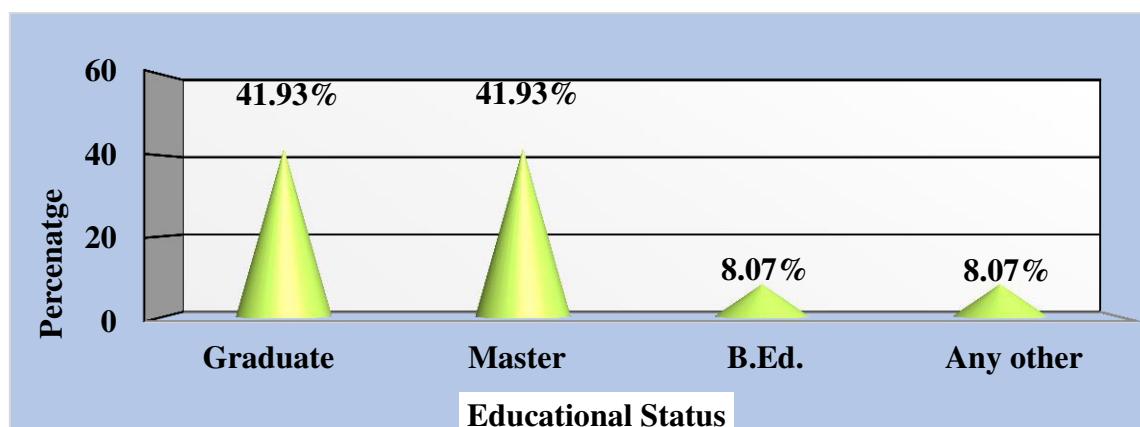


Fig 1.3: Cone diagram showing percentage distribution of school teachers according to their educational status

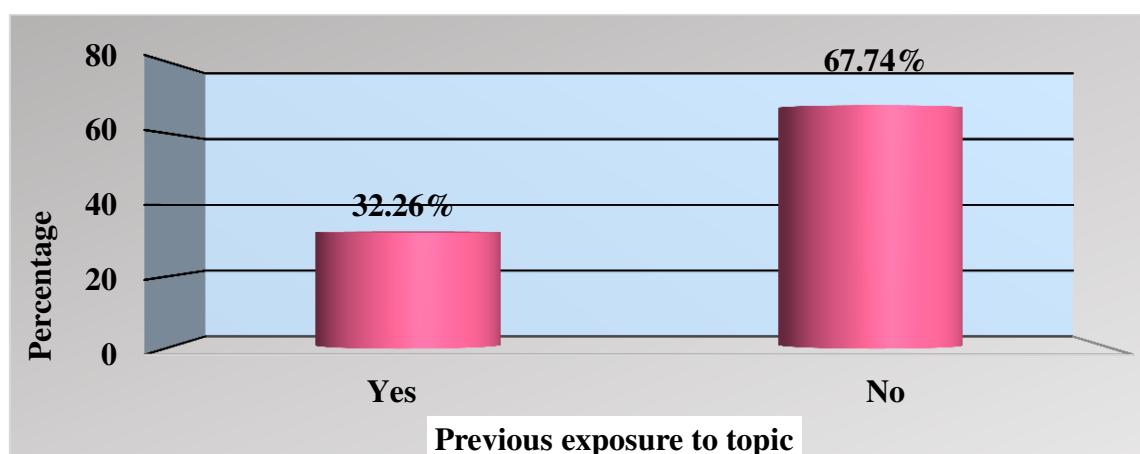
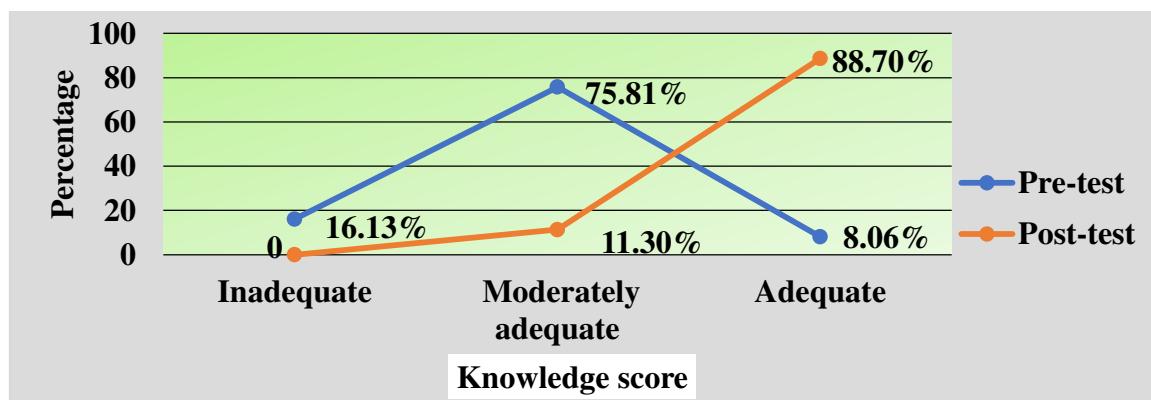


Fig 1.4: Cylindrical diagram showing percentage distribution of school teachers according to their previous exposure to the topic

#### 4.2 Assessing the pre-test and post-test level of knowledge regarding selected first aid measures among school teachers

The assessment of pre-test and post-test level of knowledge regarding selected first aid measures presented in Figure 2, the results indicates that in pre-test 10(16.13%) school teachers have inadequate knowledge, 47 (75.81%) school teachers have moderately adequate knowledge and 5 (8.06%) school teachers have adequate knowledge. Where in post-test, 7 (11.30%) school teachers have moderately adequate knowledge and 55 (88.70%) school teachers have adequate knowledge. So, post-test knowledge score remains higher than the pre-test knowledge score. Similar findings were

found in the study conducted by Sharma A among 30 school teachers at Z.P. High school, Piler, Andhra Pradesh. The comparison of pre-test and post-test parameters showed significant improvement of knowledge regarding first aid management. Thus, it can be concluded that Planned Teaching is effective in increasing knowledge of teachers.<sup>12</sup> The present study is supported by a study conducted by Simpson R and Yadav R regarding effectiveness of Planned Teaching Programme on first aid management of choking among primary school teachers.<sup>13</sup> Similar findings were found in the study conducted by Joshy A, Athulya K and Babu BS regarding effectiveness of structured teaching programme on knowledge regarding the first aid home management of selected emergencies.<sup>14</sup>



**Fig 2: Line graph showing percentage distribution of pre-test and post-test level of knowledge regarding selected first aid measures among school teachers.**

**Table I: Comparison between pre-test and post-test knowledge score regarding selected first aid measures among school teachers**

Sl.no	Knowledge score	Mean	Standard deviation	Mean difference	"t" value	df	p value	Inference
1	Pre-test	13.35	±3.77		4.10			
2	Post-test	22.76	±2.60	9.41		61	0.000062	S**

S\*= Significant, NS= Not Significant, p<0.05, S\*\*= Highly significant at, p<0.01

The effect of structured teaching programme on knowledge regarding selected first aid measures presented in **Table I**, the result shows that the mean post-test knowledge score (22.76) was higher than the mean pre-test knowledge score (13.35) and difference between the pre-test and post-test score was 9.41. The calculated t-value was 4.10 and p value was 0.000062 at 0.05 level of significance. Hence null hypothesis ( $H_0$ ) was rejected and the research hypothesis ( $H_1$ ) was accepted i.e., there was a significant mean difference between the pre-test and post-test knowledge score regarding selected first aid measures. This finding supported by Balai MK and Tripathi N<sup>15</sup>Shanthi S and Vinutha MDS<sup>16</sup>showed that structured teaching programme is effective to increase knowledge among school teachers regarding first aid measures. Similar findings were found in

the study conducted by Haider J regarding effectiveness of structured teaching programme on students' knowledge in Baghdad University regarding first aid. This study showed that the structured teaching programme is effective in improving the student's knowledge concerning first aid in the study group.<sup>17</sup> This finding supported by Frank JC showed that the knowledge and attitude of the auto drivers increased after the planned teaching programme.<sup>18</sup> Similar findings were found in the study conducted by Semwal J, et al., on knowledge and attitudes of first aid among school children of classes 9<sup>th</sup> to 12<sup>th</sup> at Doivalablock, Dehradun. Results showed that structured teaching programme is effective to increase knowledge among school children regarding first aid measures.<sup>19</sup>

**Table 2: Association between level of pre-test knowledge with the selected demographic variables**

Demographic variables	Knowledge	Score	Chi square (x <sup>2</sup> )	df	p value	Inference
I. Age						

a. 21-25 years	5	17	2				
b. 26-30 years	4	17	3	3.68	6	0.719888	NS
c. 31-35 years	1	9	-				
d. 36 and above	-	4	-				
<b>2. Sex</b>							
a. Male	-	4	1	1.89	2	0.38868	NS
b. Female	10	43	4				
<b>3. Educational status</b>							
a. Graduate							
b. Master	6	16	4				
c. B.Ed.	3	23	-	9.27	6	0.158953	NS
d. M.Ed.	-	5	-				
e. Any other	-	-	-				
	1	3	1				
<b>4. Previous exposure to the topic</b>							
a. Yes							
b. No	-	15	5	15.20	2	0.0005	S**
	10	32	-				

A chi-square test was performed to examine the association between pre-test level of knowledge with the selected demographic variables. The data presented in **Table 2**, showed that there was significant association between the pre-test level of knowledge with selected demographic variables i.e., previous exposure to the topic. This finding supported by Joshi A showed that there was an association of knowledge score with the demographic variables such as age, educational status, year of teaching experiences and sources of information on first aid, the calculated chi square value is higher than the critical value at  $p<0.05$  level of significance.<sup>20</sup>

## 5. CONCLUSION

First aid is the immediate care given to a person who has been injured or suddenly fallen ill. It includes self-help and home care if medical assistance is not available or is delayed. It also includes well-selected words of encouragement, evidence of willingness to help, and promotion of confidence

by demonstration of competence.<sup>21</sup> The provision of first aid should always have a direct relationship to general health and safety organization, because first aid itself will not handle more than a small part of workers' total care. First aid is a part of the total health care for workers. In practice, its application will depend to a large extent on persons present at the time of an accident, whether co-workers or formally trained medical personnel. This immediate intervention must be followed by specialized medical care whenever needed.<sup>22</sup> The present study concluded that structured teaching programme (STP) regarding selected first aid measures has an effect in enhancing the knowledge among school teachers. Hence, the structured teaching programme can be utilized by school teachers to provide first aid measures in emergency situation and prevent its complication among school children.

## 6. CONFLICT OF INTEREST

Conflict of interest declared of none.

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