

Original Article

# Assessment of High School students' First-Aid Knowledge, Attitudes, and Practice in Selected Schools in the Chamarajanagar District

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**Abstract** - First-aid (FA) is the practice of providing initial care for an illness or injury by a trained but unqualified person while waiting for access to medical attention. Every year, over a million kids worldwide pass away from injuries that may have been avoided. This study aimed to evaluate the high school student's knowledge, attitude, and practices at a few schools in the Chamarajanagar District.

A questionnaire on demographic Performa and a standardized self-administered questionnaire was used to collect the data. An explorative method has been adopted, and using a straightforward random sampling method, 80 students were chosen for the study.

Only 30% of the 80 respondents have a high level of knowledge, with the bulk of participants (70%) having a weak understanding. A mere 17.5% of participants have a positive attitude, 32.5 percent have a moderately positive attitude, and 50% of individuals have an unfavorable view. 47.5 percent of the subjects don't practice first aid or practice it poorly. The findings indicate that most students have poor first-aid practices, many have unfavourable attitudes about this first aid, and many people who participated lack first-aid knowledge. IEC activities should thus start picking up in all schools, particularly in rural regions.

**Keywords** - First-aid, Knowledge, Attitude, Practice, High School students.

## 1. Introduction

First aid refers to the care provided to a victim of an accident, injury, or unexpected sickness before delivering advanced medical care. It should work to maintain life, encourage healing, and stop the victim's condition from getting worse. First aid should be administered, followed by a timely referral to the appropriate medical treatment by the person caring for the wounded individual<sup>1</sup>.

All people in India must learn survival skills and first aid because non-communicable diseases and injuries have become widespread in the country. Safety education should start with schoolchildren since they can learn and have the zeal to preach and practice among their family members, friends, and community. The bulk of at-risk groups with injury tendencies are students. Due to the natural atmosphere of the institution, this increases their responsiveness to any form of educational training. Schools are the most effective sites for education on first aid<sup>1</sup>.

First-Aid Management becomes a crucial role following any injuries to serious accidents resulting in bleeding and fractures to children before the Child is transferred to a medical institution, as the Children are highly exposed to emergencies due to increasing activity. <sup>2</sup>

Teenagers and pupils in their second year of high school are more susceptible to accidents and emergencies<sup>3</sup>.

Due to an increase in risky conduct and violent acts that were more difficult, laypeople first trained in first aid in England around 120 years ago. The purpose of the training at the time was to impart life-saving skills that prevent an injured person's condition from worsening and aid in their eventual recovery <sup>4</sup>. Even while it might not lessen the effects of the crisis, early first aid will have a secondary, preventive benefit. <sup>5</sup>

On September 12, 2009, World First Aid Day was observed under "First Aid for Humanity." More than 32 National Societies contacted over 20 million individuals, and more than 760,000 volunteers and staff were organised <sup>6</sup>. Additionally, that year, 2.3 million people in Europe received training through National Societies, and 7 million globally received instruction in first aid certification programs<sup>7</sup>.

Several studies have recommended that all schools be required to teach first aid fundamentals because children are an excellent source of knowledge and can positively impact the neighborhood. When youngster is not with their relatives, they spend a lot of time at school, where they



may meet situations that need first aid. People in affluent nations are sufficiently knowledgeable about first aid, while the level of awareness in poor communities is inadequate<sup>7, 8</sup>. School health services are frequently ignored in developing nations, impacting how common ailments are treated<sup>9</sup>.

In contrast to the situation in wealthy nations like the UK, the School Health Program in India has focused very little on First Aid training. In the school health curriculum, FA is a subject that is taught more frequently<sup>10</sup>. Schools can significantly contribute to health promotion for two main reasons: first, they provide structured learning opportunities, and second, students spend a lot of time in schools participating in various activities, such as sports and physical activity<sup>11</sup>.

## 2. Need for the study

First aid is a vital life skill that teaches kids risk awareness, includes the tools to be safe, and enables them to assist others or themselves in a medical emergency. The world's leading cause of morbidity and mortality, particularly in the middle- and low-income nations, is injury<sup>13</sup>. First aid's main goals are reducing suffering, speeding up the healing process, and preventing further harm. The initial course of treatment for injuries as first aid is extremely important as it determines the future course of the disease and the likelihood of complications.<sup>14</sup>

Children need first aid more frequently than adults because they spend most of the day in school and are more likely to be involved in sports and other extracurricular activities, which increases their risk of accidents and injuries<sup>15</sup>. In general, outdoor physical activities are directly responsible for most kid injuries, 20 percent of which occur during school hours<sup>16</sup>. When first aid knowledge is applied correctly, it can distinguish between a temporary or permanent injury, a quick recovery, or a long-term disability<sup>17</sup>.

Schoolchildren will function as radical change agents if properly trained and guided, transforming our society's health situation. The school-based first aid program's yield in terms of the total number of community members trained per unit of instructional time can be further increased by students teaching family members and sharing materials with them at home. As a result, many nations have started first aid programs for students, and a lot of research has been done to back up the case for first aid in schools<sup>19</sup>.

Everyone should be familiar with basic first aid techniques, especially school-aged children. Globally, one million kids suffer avoidable injuries each year<sup>21</sup>. Reducing morbidity and mortality will be greatly helped

by having adequate knowledge of the prevention, control, and management of common illnesses and injuries<sup>22</sup>.

This study's main goal was to determine the Knowledge, Attitude, and Practice of First-Aid among a chosen group of high school students in the Chamarajanagar District.

## 3. Objectives

1. To evaluate First Aid knowledge, attitude, and practice among high school students in Chamarajanagar schools.
2. To determine whether there is an association between high school student's knowledge of first aid and their chosen demographic factors.
3. To determine whether there is an association between high school students' attitudes about first aid and the demographic factors they have chosen.
4. To find an association between Practices scores regarding First-Aid among high school students with their selected demographic data.

## 4. Methodology

### 4.1. Sources of information

The data was collected from selected high school students at the Schools of Chamarajanagar District.

### 4.2. Design and method

Quantitative research approach and a descriptive research design.

### 4.3. Setting for a study

In the Chamarajanagar District, the assessment was carried out in a few chosen high schools.

### 4.4. Sample

High school students between the ages of 13 and 18 make up the sample in this study.

Students who are accessible for data collection and agree to participate in the study meet the inclusion criteria. Children younger than 13 were not included in the study.

### 4.5. Samples taken

80 High school students from chosen schools in the Chamarajanagar District make up the sample size.

### 4.6. Technique for sampling

A convenient sampling technique was used to choose the sample.

### 4.7. Data gathering

The systematic self-administered questionnaire was modified from previous research to gather the data. It included questions about the KAP assessment as well as socio-demographic data.

## 5. Results

### Section I- Description of selected demographic variables of study subject

Table 1. Distribution of High school students according to their demographic proforma

n=80

Sl.No	Variables	Frequency(f)	Percentage (%)
1.	<b>Age in Years</b>		
	a. 13-15 years	26	32.5%
	b. 15-17 years	42	52.5%
	c. >17 years	12	15%
2.	<b>Sex</b>		
	a. Male	28	35%
	b. Female	52	65%
3.	<b>Class</b>		
	a. 8 <sup>th</sup>	26	32.5%
	b. 9 <sup>th</sup>	20	25%
	c. 10 <sup>th</sup>	34	42.5%
4.	<b>Place of residence</b>		
	a. Rural	76	95%
	b. Urban	04	05%
5.	<b>Religion</b>		
	a. Hindu	49	61.25%
	b. Muslim	18	22.5%
	c. Christian	13	16.25%
	d. Others	00	00
6.	<b>Education qualification of parents</b>		
	a. Illiterate	16	20%
	b. Primary school	17	21.25%
	c. High school	33	41.25%
	d. College/diploma/degree	14	17.5%
7.	<b>The family income per year</b>		
	a. <5000	13	16.25%
	b. 5001-10000	29	36.25%
	c. 10001-15000	18	22.5%
	d. >15001	20	25%
8.	<b>History of any previous injuries</b>		
	a. Fracture	15	18.75%
	b. Cut injuries	26	32.5%
	c. Head injury	05	6.25%
	d. Other injuries	34	42.5%
9.	<b>Health camp attended</b>		
	a. Yes	11	13.75%
	b. No	69	86.25%
10.	<b>Duration of first aid camp Attended</b>		
	a. < one week	9	11.25%
	b. > one week	2	2.5%
	c. Not at all attended	69	86.25%

The data presented, i.e., Table 01, shows that the majority of the participants in the research were in the 15–17 yrs age range, and 52 percent were female and in the 10th grade (34). Also, the majority of these students belong to the Hindu religion (49) with their family income (29) between Rs.5000-10,000 per month with their parent's education qualification of High School (33). Participants with a history of previous injuries are mostly cut injuries (26) and have not attended any health camps (86).

**Section II: Description of First aid knowledge, attitude, and practice ratings of high school pupils.**

**Table 2. Frequency and percentage analysis of high school students according to their knowledge level**

*n=80*

Level of Knowledge	Frequency	Percentage
a. Inadequate Knowledge	47	58.75%
b. Moderate Knowledge	24	30%
c. Adequate Knowledge	09	11.25

According to the information in Table 02, most high school pupils (58.75 percent) lack basic first aid skills.

**Table 3. Frequency and percentage distribution of high school students according to their attitude level**

*n=80*

Level of Attitude	Frequency	Percentage
a. Unfavorable attitude	40	50%
b. Moderately favorable attitude	26	32.5%
c. Favorable attitude	14	17.5%

The data presented in Table 03 shows that most high school students (50%) have an unfavorable attitude towards first aid.

**Table 4. Frequency and percentage distribution of high school students according to their practice level**

*n=80*

Level of Practice	Frequency	Percentage
a. Poor practice	38	47.5%
b. Moderately good practice	30	37.5%
c. Good practice	12	15%

The information in Table 04 demonstrates that most high school pupils (50%) have a negative opinion about first aid.

**Section III: Association of Knowledge test results of high school pupils and certain demographic factors**

**Table 5. Association between high school students' first aid knowledge and their demographic characteristics**

*n=80*

Sl.no	Demographic variables	Knowledge score		Df	Chi-square	Inference
		Below average	Above average			
	Age					
	a) 13-15	21	05	02	3.14	NS
	b) 15-17	26	16			
	c) 17& >	07	05			
	Sex					
	a) Male	20	08	01	0.78	NS
	b) Female	32	20			
	Class					
	a) 8 <sup>th</sup>	14	12	02	2.76	NS
	b) 9 <sup>th</sup>	15	05			
	c) 10 <sup>th</sup>	24	10			
	History of previous injuries					
	a) Fracture			02	2.80	NS
	b) Cut injuries	11	04			
	c) Head injury	20	06			
	d) Other injuries	04	01			
		20	14			
1.	Health camp attended					
	a) Yes	07	04	01	0.08	NS
	b) No	47	22			
2.	Duration of camp					
	a) <one week	04	05	02	11.83	S
	b) > one week	00	05			
	c) Not at all attended	49	20			

The information in table -05 demonstrates the association between selected demographic factors and the first aid knowledge scores of high school students from particular schools in Chamarajanagar. Variable such as duration of health camp attended is significant at 0.01 level, and remaining variables are found not significant.

**Section IV: Association between high school students' attitude scores and their chosen demographic factors**

**Table 6. Association between early adolescents' Level of Attitude ratings and their chosen demographic characteristics**

n=80

SI. No	Demographic variables	Attitude scores level			Df	Chi-square	Inference
		Unfavorable	Moderate	Favorable			
1.	<b>Age</b>				04	5.09	NS
	a) 13-15	12	08	06			
	b) 15-17	21	11	04			
	c) > 17	06	06	00			
2.	<b>Sex</b>				02	0.13	NS
	a) Male	13	11	04			
	b) Female	24	19	09			
3.	<b>Class</b>				04	3.64	NS
	a) 8 <sup>th</sup>	17	07	02			
	b) 9 <sup>th</sup>	10	08	02			
	c) 10 <sup>th</sup>	16	11	07			
4.	<b>History of previous injuries</b>				06	5.22	NS
	a) Fracture	07	06	02			
	b) Cut injuries	14	07	05			
	c) Head injury	01	02	02			
	d) Other injuries	17	14	03			
5.	<b>Health camp attended</b>				02	1.63	NS
	a) Yes	07	02	02			
	b) No	32	26	11			
6.	<b>Duration of health camp attended</b>				04	3.03	NS
	a) < one week	05	02	02			
	b) > one week	02	00	00			
	c) Not at all attended	32	26	11			

The information in Table 6 demonstrates that the association between the attitude level scores of high school children on first aid with selected demographic variables, such as age, sex, class, previous injuries, health camp attended, and duration of the camp attended, were not found significant at 0.01 level.

**Section V: Association of practice score high school children with selected demographic variables**

**Table 7. Association of the level of practice of high school students with their selected demographic variables**

n=80

SI. No	Demographic variables	Practice scores level			Df	Chi-square	Inference	
		Poor	Moderate	Good				
1.	<b>Age</b>				04	04	3.68	NS
	a) 13-15	11	11	04				
	b) 15-17	21	16	05				
	c) > 17	02	07	02				
2	<b>Sex</b>				09	02	5.49	NS
	a) Male	12	07	08				
	b) Female	18	26					
3	<b>Class</b>				02	04	2.66	NS
	a) 8 <sup>th</sup>	13	11	03				
	b) 9 <sup>th</sup>	07	10	07				
	c) 10 <sup>th</sup>	14	13					

<b>4</b>	<b>History of previous injuries</b>						
	a) Fracture	10	04	09	06	17.57	S
	b) Cut injuries	11	06	00			
	c) Head injury	00	05	06			
	d) Other injuries	12	16	02			
<b>5</b>	<b>Health camp attended</b>						
	a) Yes	03	06	02	02	1.21	NS
	b) No	31	29	02			
<b>6</b>	<b>Duration of health camp attended</b>						
	a) < one week	04	03	02	04	2.32	NS
	b) > one week	04	02	00			
	c) Not all attended	30	30	09			

The data in Table 07 shows an association between the level of practice scores of high school children in selected schools of chamarajanagar on first aid with selected demographic variables. Variables such as the history of previous injuries are significant at a 0.01 level. Other Variables were not found to be significant at the 0.01 level.

### 6. Conclusion

A valuable life skill is knowing how to give first aid. It gives kids the tools to manage risks, keep themselves safe, and aid others if they find themselves in a medical emergency. It might help them live. Our study found that most high school students who took part in the survey had inadequate first aid knowledge, a negative attitude toward first aid, and poor first aid practice.

### 7. Recommendations

Comparable studies must be conducted in other private and public high schools in various districts and locations.

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