



A Cross Sectional Study to Assess the First-Aid Knowledge Among High School Students

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ABSTRACT

Basic first aid skills should be known by everyone, especially kids in school. Every year, one million children worldwide sustain preventable injuries. Having proper understanding of the prevention, control, and management of common diseases and injuries would significantly aid in reducing morbidity and mortality. This study's main goal was to determine the Knowledge of First-Aid among a chosen group of high school students. Descriptive survey design was used among rural school children from Himachal Pradesh. In this study the total enumeration sampling technique is used for quantitative data collection. The group of Students who attended the Skill Training were selected for the Study. After obtaining Consent & Assent from the Teacher and Students the tool was administered and data were collected. The Study Reveals that the majority of participants lack adequate knowledge in this essential life-saving skill. Specifically, 58% of the school children demonstrated insufficient understanding of first aid principles and practices. This finding is concerning, as it suggests a significant gap in their ability to provide immediate assistance in emergency situations. On a more positive note, the study also indicated that 42% of the school children exhibited a moderate level of adequate knowledge on first aid. While this proportion is relatively smaller, it suggests that there is still a portion of the student population who possess a foundational understanding of first aid practices. These students may be better equipped to respond appropriately during emergencies and potentially offer assistance to those in need. However, considering the overall results of the study, it is evident that there is a pressing need for interventions aimed at improving first aid education among school children. By addressing this knowledge gap, we can empower students with the necessary skills to respond effectively in emergency situations, potentially saving lives and minimizing the severity of injuries.

INTRODUCTION

The treatment given to a victim of an accident, injury, or unanticipated illness before offering advanced medical care is referred to as first aid. It ought to keep the person alive, promote healing, and prevent further deterioration of their condition. The person tending to the injured person should offer first aid before promptly referring them to the proper medical care.

Due to the prevalence of non-communicable illnesses and injuries in India, everyone must learn how to survive and administer first aid. Schoolchildren should be the target audience for safety education because they have the capacity to learn and the passion to spread the word among their family, friends, and community. Students make up the majority of at-risk populations with injury inclinations. This makes them more receptive to any type of educational training because of the institution's natural setting. The most effective places to learn first aid are in schools.

While children are more exposed to crises due to increased activity, first aid management plays a key role following any injuries to major accidents resulting in bleeding and fractures to children before the Child is taken to a medical facility. High school sophomores and teenagers are more vulnerable to accidents and crises.

NEED FOR THE STUDY

First aid basics should be taught in all schools, according to several studies, as children are a great source of information and have a beneficial influence on the community. Young children spend a lot of time at school when they are not with their family, when they could encounter circumstances requiring first aid. First aid knowledge is fairly widespread in wealthy societies, but it is insufficient in underdeveloped areas. In impoverished countries, school health services are usually disregarded, which has an influence on how common illnesses are managed.

In contrast to wealthier nations like the UK, India's School Health Program has placed very little emphasis on first aid instruction. FA is one of the subjects that is taught more frequently in the school health curriculum. Since they offer structured learning opportunities and because students spend a

lot of time participating in different activities at school, such sports and physical activity, schools may considerably contribute to the development of health.

First aid is an essential life skill that gives children the knowledge of risks, safety equipment, and ability to help others or oneself in an emergency medical situation. Injury is the main cause of illness and mortality worldwide, especially in middle- and low-income countries. The major objectives of first aid are to alleviate suffering, hasten the healing process, and stop additional damage. First aid for injuries is crucial since it defines how the condition will develop in the future and how likely complications will be.

Since they spend the most of the day in school and are more likely to participate in sports and other extracurricular activities than adults, children require first aid more frequently than adults. The majority of injuries in children are often caused by outdoor physical activity, 20% of which happen during school hours. When first aid knowledge is used appropriately, it can tell if an injury is temporary or permanent, whether it will heal quickly, or whether it will result in a long-term handicap.

If properly instructed and supervised, schoolchildren will act as radical change agents, improving the health of our society. Students can teach family members and share materials with them at home to boost the school-based first aid program's yield in terms of the overall number of community members trained per unit of instructional time. A lot of research has been done to support the argument for first aid in schools, and as a result, several countries have established first aid programmes for kids.

Basic first aid skills should be known by everyone, especially kids in school. Every year, one million children worldwide sustain preventable injuries. Having proper understanding of the prevention, control, and management of common diseases and injuries would significantly aid in reducing morbidity and mortality.

This study's main goal was to determine the Knowledge of First-Aid among a chosen group of high school students.

The objective of the study:

1. To assess the level of knowledge on First aid management among school children at rural area of Himachal Pradesh
2. To find association between level of Knowledge and selected socio demographic variables among school children at rural area of Himachal Pradesh.

METHODOLOGY

Research Approach: Quantitative research approach was carried out.

Research design: Descriptive survey design is used to explore the level of knowledge on First aid management among school children at rural area of Himachal Pradesh.

Research setting: Selected rural school children at Himachal Pradesh.

Sampling technique: In this study the total enumeration sampling technique is used for quantitative data collection. The group of Students who attended the Skill Training were selected for the Study.

Data collection instruments: Data collection instruments were as follows-

Tool 1: Semi-structured interview schedule to ascertain the background information, includes variables i.e. age, religion, education status of family members, monthly income of family, habitat and previous knowledge about First aid Management.

Tool 2: Knowledge Questionnaire: The knowledge questionnaire was developed by the investigator to assess the knowledge on First aid management among school children. It comprises 20 items related common basic First Aid measures for common illness and injury. The interquartile range was used to score the level of knowledge of the school children on First Aid Management.

Total Score	Level of Knowledge
≤ 10	Inadequate Knowledge
11 – 15	Moderately Adequate Knowledge
≥ 16	Adequate Knowledge

Data Collection Process:

The data was collection timing was March 2022. After obtaining assent from the teacher of the respective class and explaining the purposes of the study to the participants, the informed consent was taken. And by survey method data was collected using the Semi Structured self-administered Questionnaire. Participants were asked to maintain distance and respond the Questionnaire without discussing with others. Confidentiality and anonymity of the data was maintained. Collected data was analysed using SPSS.

RESULTS**Table 1: Frequency and Percentage of Demographic Variables of School Children**

(N=64)

S. NO	Demographic Variables	Frequency	Percentage
1	Age		
	a. Less than 15 Years	30	46.9
	b. 16 -17 Years	33	51.6
	c. 18 Years and above	1	1.6
2	Education:		
	a. 7 -9 th Standard	16	25.0
	b. 10 th standard	14	21.9
	c. 11 th Standard	17	26.6
	d. 12 th standard	17	26.6
3	Religion		
	a. Hindu	64	100
4	Father Education		
	a. No Formal education	38	59.4
	b. Secondary level	21	32.8
	c. Higher secondary level	3	4.7
	d. Under graduate	2	3.1
	e. Post Graduate	0	0
5	Mother Education		
	a. No Formal education	41	64.1
	b. Secondary level	20	31.3
	c. Higher secondary level	3	4.7
	d. Under graduate	0	0
	e. Post Graduate	0	0
6	Economic status of the family		
	a. < 5000 per month	42	65.6
	b. 5001 – 10000 per month	8	12.5
	c. 10000 – 25000 per month	10	15.6
	d. 25000 – 50000 per month	4	6.3
7	Habitat		
	a. Rural	58	90.6

S. NO	Demographic Variables	Frequency	Percentage
	b. Urban	6	9.4
8	Previous knowledge		
	a. Class room teaching	44	68.8
	b. Special Class/ Session	4	6.3
	c. Online	6	9.4
	d. None	10	15.6

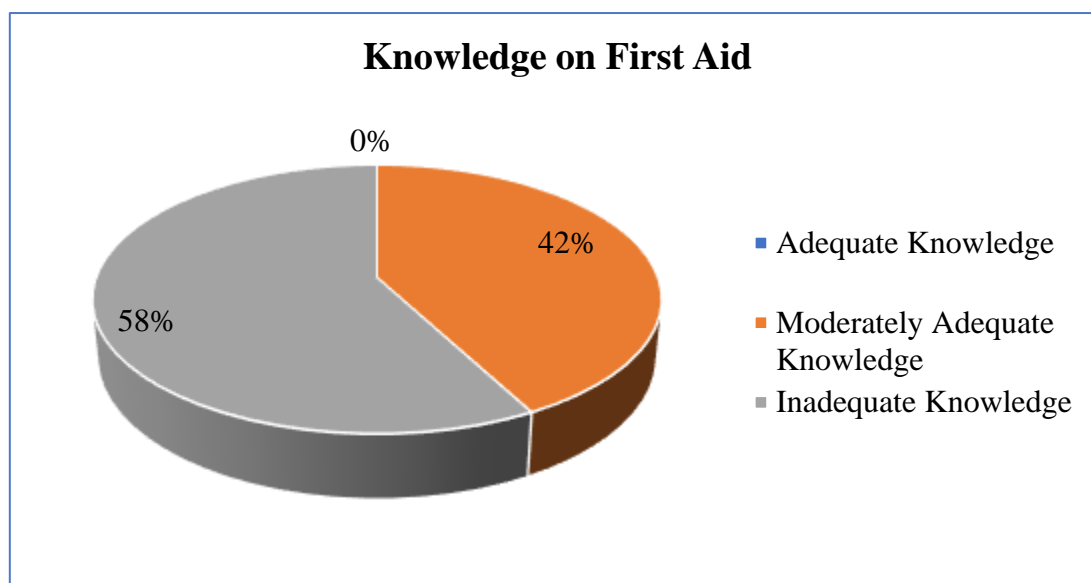


Figure 1: Distribution of Level of Knowledge on First Aid among School Children.

Figure 1 depicts that School Children no one has adequate knowledge on First Aid, 58% of School Children has inadequate knowledge and 42% School Children has moderate level of adequate knowledge on First Aid.

Table 2: Association between Level of Knowledge on First Aid and Selected Socio Demographic Variables of School Children (N=64)

S. No	Place of Residence	Inadequate Knowledge	Moderately Adequate Knowledge	Chi Square	Sig. (2-tailed)
1	Age			4.809	0.090 NS
	a. Less than 15 Years	16	14		
	b. 16 -17 Years	10	23		
	c. 18 Years and above	1	0		
2	Education:			6.717	0.081 NS
	a. 7 -9 th Standard	9	7		
	b. 10 th standard	4	10		
	c. 11 th Standard	10	7		
3	Father Education			2.118	0.548 NS
	a. No Formal education	18	20		
	b. Secondary level	8	13		
	c. Higher secondary level	1	2		
5	Mother Education			2.045 ^a	0.360 NS
	a. No Formal education	20	21		
	b. Secondary level	6	14		

S. No	Place of Residence	Inadequate Knowledge	Moderately Adequate Knowledge	Chi Square	Sig. (2-tailed)
6	c. Higher secondary level	1	2	2.479	0.479 NS
	Economic status of the family				
	a. < 5000 per month	19	23		
	b. 5001 – 10000 per month	4	4		
	c. 10000 – 25000 per month	2	8		
7	d. 25000 – 50000 per month	2	2	4.596	0.075 NS
	Habitat				
	a. Rural	22	36		
8	b. Urban	5	1	13.643	0.003* S
	Previous knowledge				
	a. Class room teaching	16	28		
	b. Special Class/ Session	4	0		
	c. Online	0	6		
	d. None	7	3		

*S- Significant at $p < 0.05$ & NS – Non Significant

SUMMARY

This study conducted on school children's knowledge of first aid revealed that the majority of participants lack adequate knowledge in this essential life-saving skill. Specifically, 58% of the school children demonstrated insufficient understanding of first aid principles and practices. This finding is concerning, as it suggests a significant gap in their ability to provide immediate assistance in emergency situations.

On a more positive note, the study also indicated that 42% of the school children exhibited a moderate level of adequate knowledge on first aid. While this proportion is relatively smaller, it suggests that there is still a portion of the student population who possess a foundational understanding of first aid practices. These students may be better equipped to respond appropriately during emergencies and potentially offer assistance to those in need. The previous exposure has Significant Relationship with current knowledge of Students on First Aid.

However, considering the overall results of the study, it is evident that there is a pressing need for interventions aimed at improving first aid education among school children. By addressing this knowledge gap, we can empower students with the necessary skills to respond effectively in emergency situations, potentially saving lives and minimizing the severity of injuries.

CONCLUSION


The study's findings highlight the inadequacy of first aid knowledge among school children, with 58% demonstrating insufficient understanding. While 42% showed a moderate level of adequate knowledge, there is still room for improvement in equipping students with the necessary skills to provide effective first aid. It is crucial for educational institutions, policymakers, and relevant stakeholders to prioritize first aid education programs to ensure that school children are adequately prepared to respond to emergencies and contribute to safer communities.

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