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RESEARCH ARTICLE

EFFECTIVENESS OF TRAINING PROGRAMME REGARDING FIRST AID AND BASIC LIFE SUPPORT ON THE MANAGEMENT OF COMMON ACCIDENTS AMONG CHILD OF SELECTED SCHOOLS IN LUCKNOW (UP)

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Abstract

Background: Accidents among school child are considered as one of the most serious health problem facing the world today because it can result in life long disability or even death. So that first aid and basic life support become as important as preserving their life and minimizing the consequences of injuries until help is obtained.

Method- A pre-experimental study conducted on 50 child studying in Dewa public schools. Sample was selected on the basis of non-probability purposive sampling technique. The data collection was done by conducting pre-test with structured knowledge questionnaire regarding first aid and basic life support on management of common accidents than after 7 days interval post-test was conducted with same structured knowledge questionnaire.

Results: Data was analyzed and interpreted by using both descriptive and inferential statistics. Distribution of child according to level of knowledge showed that none of have adequate knowledge. Majority (62.00%) of students were having inadequate knowledge, 38.00% of child were having moderate level of knowledge. Post-test knowledge scores shows that majority (54.00%) child had adequate level of knowledge, 46.00% child were having moderate level of knowledge whereas none of the child were having inadequate level of knowledge.

Conclusion: Pretest findings showed that there was inadequate knowledge on first aid and basic life support training among child which was improved after given training programme.

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Introduction:-

The National First Aid Science Advisory Board defined first aid (FA) as assessments and interventions that can be performed by a bystander (or by the victim) with minimal or no medical equipment. Childhood injuries are the leading cause of death for children in the preschool and school-going age in World.¹

According to the American Heart Association, first aid is defined as the assessments and interventions that can be performed by a bystander (or by the victim) with minimal or no medical equipment, and a first aid provider is defined as someone with formal training in first aid, emergency care, or medicine who provides first aid. First aid

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education is not commonly educated to all people in general. Only health personnel who understand and receive training about first emergency aid.²

BLS refers to maintaining an airway and supporting breathing and the circulation. It comprises the following elements: initial assessment, airway maintenance, expired air ventilation (rescue breathing; mouth-to-mouth ventilation), and chest compression. Many people already know the importance of first aid but have not reached the learning stage which means they do not understand in detail (Farzan et al., 2023). Emergency cases are an important part that needs attention because in terms of the number and impact they have increased from time to time (Zhang et al., 2022).

In a country where road traffic accidents, pedestrian mortality, and other such events occur in the eyes of the society, especially the police sector who are contacted the first in case of any accidents and emergencies even before the medical help is sought, a basic level of comprehending first aid at the site of emergency is significant in reducing the mortality and morbidity rate.

Objectives:-

1. To assess the pre-existing level of knowledge regarding the first aid and basic life support among child of Dewa public schools Lucknow (U.P.).
2. To evaluate the effectiveness of training program regarding the first aid and basic life support on the management of common accidents.
3. To find out association between pretest knowledge scores with their selected socio-demographic variables.

Hypothesis

1. **H₁:** There is a significant difference between the pre-test and post-test knowledge scores regarding first aid and basic life support training among child of Dewa public schools Lucknow (U.P.).
2. **H₂:** There is a significant association between the pretest knowledge scores with their selected socio-demographic variables.

Assumptions

In this study the researcher assume that-

1. 8th class students may have some knowledge regarding first aid and basic life support.
2. School child will be able to know about First aid and basic life support. It is necessary for management of common accidents.
3. The training programme will enhance the knowledge regarding First aid and basic life support.

Delimitations

The study is delimited to:-

1. 8th class child who are studied in Dewa public schools, Lucknow (U.P.).
2. Fifty 50 child of Dewa public schools, Lucknow (U.P.).

Methods & Material:-

Research Approach:

Quantitative evaluative research approach using the pretest and posttest design was adopted.

Research design:

Pre-experimental one group pre-test and post-test research design.

Setting:

Study was conducted in Dewa Public School in Lucknow.

Population:

8th class students of Dewa Public School Lucknow.

Sample size:

8th class students.

Sampling Technique:

Purposive sampling technique was used.

Inclusion criteria:

In this study inclusive criteria were:-8th class students who were

- 8th class students of Dewa Public School Lucknow (U.P.).
- Who are willing to participate in the study

Exclusion criteria

In the present study exclusion criteria were:-

Student who were-

- Non cooperative to participate in the study
- Who are not available at the time of study

Data collection tool:

Tool consists of 2 parts-

Section I- Socio-demographic data: Age, Source of previous information, Religion of the participant, Employment status of parents, Monthly income in family.

Section II- Structured knowledge questionnaire: Structured Knowledge Questionnaire includes 20 Multiple Choice Questions regarding First aid and basic life support on management of common accidents.

Score Interpretation:

Knowledge items score 1 was awarded for each correct response and 0 for wrong response in all items. According to the scores attained the following criterion of interpreting the scores was developed.

Reliability:

Reliability of the tool was tested for reliability by administering the structured knowledge questionnaire among the 10 students of APS School. Reliability was established by using split half technique.

Where 'r' is reliability co-efficient. The reliability of questionnaire was found $r = 0.8$

Study Period:

This study was conducted by the researcher from March 2023 to June 2024

Ethical Clearance:

1. Written formal permission will be obtained from the research and ethical committee of Dewa public school for conducting the study.
2. Informed consent will be obtained from the participants who enrolled for the study.
3. Confidentiality and anonymity of the subject will be maintained.

Data analysis:

Descriptive statistic such as frequency & percentage was used to analyze the socio demographic variables. Mean, Mean percentage and S.D. was used to assess the level of knowledge regarding first aid and basic life support on management of common accidents. In inferential statistic, paired 't' test was used to compare pretest & posttest scores and chi-square X^2 used to determine the association of pretest level of knowledge scores with selected socio-demographic variables.

Results:-

Percentage Distribution of students according to their age shows that 70.00% were in the age group of 14-15 Years and 30.00% students were in age group 12-13 Years (Fig. 1). Distribution of Students according to their source of previous information shows that 74.00% Students had knowledge from media, 14% Students had knowledge from books and only 12% students had previous knowledge through Lecture (Fig. 2). Percentage distribution of students according to their religion of participant shows that 80.00% were from Hindu religion and 10.00% students from Muslim & Christian religion (Fig. 3). In Fig. 4 shows 44.00% were government employee, 32.00% student parents were Business person, 12% student parents were retired and same 12% were Farmer. And last distribution of students according to their monthly income in family shows that 66.00% having monthly income more than

20,000Rs. and 14.00% were having income below 15,000Rs. And 12% were having the monthly income Rs. 15,000 – 18,000 and only 8% were having the monthly income between Rs.18,000–20,000.

Out of 50 students 62% in pretest had inadequate knowledge, 38% had moderate & none of students were having adequate knowledge. In post-test, majority of student 54% had adequate level of knowledge, 46% students were having moderate knowledge and none had inadequate knowledge (Table - 1). The mean pre-test knowledge score was 11.30 which improved to 20.44 in post-test at ($P < 0.001$) shown at Table-2. And there is no association between the knowledge scores with socio demographic variables like- Age in year, source of previous information, religion of the participant, employment status of parent & monthly income in family Table – 3.

Fig. 1:- Percentage distribution of students according to their age in year.

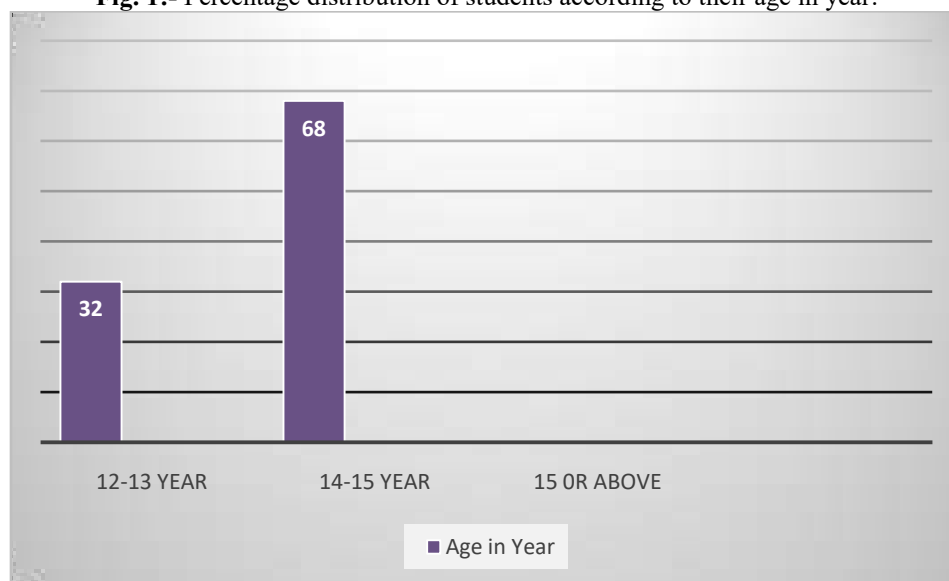


Fig. 2:- Percentage distribution of students according to their source of previous information.

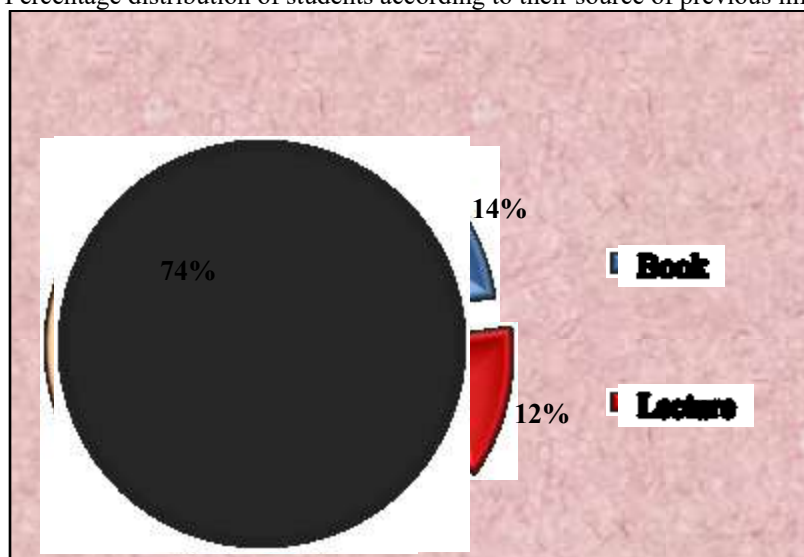


Fig. 3:- Percentage distribution of students according to their religion of participant

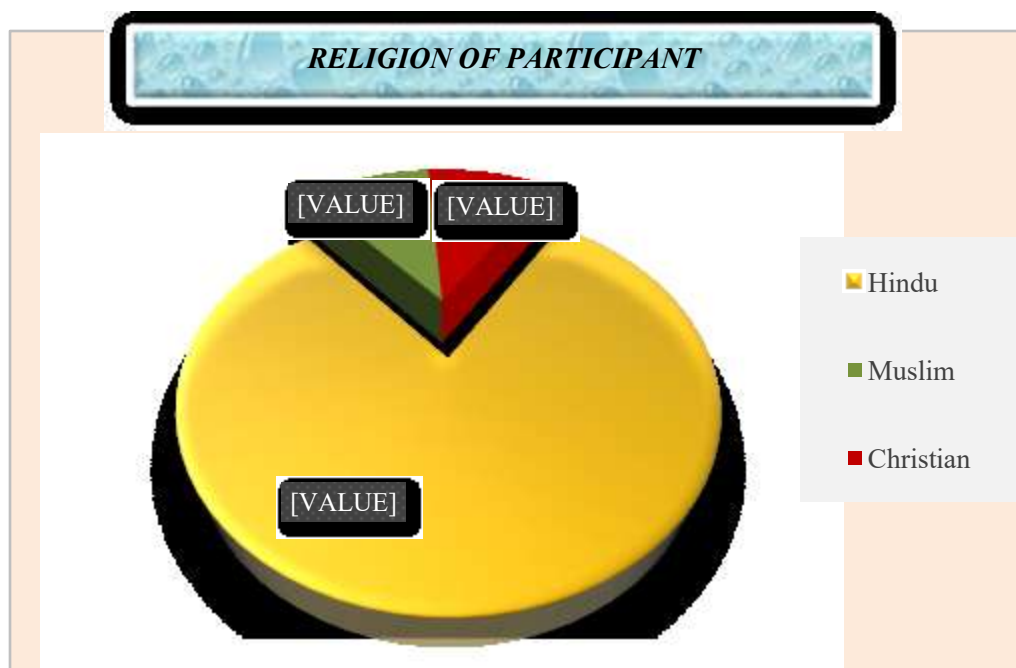


Fig. 4:- Percentage distribution of students according to their employment status of parent..

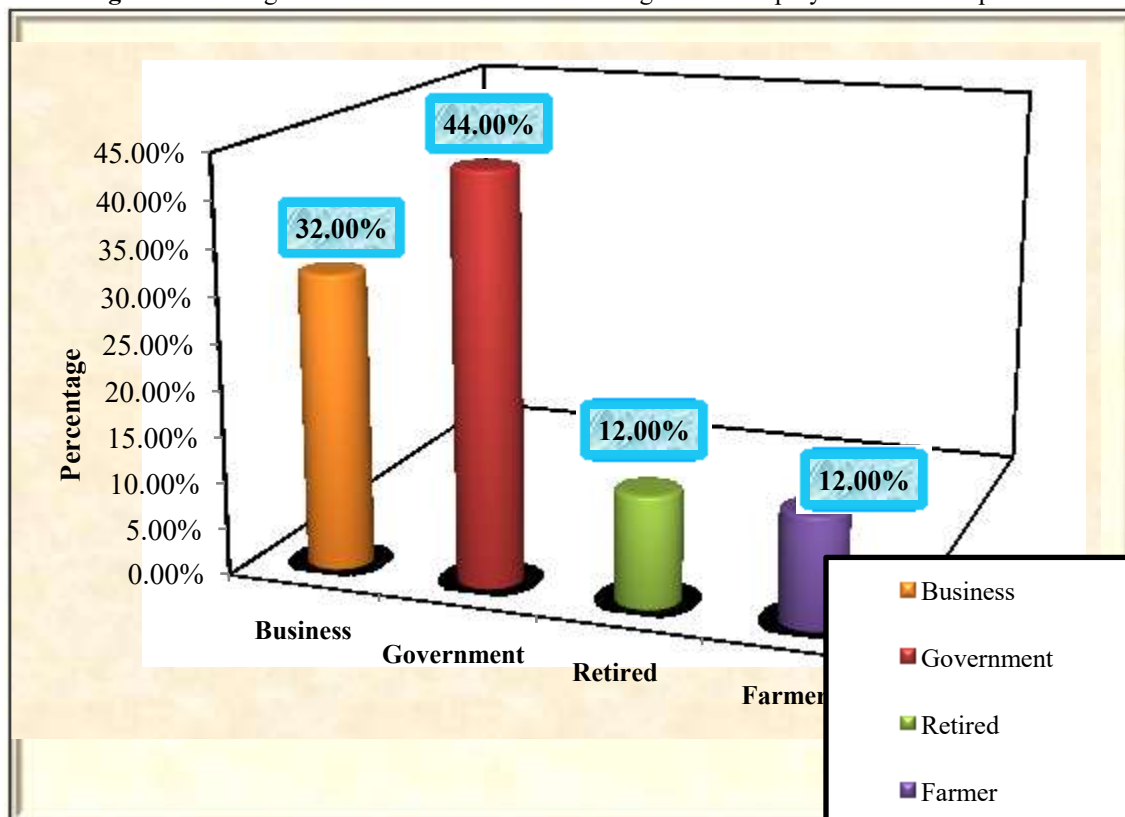


Fig. 5:- Percentage distribution of students according to their monthly income in family.

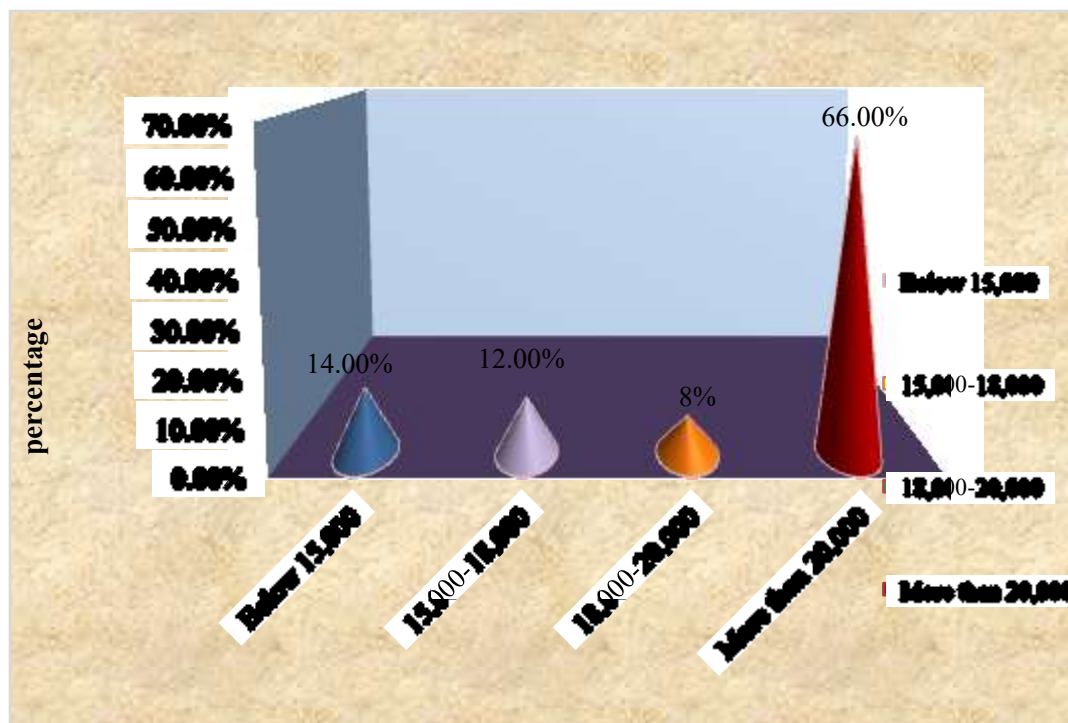


Table 1:- Comparison of pre-test and post-test knowledge scores.

Level of Knowledge	Pre-test Score	Post-test Score
Inadequate (0-33.3%)	62.00%	0.00%
Moderate (33.4-66.7%)	38.00%	46.00%
Adequate (66.8-100%)	0.00%	54.00%

Table 2:- Testing of Hypothesis.

Knowledge Scores	Mean and Standard Deviation	Mean Difference & SD	't' Value	df	P-Value	
					Calculated Value	Table Value
Pre-test	11.30 ± 3.26	9.14 ± 2.72	23.777	49	<0.001*	2.009
Post-test	20.44 ± 3.42					

t (49)= 2.009 and p<0.05

Table 3:- Association between the Pretest knowledge scores with their selected socio-demographic variables.

Variables	Level of Knowledge				Statistical Significance			
	Inadequate (n= 31)		Moderate (n= 19)		Chi Square	df	p- value	Table Value (P< 0.05)
	No.	%	No.	%				
Age in Years)								
12-13Year	10	32.3%	5	26.3%	0.198	1	0.656	3.84
14 – 15Year	21	68%	14	73.7.%				
15 or above	0	0.00%	0	0.00%				

Source of previous information								
Book	3	9.7%	4	21.1%	0.942	2	0.379	5.99
Lecture	3	9.7%	3	15.8%				
Media	25	80.6%	12	63.2%				
Not exposed	0		0					
Religion of the participant								
Hindu	24	77.4%	16	84.2%	0.764	2	0.682	5.99
Muslim	3	9.7%	2	10.5%				
Christian	4	12.9%	1	5.3%				
Others	0	0.00%	0	0.00%				
Employment status of parents								
Business	8	25.80%	8	42.1%	2.217	3	0.529	7.82
Government job	14	45.2%	8	42.1%				
Retired	5	16.1%	1	5.3%				
Farmer	4	12.9%	2	10.5%				
Monthly income in family								
Below 15,000	3	9.7%	4	21.1%	1.469	3	0.690	7.82
15,000-18,000	4	12.9%	2	10.5%				
18,000-20,000	3	9.7%	1	5.3%				
More than 20,000	21	67.7%	12	63.2%				

Discussion:-

Our study finding shows that majority 70.00% Students were from 14-15 Years of age, 74.00% had previous knowledge from media, 80.00% Student was Hindu, 44.00% student parent were government employee and 66.00% student parents have monthly income more than 20,000.

The second objective of the study to evaluate the effectiveness of training program regarding the first aid and basic life support on common management of accidents in Table 2. Our study findings shows that the mean posttest knowledge scores of students was 20.44 and mean pretest knowledge scores was 11.30. This shows the difference between pretest and posttest score findings.

Table 3 shows that there was no association between the pretest knowledge score and other demographic like Age, Source of previous information, Religion of the participant, Employment status of parent and Monthly income in family.

Limitations:-

This study also has some limitation they are-

- The size of the sample was small to draw generalization
- The study was limited to the 8th class students of Dewa public schools, Lucknow (U.P.).

Conclusion:-

It was concluded that training programme was an effective to increase the knowledge level of students regarding first aid and basic life support on management of common accidents.

Declarations:

The author declared no potential conflicts of interest with respect to the research, authorship and publication of this article.

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References:-

1. Kleinman ME, Goldberger ZD, Rea T, et al. 2017 American Heart Association focused update on adult basic life support and cardiopulmonary resuscitation quality: an update to the American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*. 2018;137(1):e7–e13.
2. Arbon P, Hayes J, Woodman R. First aid and harm minimization for victims of road trauma: a population study. *Prehosp Disaster Med*. 2011;26(4):276–282.
3. Rajapakse R, Noč M, Kersnik J. Public knowledge of cardiopulmonary resuscitation in Republic of Slovenia. *Wien Klin Wochenschr*. 2010;122(23–24):667–672.
4. Mekonnenkassachilot, Muhye Addis, basic life support knowledge and its associated factors among a non medical population in Gondar town, Ethiopia. 2020 Nov 3;12:323–331.
5. Reddy Gowry et al, Assessment of the Level of Knowledge of First Aid and Basic Life Support among the Police Workforce in a Coastal Area in Southern India, *journal of national science, and medicine published by wolters Kluwer* 202.
6. Markenson D, Ferguson Jeffrey D, Chameides L, Cassan P, Chung KL, Epstein J, et al. American heart association and American red cross guidelines for first aid. *Circulat AHA J* 2010;122:934-46.
7. Handley AJ. Basic life support. *Br J Anaesth* 1997;79:151-8.
8. Yurumez Y, Yavuz Y, Saglam H, Koken R, Tunay K. Evaluation of the level of knowledge of first aid and basic K. *AkadAcil Tip Derg* 2007;5:17-20.
9. American Red Cross. Adult First Aid/CPR/AED-Ready Reference Manual. Red Cross Store, USA: American Red Cross Association; 2011.
10. Fiander S. Road Accidents and First Aid. London, UK: British Red Cross; 2001. p. 6-9.
11. Tafere T. Assessment of Knowledge, Attitude, and Practice of First Aid Associated with Fighting Accidents among Community Police Officers in Addis Ababa City, Ethiopia: Addis Ababa University; 2017.
12. Anderson GS, Gaetz M, Masse J. First aid skill retention of first responders within the workplace. *Scand J Trauma Resusc Emerg Med* 2011;19:1-6.