



A STUDY TO EVALUATE THE EFFECTIVENESS OF EDUCATIONAL INTERVENTION ON KNOWLEDGE REGARDING FIRST AID MANAGEMENT OF SELECTED AILMENTS AMONG THE SCHOOL CHILDREN IN A SELECTED SCHOOL AT CHIDAMBARAM

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ABSTRACT

*The school children are more active having a high level of motor aggravation which leads them to learn new things quick and as fast as possible. This curiosity may sometime unfortunately lead into accidents which seek immediate attention failing in which the consequences may be much horrible. All the school children should receive first aid training and it is the need of the hour to facilitate the children with scientific knowledge.***Title:** Study to evaluate the effectiveness of educational intervention on knowledge regarding first aid management of selected ailments among the school children in a selected school at Chidambaram.**Objectives** :To assess the knowledge on first aid management of selected ailments regarding Fainting, Drowning, Foreign bodies in the eye and ear among the school children before the educational intervention. To evaluate the effectiveness of educational intervention on first aid management of selected ailments among the school children.**Design:** Quasi-experimental design one group pre-test and post-test. **Setting:** Selected School at Chidambaram. **Sampling Technique:** Purposive sampling technique. **Sample Size:** 100 school children. **Result:** In relation to the level of knowledge in the pre-test almost 55 % of the school children had moderately adequate knowledge 45 % of school children had inadequate knowledge and none of them had adequate knowledge. Among them 77% of them had moderately adequate knowledge, 21 % of them had adequate knowledge and only 2% of them had inadequate knowledge in the post-test after educational intervention on first aid management. **Conclusion:** The study was concluded that the educational intervention program was effective in improving the knowledge of school children on first aid management of selected ailments.

KEY WORDS: First-aid management, selected ailments, school children.



INTRODUCTION

The real joy, fun, lovable moments don't express the external world but help enjoy every individual to each and every moment of life. This real joy, fun and favourable moments will become more enjoyable, if the source of all these start from the ever green children. Children are the young people who represent the country in future. Their health needs are vital and they share the entitlement to good health and quality health services to the rest of the community. School age children become more independent with age. This independence leads to an increased level of self confidence and decreased of level fears, which leads to accidents and injuries.

Injuries among school students are considered as one of the most serious health problems facing the world today because it can result in life long disability or even death. Basic first aid knowledge helps the children to deal with emergency situations. Everyone needs to teach children about being mentally prepared for emergencies. Children should be taught about different first aid measures, both at home and at school, which emphasize the importance of child safety. This enables them to overcome difficult situations like injuries, burns and outdoor emergencies. All the school children should receive first aid training starting in the first grade itself. It is the need of the hour to facilitate the children with scientific knowledge.

OBJECTIVES OF THE STUDY

1. To assess the knowledge on first-aid management of selected ailments (Fainting, Drowning, Foreign bodies in the eye and ear) among the school children before the educational intervention.
2. To evaluate the effectiveness of educational intervention on first aid management of selected ailments among the school children.



RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It may be understood as a scientific way of doing research. It is a significant part of any early study, which enables a researcher to project a research undertaken.

Research Approach:

Quantitative approach was used to evaluate the effectiveness of educational intervention on first-aid management of selected ailments among the school children in a selected school at chidambaram.

Research Design:

The research design adopted for the study was quasy- experimental one group pre-test and post-test design.

Research Setting:

Selected Schools at Chidambaram

Sample:

School children studying in 8th and 9th standards, in Selected School, at Chidambaram, who fulfilled the inclusion criteria.

Criteria for sample selection:

Inclusion criteria:

- School children studying in 8th and 9th standards.
- Who are willing to participate.

Exclusion criteria:

- School children who are on leave.

Sampling Technique:

In this study, the researcher adopted the Purposive sampling technique.

Sample Size:

The sample comprised of 100 school children studying in selected School at Chidambaram.

VARIABLES OF THE STUDY:

Independent variables: The independent variable was the educational intervention on first aid management of selected ailments.

Dependent variables: Knowledge of the school children on first aid management of selected ailments in selected school at chidambaram.

Extraneous variables: The extraneous variables are the interest, student's health condition and physical facilities of class room in learning, during, teaching.

DESCRIPTION OF THE DATA COLLECTION INSTRUMENT:

Data collection tool is organized into three sections:

Section A: student profile includes the variables like Age, Sex, Religion, Standard, Type of family, Educational status of mother and father, Occupational status of mother and father, Income, and Type of residence.

Section- B: Knowledge Questionnaire on selected first aid management:

It consisted of 45 questions which includes introduction to first aid management, Fainting, Drowning, Foreign bodies in the eye and ear.

Section C: Educational intervention on first aid management of selected ailments with video assisted teaching.

SCORING AND SCORE INTERPRETATION

- The knowledge part tool consisted of 45 multiple choice questionnaire.
- Each correct multiple choice response carries '1' mark.
- Wrong response carries 0 'mark' 45.
- The total score was interpreted as below and score was converted into %.

S.No	Level of knowledge	Range of score	Percentage
1.	Inadequate knowledge	12 to 23	<50
2.	Moderate knowledge	24 to 35	50 to 75
3.	Adequate knowledge	36 to 45	>75

DESCRIPTION OF THE INTERVENTION

Educational intervention on first-aid management of selected ailments (Fainting, Drowning, Foreign bodies in the eye and ear, Injuries in the eye and ear Bleeding from nose and Minor external bleeding,) was given by a researcher using video assisted teaching for the school students studying in selected school at Chidambaram.

SECTION - A

TABLE -1 DISTRIBUTION OF THE DEMOGRAPHIC VARIABLES OF THE SCHOOL CHILDREN



S.NO.	Demographic Variable	Frequency	%	X ²	P value	
1.	Age	13 years	47	47 %	2.80	0.246 (NS)
		14 years	37	37 %		
		15 years	16	16 %		
2.	Sex	Male	86	86 %	1.05	0.305 (NS)
		Female	14	14 %		
3.	Religion	Hindu	95	95 %	2.12	0.346 (NS)
		Muslim	2	2 %		
		Christian	3	3 %		
4.	Standard	8 th Standard	55	55 %	18.57	<0.001 (S)
		9 th Standard	45	45 %		
5.	Type of family	Joint family	67	67 %	0.385	0.535 (NS)
		Nuclear family	33	33 %		
6.	Educational status of Father	Illiterate	13	13 %	9.357	0.096 (NS)
		Primary School	20	20 %		
		Middle School	17	17 %		
		High School	25	25 %		
		Higher secondary school	15	15 %		
		Graduate	10	10 %		
7.	Income	Below Rs.1000	25	25 %	3.342	0.342 (NS)
		Rs.1001-3000	23	23 %		
		Rs.3000-5000	18	18 %		
		Above Rs.5000	34	34 %		
		Semi urban	9	9 %		

Table 1 reveals the point that out of 100 school children 47 (47%) of them were in the age group of 13 years, 37 (37%) of them were in the age group of 14 years and the remaining 16 (16%) were in the age group of 15 years. Regarding sex, 86 (86%) of them were males and the remaining 14 (14%) were females.

Regarding religion, 95 (95%) school children were Hindus, 3(3%) were Christians and only 2(2%) of them were Muslims.

With regard to educational status of school children, 55(55%) of them were from 8th standard and the remaining 45(45%) of them were from 9th standard.

With regard to the type of family, 67(67%) of them belonged to joint-families and 33(33%) of them belonged to nuclear families.

Regarding educational status of the father, 13(13%) of them were illiterate, 20(20%) of them had primary school education, 17(17%) of them had middle school education, 25(25%) of them had high school education 15 (15%) of them had higher secondary school education and only 10(10%) of them were graduate.

With regard to family income, 25(25%) of them had family income of 1000 rupees, 23(23%) of them had family income between 1001-3000 rupees, 18(18%) had family income between Rs.3000-5000 and 34(34%) of them had family income more than Rs.5000.

TABLE - 2 LEVEL OF KNOWLEDGE ON FIRST- AID MANAGEMENT OF SELECTED AILMENTS IN PRE-TEST AND POST-TEST AMONG THE SCHOOL CHILDREN

N= 100

S.no	Level of knowledge on first-aid management	Pre-test		Post-test	
		No.	(%)	No.	(%)
1.	Inadequate knowledge (12-23) <50%	45	45 %	2	2 %
2.	Moderately adequate knowledge (24-35) 50-75%	55	55 %	77	77 %
3.	Adequate knowledge (36-45)>76-100%	-	-	21	21 %
	Total	100	100 %	100	100 %

Maximum score =45



Table-2 depicts the percentage distribution of level of knowledge on first-aid management of selected ailments in pre and post-test among the school children. In relation to the level of knowledge in the pre-test almost 55 % of the school children had moderately adequate knowledge 45 % of school children had inadequate knowledge and none of them had adequate knowledge. Among them 77% of them had moderately adequate knowledge, 21 % of them had adequate knowledge and only 2% of them had inadequate knowledge in the post-test.

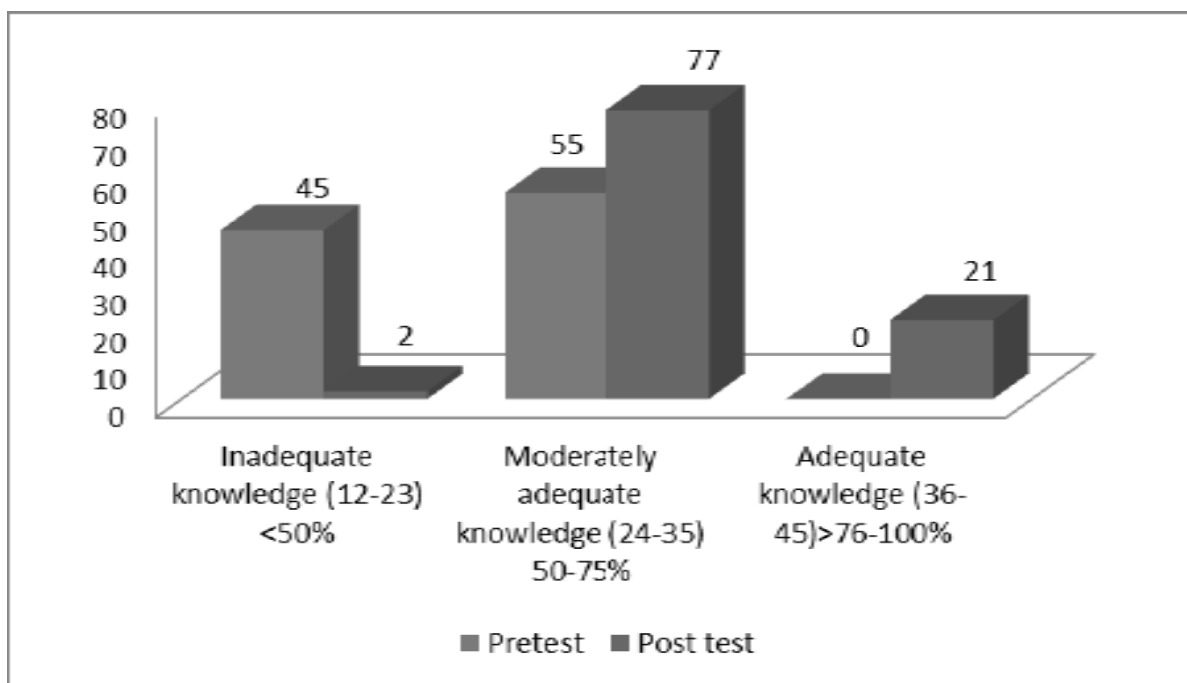


Figure 1: *Level of knowledge on first-aid management of selected ailments in pre-test and post-test among the school children*

TABLE 3: ASSESS THE EFFECTIVENESS OF EDUCATIONAL INTERVENTION ON FIRST-AID MANAGEMENT OF SELECTED AILMENTS AMONG THE SCHOOL CHILDREN

VARIABLES	PRE-TEST		POST- TEST		PAIRED 'T' TEST	P.VALUE
	Mean	SD	Mean	SD		
General information	3.27	0.9	4.62	0.58	12.88	<0.001
Fainting	3.08	0.99	3.92	0.87	7.07	<0.001
Drowning	2.55	1.25	3.23	0.93	4.78	<0.001
Foreign bodies in the eye	2.38	1.09	3.03	0.96	4.70	<0.001
Foreign bodies in the ear	2.30	1.48	3.46	1.19	6.17	<0.001

S-Significant ($p < 0.001$) Maximum score=45

Table - 3 shows the effectiveness of educational intervention on first-aid management of selected ailments among the school children

The pre-test knowledge score on general information was 3.27 with the standard deviation 0.9. After the educational intervention, the mean post-test knowledge score was found improved to 4.62 with the standard deviation 0.58. The improvement was statistically tested by paired 't' test and the result was found to be significant ($p < 0.001$). This finding indicated that the educational intervention of first-aid management (on general information) was effective to improve the knowledge score among the school children.

The pre-test knowledge score on fainting was 3.08 with the standard deviation 0.99. After the educational intervention, the mean post-test knowledge score was found improved to 3.92 with the standard deviation 0.87. The improvement was statistically tested by paired 't' test and the result was found to be significant ($p < 0.001$). This finding indicated that the educational



intervention of first-aid management (on fainting) was effective to improve the knowledge score among the school children.

The pre-test knowledge score on drowning was 2.55 with the standard deviation 1.25. After the educational intervention, the mean post-test knowledge score was found improved to 3.23 with the standard deviation 0.93. The improvement was statistically tested by paired 't' test and the result was found to be significant ($p < 0.001$). This finding indicated that the educational intervention of first-aid management (on drowning) was effective to improve the knowledge score among the school children.

The pre-test knowledge score on foreign bodies in the eye was 2.38 with the standard deviation 1.09. After the educational intervention, the mean post-test knowledge score was found improved to 3.03 with the standard deviation 0.96. The improvement was statistically tested by paired 't' test and the result was found to be significant ($p < 0.001$). This finding indicated that the educational intervention of first-aid management (on foreign bodies in the eye) was effective to improve the knowledge score among the school children.

Discussion

The main study was conducted for a period of 4 weeks. A total of 100 samples were selected from the 8th and standard school children using purposive sampling technique. The purpose of the study was explained to the school children and consent was obtained from all the patients. Structured pre-test questionnaire was administered on the school children. On the same day the educational intervention on first aid management of selected ailments was given to them by using video-assisted teaching. After one week, the post-test was conducted and the data were collected.

The first objective was to assess the knowledge on first-aid management of selected ailments (Fainting, Drowning, Foreign bodies in the eye and ear and injuries in the eye, Bleeding from nose, Minor external bleeding) among the school children before the educational intervention.



Table -2 This study results revealed that before the education intervention out of 100 children, 55 (55%) of students had moderately adequate knowledge 45(45%) had inadequate knowledge and none of them had adequate knowledge regarding first aid management of selected ailments in the pre-test.

The second objective of the study was to evaluate the effectiveness of educational intervention on first aid management of selected ailments among the school children.

This study results revealed that after the education intervention out of 100 children, 77 (77%) of students had moderately adequate knowledge 21(21%) had adequate knowledge and 2 (2%) inadequate knowledge regarding first-aid management of selected ailments in the post-test.

Phougat Jyoti and Kumara Chetna (2018) conducted a quasi-experimental research design (one group pre-test and post-test) was used. The study was conducted at Arya public senior secondary school Mullana, Ambala, Haryana. Before giving health education pre-test of knowledge was assessed. A health education programme was given on first- aid management for 40 minutes duration on the same day. On the 7th day post-test knowledge were assessed. The result showed that in the pre-test none of them had good and very good knowledge towards first-aid management where as in the post-test 44 % children had good knowledge and 45 % children had very good knowledge towards first-aid management.

Rekha S., Sonavane., Aravind Kasthuri., Deepthi Kiran (2016) conducted a cross-sectional study to evaluate the effectiveness of first-aid training on mothers among under 15 years children in a rural area of South India. The mean baseline knowledge score was 2.3 ± 1.98 . Fifty six women participated in the training programme on first-aid, and the mean knowledge score among these 56 women was from to be 11.64 ± 1.27 immediately following training. There was a significant improvement in the total knowledge scores in the post evaluation as compared to pre evaluation levels ($p < 0.001$).



Recommendations:

Based on the findings of the present study the following recommendations are made:

1. The study can be replicated using a large sample to generalize the findings.
2. A similar study can be conducted using experimental research design.
3. A similar study can be conducted among the college students.

A follow up study can be conducted to evaluate the effectiveness of educational intervention programme on practice.

Conclusion:

The following conclusion was drawn from the present study.

1. This study results revealed that the knowledge level of school children were increased after the educational intervention on first-aid management of selected ailments. Education plays the key role in promoting the knowledge of children.

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