

## Effectiveness of PTP on Knowledge Regarding First Aid Measures for Selected Minor Ailments of Children among the Primary Teachers

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### Abstract

A child's world centers around the home, school and the community the biggest threats to children's health in the very places that should be safest home, school and community. First aid measures are the best way to save the children under some health problems and injuries, because the future development of our children depends on their enjoying good health today. Today's children are tomorrow's future, but how we choose to raise our children determine the outcome of our future. Children become the happiness of the society and home as well as future of the country. We cannot ignore their involvement and contribution in the life of parents, teacher and other related persons all through the life. Children are very liked by everyone and life becomes very boring and upset without children. Children are blessed by the God and conquer our hearts with their beautiful eyes, innocent activities and beautiful smiles.

**Keywords:** Injuries; PTP.

### Introduction

School children are active youngsters who receive decreasing amounts of supervision from parents and other adults. All young children can be naughty, defiant and impulsive from time to time, which is perfectly normal. During the school age period, children have more interest in playing and the sense of taste, fully mature prior to the school years and they have more independency. School children attempt to master new motor skills, they are at risk for unexpected injury and fracture during sports hours in school and sometimes due to eating habits and contamination of the food items, children can have diarrhoea, vomiting and food poisoning etc. The occurrence of injury and health problems of school children is unintended and its preventable. Through first aid measures or emergency treatment, we can reduce the disability among children.

First aid measures mean emergency care and treatment of an injured or ill person before complete medical and surgical treatment can be secured. If anyone is in need of protection, it is children, because of their lack of physical and mental maturity. They need special care, firstly

from their parents. Responsible for their rearing from the time of their birth and secondly from the teacher that welcomes them. This reality, which seems so elemental, is not always as respected, as it should be.

Knowledge of first aid, which constitutes life-saving treatments for injuries or unexpected illnesses, is important for every individual at every age. First aid and basic life support are so important that teaching basic first aid should be compulsory in all schools.

A Cross sectional survey in rural Tamil Nadu report showed that the rate of accident and poisoning, among children in 0-14 years are poisoning 40.3%, burns 3.8%, animals bites 76%, drawing 7.2%, falls 81.67%, and injury rate was 341.89/1000 child-years and mortality rate of 39.16/100,000 child-years. First aid is the provision of immediate care for an injury or illness. It is usually performed by a sick or injured patient until definitive medical treatment can be accessed. Certain self-limitation or minor injuries may not require further medical care past the first aid intervention. It generally consist of a series of simple and in some cases, potentially life-preserving techniques that person can be trained to perform with minimal equipment.

Basic first aid knowledge helps the teachers to deal with emergency situation. Everyone needs to teach teachers about the mentally prepared for emergencies. Teachers should be taught about different first aid measures at school, which helps emphasize the important of child safety. This enables them to overcome difficult situations like injuries, bites, and outdoor emergencies. First aid is all about using common sense in the hour of need.

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#### *Objectives*

1. To assess the pre test knowledge score on first aid measures for selected minor ailments of children among the primary teachers.
2. To assess the post test knowledge score on first aid measures for selected minor ailments of children among the primary teachers.
3. To find the effectiveness of planned teaching program on first aid measures for selected minor ailments of children among primary teachers.
4. To find the association of pre test knowledge on first aid measures for selected minor ailments of children with selected demographic variables.

#### *Review of Literature*

Literature relevant for this study has been organized in the following sections,

##### *1. Studies related to First Aid Measures.*

*Prabhjot Saini, P. Ranadive, and R. Mahal, (2009)* conducted "a study of knowledge of first aid management and emergency care". The study was conducted on 50 staff nurses working in burns unit, plastic surgery unit, trauma/casualty and intensive care units of selected hospitals of Ludhiana. The sample consisted of two groups of staff nurses, experimental group and control group. Experimental group have significant group have significant increase in post-test knowledge mean score as evident from 't' value (10) = 5.75, control

group shows that there is statistically significant difference in the knowledge scores as evident from 't' value (23) = 2.43.

##### *1. Studies related to selected Minor Ailments in School Children.*

*Bin Mohanna, MA, Bin Ghouth, AS, and Rajaa. YA, (2007)* conducted a study on fever signs and infection rate among asymptomatic school children in Hajr Valley, Yemen. This study recorded fever signs and the rate of parasitaemia among asymptomatic school children in Hajr Valley, Hadhramout governorate, Yemen. Tests were made for parasites and anaemia in 469 randomly selected primary school children aged 6 - 11 years, together with clinical examination to determine spleen size, and interviews to study sociodemographic factors. Of the children, 12.8% had positive a blood films and 11.3% had spleen enlargement. There were significant associations between infection, anaemia and splenomegaly and fever. Children with malaria parasitameia were more often absent from school.

##### *2. Studies related to planned Teaching Programme*

*Mrs. Kazi Fauzia Jawaid, (2007)* conducted a study on "effectiveness of a planned teaching programme on first aid for selected accidents and emergencies for school children in selected high schools of Udupi. In this 't' test showed that there was a significant difference between the mean pre-test and post-test skill scores of 'first aid for closed fracture of the hand' of the high school children  $t=24.5, t(55)=2, p<0.05$  which is significant. The 't' test showed that there was a significant difference between the mean pre-test and post-test skill scores of 'first-aid for poisonous snake bite' of the high school children  $t = 22.54, t(55) = 2, p<0.05$  which is significant. Hence the null hypothesis was rejected indicating that the PTP was effective method in improving the skills of the high school children.

#### *Hypotheses*

$RH_1$ : The mean post-test knowledge score on first aid measures for selected minor ailments of school children will be higher than the mean pre-test knowledge score among primary teachers.

$RH_2$ : There will be significant association between the mean pre-test knowledge score on first aid measures for selected minor ailments of school children among the primary teachers with their selected demographic variables.

### Methodology

An evaluator approach with one group pre-test design was used for the study. The samples consisted of 60 primary teachers selected by Non probability convenient sampling technique. The setting for the study was Shri Nikhil Chetna Public School Bawliya Khurd, Rukhma Devi Public School, Marodhat, Jai Minesh Public School at Indore. Data was collected by administering a structured knowledge questionnaire by the investigator before and after planned teaching programme. Post-test was conducted after 7 days of pre test. Data were analysis using descriptive & inferential statistics (Paired 't' test, Chi- square test, Karl- Person's correlation).

#### Analysis And Interpretation:

##### 1. Description of the Demographic Variables of the Samples

This section shows the analysis of the frequency and percentage distribution of the samples according to selected demographic variables which include age, educational qualification, total years of teaching experience, and marital status, religion.

**Table 1:** Frequency and percentage distribution of samples according to their demographic variables.

n = 60

S. No	Demographic Variables	Frequency	Percentage
<b>1</b>	<b>Age in Years</b>		
a.	26 - 30	17	28.33
b.	31 - 35	26	43.34
c.	36 - 40	17	28.33
<b>2</b>	<b>Educational qualifications</b>		
a.	Diploma in Teaching	22	36.67
b.	Graduate in teaching	14	23.33
c.	Post graduate in teaching	24	40
<b>3</b>	<b>Total years of teaching experience</b>		
a.	2 - 5 years	50	83.33
b.	More than 5 years	10	16.67
<b>4</b>	<b>Marital status</b>		
a.	Married	56	93.33
b.	Unmarried	4	6.67
<b>5</b>	<b>Religion</b>		
a.	Hindu	39	65
b.	Christian	9	15
c.	Muslim	12	20

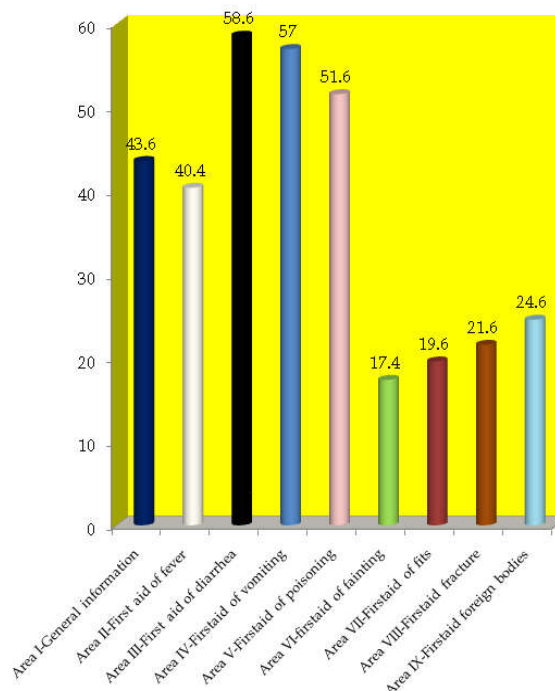
##### 2. Section B: Area-wise analysis of the knowledge scores

This part deals with area- wise mean, SD and mean percentage of pre test knowledge scores of teachers regarding first aid measures for selected minor ailments in children.

**Table 2:** Area- wise mean, SD and mean percentage of pre test knowledge scores of teachers regarding first aid measures for selected minor ailments in children

Areas	Maximum score	Minimum Score	Mean	SD	Mean%
Area I	5	5	2.18	1.32	43.6
Area II	5	4	2.02	1.20	40.4
Area III	5	5	2.93	1.13	58.6
Area IV	5	5	2.85	1.19	57
Area V	5	5	2.58	1.23	51.6
Area VI	5	3	0.87	0.60	17.4
Area VII	5	3	0.98	0.68	19.6
Area VIII	5	3	1.08	0.70	21.6
Area IX	5	3	1.23	0.83	24.6
Overall knowledge	45	24	16.73	3.82	37.18

Data in the above Table and Figure revealed that teachers had highest knowledge in the Area III that is, first aid for diarrhoea with a mean percentage of 58.6% followed by Area IV which is first aid of vomiting with a mean percentage of 57%, then the Area V that is, first aid of poisoning with a mean percentage of 51.6%, then in Area I that is general information about first aid with a mean percentage of 43.6 followed by area II first aid of fever with a mean% of 40.4% and least in the area VI that is, first aid of fainting with a mean percentage of 17.4%. The mean knowledge score was 16.73±3.82, with a mean percentage of 37.18% revealing that the overall knowledge of the teachers regarding first aid of selected minor ailments of children is inadequate.



**Fig.4.2:** The bar diagram shows area-wise percentage distribution of teachers knowledge.

**Table 4.4:** Mean, SD, Mean difference of pre test and post test

Areas	No. of items	Knowledge score								
		Pre-test(A)			Post-test(B)			Effectiveness(B-A)		
		Mean	SD ±	Mean%	Mean	SD ±	Mean%	Mean	SD (±)	Mean%
Area I	5	2.18	1.32	43.6	3.8	0.97	76	1.62	0.35	32.4
Area II	5	2.02	1.20	40.4	3.25	1.13	65	1.23	0.07	24.6
Area III	5	2.93	1.13	58.6	3.8	0.92	76	0.87	0.21	17.4
Area IV	5	2.85	1.19	57	3.77	1.01	75.4	0.92	0.18	18.4
Area V	5	2.58	1.23	51.6	3.65	1.10	73	1.07	0.13	21.4
Area VI	5	0.87	0.60	17.4	2.77	1.17	55.4	1.9	0.57	38
Area VII	5	0.98	0.68	19.6	2.75	1.23	55	1.77	0.55	35.4
Area VIII	5	1.08	0.70	21.6	2.67	1.24	53.4	1.59	0.54	31.8
Area IX	5	1.23	0.83	24.6	2.87	1.31	57.4	1.64	0.48	32.8
Total	45	16.73	3.82	37.18	29.32	4.14	65.16	12.59	0.32	27.98

#### 4.4 Effectiveness of Planned Teaching Programme on First Aid Measures for Selected Minor Ailments in Children

This part deals with Area-wise Mean, SD, and Mean percentages of pre test and post test knowledge scores and Comparison of knowledge and effectiveness in pre-test with post test

##### Section A: Area-wise, Mean, SD, and Mean percentages of pre test and post test

This part deals with Area-wise Mean, SD, and Mean percentages of pre test and post test knowledge scores

The data presented in the table 4.4 shows that the total mean knowledge score is increased by 27.98% with mean  $\pm$ SD of 12.59 $\pm$ 0.32 after the administration of Planned teaching programme.

Comparison of the area wise mean and SD of the knowledge scores showed that, the effectiveness of planned teaching programme in the area of 'First aid general measure' had 32.4% increase in the mean percentage knowledge scores with the mean and SD of 1.62 $\pm$ 0.35 was observed with that of 43.6% in pre-test and 76% in the post test. Highest increase was found in the area of 'first aid of fainting' was 38% increase in the mean percentage knowledge scores with the mean and SD of 1.9 $\pm$ 0.57 was observed with that of 17.4% in pre-test and 55.4% in post test. Least increase was found in the area of 'First aid of diarrhoea' was 17.4% increase in the mean percentage knowledge scores with the mean and SD of 0.87 $\pm$ 0.21 with that of 58.6% in pre-test and 76% in the post test. The results reveal that the overall knowledge was more compared to that of the pre test as the post test knowledge score come under good knowledge which was inadequate in the pre-test assessment.

**Table:** Association between pre-test knowledge with demographic variables

N = 60

Demographic variable	$\chi^2$	Df	Knowledge	
			p-value	Inference
Age	0.102	1	0.749	NS
Education	1.071	1	0.301	NS
Total teaching	0	1	1	NS
Marital status	0	1	1	NS
Religion	1.071	1	0.301	NS

Table value  $\chi^2$  3.84, df-1 S = Significant; NS = Not significant

#### Association Between Pre-Test Knowledge Score of Primary Teachers on First Aid Measures for Selected Minor Ailments of Children with Selected Demographic Variables

Chi-square test was computed to test the association between the knowledge of the subjects and selected demographic variables; the following null hypothesis was formulated.

$H_{02}$ : There will be no significant association between knowledge score with selected demographic variables.

### Discussion

#### ➤ Area-wise analysis of the knowledge scores

- The area-wise analysis revealed that the teachers scored highest in the area III of first aid of diarrhoea (Mean percentage 58.6%).
- The area-wise analysis revealed that the teachers scored lowest in the area VI of first aid of fainting (Mean percentage 17.4%).
- The overall mean knowledge score was 16.73 $\pm$ 3.82, with a mean percentage of 37.18%.



The study findings were supported by a descriptive study conducted on 'the knowledge and practices regarding the first aid training among teachers of preschool children in a selected urban community at Indore city. The samples were 60 teachers at Indore. The data was collected using a structured questionnaire. The results shows that only 59.7% of teachers are knowledgeable about first aid measure and among them only 52.2% teachers are giving proper first aid training to their children. The highest mean knowledge (78.3%) found in the aspect of emergency readiness followed by first aid management (67.1%).

*Effectiveness of planned teaching programme on first aid measures of selected minor ailments in children.*

- The results shows that the total mean knowledge score is increased by 27.98% with meanSD of  $12.59 \pm 0.32$  after the administration of planned teaching programme.

Comparison of the area wise mean and SD of the knowledge scores showed that,

- The effectiveness of planned teaching programme in the area of 'First aid general measure' had 32.4% increase in the mean percentage knowledge scores with the mean and SD of  $1.62 \pm 0.35$  was observed with that of 43.6% in pre-test and 76% in the post test.
- Highest increase was found in the area of 'first aid of fainting' was 38% increase in the mean percentage knowledge scores with the mean and SD of  $1.9 \pm 0.57$  was observed with that of 17.4% in pre-test and 55.4% in post test.
- Least increase was found in the area of 'First aid of diarrhoea' was 17.4% increase in the mean percentage knowledge scores with the mean and SD of  $0.87 \pm 0.21$  with that of 58.6% in pre-test and 76% in the post test
- The pre-test knowledge of all the teachers was inadequate 36.67%, moderate 63.33% and adequate 0%,
- The post test knowledge adequate 41.67%, moderate 58.33% and none of them had inadequate knowledge regarding first aid measures of selected minor ailments in children

The overall effectiveness of the study showed that,

- ❖ The value of 't' was calculated to analyses the difference in knowledge score of parents in pre-test and post-test.
- ❖ The calculated' value (19.23,  $p < 0.05$ ) in

knowledge aspect was greater than the table value (1.83) at 0.05. Therefore, the null hypothesis was rejected and the research hypothesis was accepted indicating the gain in knowledge was not by chance.

- ❖ Hence it is concluded that there is very highly significant gain in knowledge of teachers on first aid measures of selected minor ailments in children after the planned teaching programme.
- ❖ The findings revealed that the mean post test score was significantly higher than their mean pre test score.

The study findings were supported by a pre experimental study on 'the effectiveness of a planned teaching program on first aid measures to mothers of children between one to three years of age in selected day care centres at Indore. The samples were 60 mothers having children between one to three years of age at Mangalore. The data was collected using structured questionnaire. The results shows that 95% of mothers have good knowledge score that is 70-100% in the post test as compared to average knowledge score that is 50-69% obtained among 73.33% of samples in the pre test. The researcher reaches the conclusion that a planned teaching program helps to improve the knowledge of mothers regarding first aid measures of children.

➤ *Association between Pre-test knowledge scores regarding first aid measures of selected minor ailments in children with selected demographic variables.*

- There was not significant association between the pre-test knowledge score with the demographic variables.
- The null hypotheses were rejected.

Rivara. FP, Booth. CL, Bergman. AB, Rogers. LW, and Weiss.J, (1991) conducted a study on prevention of pedestrian injuries to children: effectiveness of a school training program. Pedestrian injuries are a complex problem for which no single intervention will be completely effective. One component of a community wide program, training of school children in street-crossing skills, is evaluated. The program targeted public school students in grades K through 4 with an eight session training program by a single teacher, cross age teaching, videotape feedback, and in 1990 parent child activity workbooks. Children's street crossing was observed pre-training and post-training and graded on four behaviours: walking on sidewalk/

shoulder vs in the street; stopping at the curb; looking L-R-L before crossing; keep looking while crossing. Observations were completed on 137 children in 1989 and 92 in 1990. It is concluded that pedestrian skills of children can be improved but that such a program must be part of a broader effort if pedestrian injuries are to decrease.

## Results

The result of this study indicates that there was a significant increase in the post-test knowledge scores compared to pre-test scores of first aid minor ailments of children. The mean percentage knowledge score was observed 37.18% in the pre-test and after implementation of planned teaching programme post-test mean percentage was observed with 65.16%. This is shows the effectiveness of planned teaching programme was 27.98%.

### *Interpretation and Conclusion*

The findings of this study provide information for conducting educational programme for first aid measures for selected minor ailments of children. This study proved that there was a significant increase in the post-test knowledge score compared to pre-test score in all area & there was a significant increase in the knowledge score among the primary teachers.

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