

# A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING FIRST AID MANAGEMENT AMONG PRIMARY SCHOOL TEACHERS OF SELECTED PRIMARY SCHOOLS OF VADODARA CITY

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**Abstract:** **BACKGROUND:** This study was design to improve the knowledge of First-aid management of primary school teachers in primary schools at Vadodara city. Emphasis was put on trying to establish the relation between Age, gender, work experience, awareness about first-aid, source of information, work area and education with knowledge regarding first aid management. The validity and reliability of research instruments was established and data was collected from 30 primary school teachers selected primary schools. To analyses the data and correlation statistics tool was used with aim of establishing to find association of knowledge of first-aid management with selected demographic variable. **AIMS AND OBJECTVES:** The aim of this study is to find out the knowledge regarding first-aid management of primary school teachers. **MATERIAL AND METHOD:** Pre-experimental one group pre-test post-test research design was used for this study. The tool consists of two parts: first part consist of demographic data of sample, second part consist of self-structured questionnaires. 30 samples were collected form selected primary schools. **RESULTS:** The finding shows that association of knowledge of First-aid management. The pretest mean score of knowledge of First-aid management is and 11.63 and post-test mean score of knowledge is 24.33 the mean difference of pre- test and post-test of knowledge is 12.7. The association between knowledge of primary school teachers and demographic variable. Significant demographic variable is age of primary school teachers with  $\chi^2$  value 8.902(3df=7.82).The non significant variables are gender of Primary school teachers with  $\chi^2$  value 2.134(1df=3.84), work experience  $\chi^2$  value 1.155 (1df=3.84), for awareness about first-aid  $\chi^2$  value 00 (0df=00),for source of information  $\chi^2$  value 5.488 (3df=7.82), work area  $\chi^2$  value 0.879 (1df=3.84),Education  $\chi^2$  value 0.026 (1df=3.84).The paired 't' calculated value of knowledge 15.42 at 0.05 level of significance which is more than table value 2.05 at 0.05 of 't' hence. **CONCLUSION:** The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature.The self-administered questioner has been shown remarkable association between knowledge questioner with demographic variable. Using the statistical formula, we have computed the association between the demographic variable and knowledge questioner.The association between knowledge of primary school teachers and demographic variable. Significant demographic variable is age of primary school teachers. The non-significant variables are gender, work experience, awareness about first-aid, source of information, work area, Education.The calculated t value of knowledge is 15.42, which is more than tabulated value of 2.05 at 0.05 level of significance t values of knowledge shows significance increase in the post test score after providing planned teaching programme.

**Key Words:** Evaluate, Effectiveness, Planned teaching programme, First-aid management,Primary school Teachers.

## 1. INTRODUCTION:

First aid is the most important branch of Medical science. First aid is the immediate and temporary treatment given to the person who suffers an accident or any sudden illness before the medical help (aid) available, is called First Aid! First aid can also be defined as the immediate and temporary care given to an injured or sick person until the service of a qualified doctor are obtained. Proper and immediate care is absolutely necessary to save life and mitigate suffering. The First aid is not an end by itself. It indicates that the person is in need of a —Secondary Aid—. General Esmarch

(1823 – 1908) was the famous German Surgeon who first conceived the idea of —First aid. In 1877 St. John Ambulance Association of England was formed. In 1920, Red Cross Society of India was established. This is an age when technology has produced complicated machinery and swift means of transport. So, accidents are on the rise and produced devastating results with loss of life, injuries to body and mind. Under these circumstances, first aid has gained much importance. When the first aider reaches the spot of the accident, the causes of the accident may still be present and continues to exert harmful effect.<sup>1</sup>

Children spend most of the time in school under the direct supervision of teachers. They are also exposed to various types of epidemiological factors in the school, which influence their present and future state of health.<sup>2</sup>

The various stages of growth and development in children are associated with particular types of injuries, based on the milestones they achieve at different ages. Due to the rapidly changing lifestyles and increasing motorization, children like all others come in contact with large number of motorized vehicles on roads that are designed and built without keeping their needs in mind. The body parts of children being in a phase of growth and due to relative softness of tissues, are more vulnerable to the impact of injury. Some of the characteristics of children like smaller body size, vision, hearing, and limited risk perception, makes them more susceptible to be involved in traffic crashes, burns, poisoning, drowning & others and also affects the injury outcomes. Larger policies and programmes in transport, housing, environment, education, urban and rural development and others do not consider needs and limitations of children. Consequently, children share the same environment.<sup>3</sup>

## 2. NEED FOR THE STUDY:

Children are the future of every country and all societies strive to ensure their health and safety. India is home to nearly 500 million young people among whom children less than 15 years are 37% (370 million). Since India's independence, continuous efforts have been made to improve the status of children. The large burden of communicable, infectious and nutritional disorders is gradually on the decline due to massive efforts and investments by successive Indian governments, even though it is an unfinished agenda. Parallel to these changes, it is also becoming apparent that children saved from diseases of yesterday and are becoming victims of injury on road at home and in public recreational places. As per WHO estimates, nearly 950,000 children die in the world due to an injury each year. The burden of child injuries in India is not clearly known.<sup>3</sup>

Proper early measures may be instrumental in saving life and ensuring better and more rapid recovery. The avoidance of unnecessary movement and over excitation of the victim often prevents further injury. Conditions that require immediate attention to avert death include cessation of breathing i.e. asphyxia, severe bleeding, poisoning, fracture, fainting, bites and stings, burns and drowning. According to Red Cross among these injuries there are few common injuries occur at the school premises, like fall (82%), fracture (49%), and ingestion of foreign body (0.5%).<sup>4</sup>

## 3. REVIEW OF LITERATURE:

**Alomar M et.al (2016)** conducted a study on Knowledge, attitude, and belief regarding burn first aid among caregivers attending pediatric emergency medicine departments. Caregivers attending four pediatric emergency departments answered a structured questionnaire for demographic information, knowledge, and the burn first aid they provide including two case scenarios. Applying cold water for 15-20min, smothering burning clothes, and covering the pot of oil on fire with a wet cloth were considered appropriate responses. The main outcome measure was the proportion of caregivers who were aware of burn first aid and did not use inappropriate remedies. Additional questions regarding the best means of educating the public on burn first aid were included. Individual chi-squared tests and univariate logistic regressions were performed to correlate knowledge with demographic features, history of burns, and first-aid training. The 408 interviewed caregivers (55% women) reflected a wide range of age, occupation, and educational level. Sixty percent (60%) of respondents had a large family, with 52% reporting a history of burns. Overall, 41% treated burns with cool or cold water, although 97% had inappropriate or no knowledge of the duration. Further, 32% treated burns with nonscientific remedies alone or in combination, including honey, egg white, toothpaste, white flour, tomato paste, yogurt, tea, sliced potato, butter, or ice. Only 15% had first-aid training. While 65% of caregivers covered a pot of oil on fire with a wet cloth, only 24% reported smothering burning clothes. Participants preferred learning more of first aid for burns via social media (41%), hospital visits (30%), and television (TV) (16%). No significant correlation was found between age, family size, language, history of burns, or training and knowledge; however, female gender and higher educational level were associated with increased awareness, although this was not statistically significant ( $p=0.05$  and  $p=0.17$ , respectively). The logistic regression accounting for all significant variables showed that the history of burns had the greatest effect on knowledge of first aid ( $p<0.03$ ). Knowledge of burn first aid among caregivers is limited, with many resorting to non-scientific remedies. Use of social media, hospital visits, and TV for first-aid education might improve caregivers' awareness. A nationwide educational program emphasizing first-aid application of only cold water and reduced use of inappropriate home remedies for burns is recommended.<sup>5</sup>

**Fadeyibi IO (2015)** conducted a study on Practice of first aid in burn related injuries in a developing country. Patients admitted to a University Teaching Hospital for treatment of burns were recruited for this prospective study. Data detailing demographics, scene and a etiology of burns, material used for first aid, who administered first aid, level of education and relationship of first-aider with patients, length of hospital stay, complications and outcome of treatment were collected and statistical analysis performed. 168 patients; 73 (43.4%) children and 95 (56.6%) adults were seen. Burns were sustained at home in 95 (74.2%) cases and outside in 33 (25.8%). Water lavage was used in 49 (29.2%) cases, raw eggs in 21 (12.5%), pap in 16 (9.5%) and other materials in 48.8%. 40 (23.8%) patients had not received any form of first aid at presentation. Patients that received no water first aid had higher complication rate (35.3% versus 18.4%) compared with those that had water first aid. The use of water first aid in burns was shown to reduce complication rate in this study. People should be educated on the efficacy of water first aid in pre-hospital care of burns.<sup>6</sup>

#### 4. MATERIALS AND METHODS:

**Research approach:** This study applied on quantitative approach

**Research design:** Pre-experimental one group pre-test post-test research design.

##### Variable

**Research variable:** According to the objectives of the study, the major variables includes as following

**Independent Variable:** In this study the Independent Variable is Planned Teaching Programme.

**Dependent Variable:** In this study the Dependent Variable is knowledge of primary school teachers regarding first-aid management.

**Demographic Variable:** In this study include Age, gender, work experience, awareness about first-aid, source of information, work area and education.

**Setting of the study:** Setting is the physical location or the area where the research study is conducted. In this study setting refers to Gujarat public school & Shree Ambe Vidhyalay of Vadodara city

**Target population:** In this study target population consisted of primary school teachers from selected primary schools of Vadodara city.

**Accessible population:** in this study comprises of primary school teachers from selected primary schools of Vadodara city and available during the research study.

**Sampling techniques:** The sampling techniques used for this study is non probability convenient sampling technique.

**Sample size:** The sample size for this study Comprise of 30 primary school teachers belongs to selected primary schools

#### 5. TOOL FOR DATA COLLECTION:

This consists of two parts:

**Section 1:** Demographic variables such as age, gender, work experience, awareness about first-aid, source of information, work area, education.

**Section 2:** Structured knowledge questionnaire is used to assess knowledge Regarding First-aid management.

##### Scoring interpretation of knowledge:

- Adequate knowledge – 21-30
- Moderately adequate knowledge – 11-20
- Inadequate knowledge – 1-10

#### VALIDITY

To ensure content validity of the tool, the self structured questioners was send to experts. The experts were selected based on their clinical expertise, experience and interest in the problem being studied. They were requested to give their opinions on the appropriateness and relevance of the items on the tool. The experts were from the field of nursing. Modifications of items in terms of simplicity and order were made.

On common agreement a few additions and deletions were made in the tool and content. As a whole the suggestions and comments of experts included grammatical corrections of sentences. Else the tool was found to be relevant.

The necessary modifications has been done as per the expert's advice. The recommendations and suggestions of the experts were considered to modify the items of the tool.

#### RELIABILITY

The reliability of tool established by using split half method Spearman Brown Prophecy formula ( $r=0.89$ ) reliability test.

#### DATA COLLECTION PROCEDURE

The formal permission was obtained for the approval of the study from different primary schools of Vadodara city, from 1<sup>st</sup> March to 9<sup>th</sup> March. The data collection done within a given period of 1 week. The investigator selected 30 primary school teachers meeting the inclusion criteria for data collection by using non- probability convenient sampling. The investigator selected the subject and established the rapport by explaining purpose of the study, the co-operation required and the anonymity assured before obtaining verbal consent. Initially the demographic tool, self structured questionnaire, administered to the sample to know existing level of knowledge regarding First-aid management then the planned teaching programme was given to the samples of the study. After 7 days post test was administered to assess the effectiveness of the planned teaching programme among primary school teachers.

## 6. PLAN FOR THE DATA ANALYSIS:

Data analysis is the systematic organization and synthesis of research data and testing of research hypothesis using the data. For this study, the data obtained were analyzed in respect to objectives of the study by using descriptive and inferential statistics.

### DESCRIPTIVE STATISTICS

- Frequency and percentage distribution is used to describe the demographic variables.
- Mean, median and standard deviation is used to describe pre-test and post-test score.

### INFERENTIAL STATISTICS

- Paired 't' test is used to assess the effectiveness of planned teaching programme on knowledge regarding First-aid management.
- Chi-square test is used to find association of the pre-test knowledge scores on knowledge regarding First-aid management.

### PLAN FOR DISSEMINATION AND UTILIZATION OF DATA

The dissertation will be displayed in the college library for reference. It will be published in the various journals, put up on the web site for reference after final year B.Sc. nursing result.

## 7. RESULTS:

### DESCRIPTION OF THE SAMPLES ACCORDING THEIR DEMOGRAPHIC CHARACTERISTICS

n=30

SR NO.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1.	<b>Age</b>		
	25 – 30 Year	09	30 %
	31 – 35 Year	08	26.7 %
	36 – 40 Year	04	13.3%
	41 – 45 Year	09	30 %
2.	<b>Gender</b>		
	Male	03	10%
	Female	27	90 %
3.	<b>Work Experience</b>		
	Less Than 5 Year	11	36.7%
	More Than 5 Year	19	63.3 %
4.	<b>Awereness About First Aid Management</b>		
	Yes	30	100 %
	No	00	00 %
5.	<b>Source Of Information</b>		
	Mass Media	12	40 %
	Class Teaching	13	43.3 %
	Workshop	01	3.3%
	Educational Services	04	13.3%
6.	<b>Work Area</b>		
	Public	26	86.7%
	Government	04	13.3%

7.	<b>Education</b>		
	Degree	16	53.3%
	Post Graduate	14	46.7 %
	P.hd	00	00%

### Comparison of pre-test and post test knowledge score of Primary school teachers.

n=30

Variable	Pre test	Mean	Mean Difference	Std. Deviation	t- Value
<b>Knowledge regarding First-aid management</b>	Pre-test	11.63	12.7	3.89108	15.42
	Post-Test	24.33		3.10522	

(df=29,0.05)

Above data shows the comparison of pre test and post test knowledge regarding first-aid management of primary school teachers. It shows overall mean score of knowledge in pre test is (11.63) while after providing planned teaching programme, the score of knowledge was increased up to (24.33). The standard deviation of pre test was (3.89108), after providing planned teaching programme the standard deviation is (3.10522). The mean difference between pre test and post test knowledge score is (12.7) shows the positive impact of Planned teaching programme on sample. The calculated “t” value (15.42) is greater than the tabulated “t” value at 0.05 levels. Data shows that there is significant difference between pre test and post test level of knowledge score.

### Association between pre-test knowledge score and socio-demographic variables.

n=30

\*Significant at 0.05 level

 $\chi^2$  = Chi Square

Sr. no.	Variable	1-10	11-20	Total	X <sup>2</sup>	Df	Level of significance
<b>1</b>	<b>Age</b>				8.902	3	8.902>7.82 S
	25-30 Year	2	7	9			
	31-35 year	1	7	8			
	36-40 year	0	4	4			
	41-45 year	6	3	9			
	<b>TOTAL</b>	9	21	30			
<b>2</b>	<b>Gender</b>				2.134	1	2.134<3.84 NS
	Male	2	1	3			
	Female	7	20	27			
	<b>TOTAL</b>	9	21	30			
<b>3</b>	<b>Work Experience</b>				1.155	1	1.155<3.84 NS
	Less than 5 year	2	9	11			
	More than 5 year	7	12	19			
	<b>Total</b>	9	21	30			
<b>4</b>	<b>Awareness about first-aid</b>				00	00	00<3.84 NS
	Yes	9	21	30			
	No	0	00	00			
	<b>TOTAL</b>	9	21	30			
<b>5</b>	<b>Source Of Information</b>				5.488	3	5.488<7.82
	Mass media	1	11	12			
	Class teaching	6	7	13			
	Work shop	0	1	1			

\*S=Significant

NS= Non Significant



	Educational services	2	2	4			NS
	<b>TOTAL</b>	9	21	30			
6	Work Area				0.879	1	0.879<3.84
	Public	7	19	26			NS
	Government	2	2	4			
	<b>TOTAL</b>	9	21	30			
7	Education						
	Degree	5	11	16	0.026		
	Post Graduate	4	10	14		1	0.026<3.84
	P.Hd	0	0	00			NS
	<b>TOTAL</b>	9	21	30			

Above table reveals

Above table reveals the association between knowledge of primary school teachers and demographic variable. Socio-demographic variable such as gender of Primary school teachers with  $\chi^2$  Value 2.134 (1df=3.84), work experience of Primary school teachers with  $\chi^2$  Value 1.155(1df=3.84), Awareness about first-aid of Primary school teachers with  $\chi^2$  value 00 & source of information of Primary school teachers with  $\chi^2$  value 5.488 (3df=7.82), Work area of Primary school teachers with  $\chi^2$  value 0.879(1df=3.84) & Education of Primary school teachers with  $\chi^2$  value 0.026(1df=3.84). so, for this variable calculated  $\chi^2$  Value is less than tabulated  $\chi^2$  Value, but for one variable, Age of primary school teachers  $\chi^2$  value  $\chi^2$  value 8.902 (3df=7.82) is more Than tabulated value. So, Except This One Variable Research Hypothesis H<sub>2</sub> Is Rejected.

## 8. DISCUSSION

The aim of the study was conducted to evaluate the effectiveness of Planned teaching programme on knowledge regarding First-aid management among Primary school teachers. It was found Primary school teachers had inadequate knowledge regarding First-aid management and planned teaching programme is effective to improve the knowledge regarding First-aid management.

Various evidence show the effectiveness of planned teaching programme on knowledge regarding first-aid management. The Primary school teachers are having lack of knowledge regarding first-aid management, so it is important that health care provider should provide the knowledge regarding first-aid management.

## 9. RECOMMENDATIONS:

**Based on the findings of the present study recommendation offered for the future study:**

- The similar study can be conducted on larger sample this will provide the valuable evidence in the area of practice.
- The similar study can be done in different college.
- The study can be conducted to assess Primary School Teachers knowledge regarding First aid management.

## 10. CONCLUSION:

This study was undertaken to assess the effectiveness of planned teaching programme, regarding First-aid management. the study involves one group pre- test post- test pre experimental design with non probability convenient sampling technique, 30 samples of Primary school teachers was selected on the basis of inclusion and exclusion criteria. A conceptual framework used for this study is modified “king’s goal attainment model.” Analysis of obtained data was planned based on the objectives and hypothesis of the study, both descriptive and inferential statistics were used for the analysis of the data. The data is interpreted in the forms of tables and graphs.

This chapter dealt with discussion of the findings according to objectives of the research study, hypothesis, overall conclusion.

## 11. ETHICAL CONSIDERATION:

The permission was taken from the concerned authority in the sumandeep nursing college, Vadodara .Written consent was taken from the Primary school teachers of selected primary schools of Vadodara city. No financial burden

given to the participants towards the materials use during the intervention. All information will keep as confidential and use only for the present study.

## **12. CONFLICTS OF INTEREST:**

- The authors declare that there is no conflict of interest statement.

## **13. SOURCE OF FUNDING:**

- Researchers used their own fund for their research.

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