



Pre-Experimental Study To Assess The Effectiveness Of Structured Teaching Programm On Knowledge Regarding First Aid Management Among Teachers In Selected Schools of Banglore India.

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ABSTRACT

*An emergency is serious, unexpected, unpleasant, sensational stimulus and often dangerous situation to our body whenever there is any injury or damage to any of the tissue requiring immediate action and intervention based on medical advice, home remedies or first aid. There are different types of injuries, traumas, deformities, abnormalities and other emergencies where a person seeks immediate first aid, proper medical care and hospital admissions. The youngsters are more prone to get these minor injuries and emergencies especially during their schooling hours. As such the school children are usually become the victim of these minor injuries or accidents and other medical emergencies like bleeding, choking, head injuries, and breathing difficulties. So in these situations teachers plays a main role in performing and managing the victims based on skill and proper knowledge regarding first aid management. The school teachers can use different measures on different patients based on emergencies like some needs Cardiac pulmonary resuscitation having breathing problems and some needs simple dressing care having minor bleeding and some needs analgesics having acute pain as long as concern first aid point of view to prevent further damage. As per survey almost one lakh and twenty thousand accidents took place in per year India. Therefore, on the basis of these observations and views pre-experimental study was conducted to assess the effectiveness of structured teaching programm on knowledge regarding first aid management among teachers in selected schools of Banglore India for which 60 subjects were selected by convenient sampling technique. During data collection Demographic variables, Self structured knowledge questionnaire and structured teaching program was used to assess the pre and posttest knowledge among subjects. After Data collection the data was analyzed by descriptive and inferential statistics using chi-square and t-test. The findings revealed that the mean posttest knowledge score **25.45**, standard deviation **22.38**, was significantly higher than mean pretest knowledge score **14.36** standard deviation **19.10** at p -value <0.01 among study subjects which indicated that structured teaching program was highly effective in enhancing the knowledge among School Teachers at mean difference **11.08**. The study also concluded that there were statistically no significant association between demographic variables ($p=0.000$) of School teachers with their pre-test knowledge scores at 0.05 level of significance.*

KEYWORDS:

Assess Effectiveness, Structured Teaching Programme, Knowledge, First Aid, School and Teachers.

1. INTRODUCTION

First aid is the provision of initial care for an illness and injury. Certain self-limiting illness or minor injury may not require further medical care. It is generally consist of a series of simple and in some cases potentially lifesaving techniques that an individual can be trained to perform with minimal equipment.¹

According to World Health Organization Child injuries are an important public health and developmental issues. In addition to the 830,000 deaths every year and Millions of children suffer a non-fatal injury that often requires long term hospitalization and rehabilitation.²⁻ said WHO chief Margaret Chang.

Western Australia celebrates an annual school safety awareness event “Safety in School weeks” (8th-12th JUNE) which aims to provide a week to focus on injury prevention of all Western Australian primary schools and the wider community.³

First aid for the sick and wounded has been practiced since ancient times. In the fact the famous German Surgeon General Esmarch (1823-1908) is considered to have conceived the idea of First aid. But an organized worldwide effort in giving first aid came only in the year 1877 with the formation of St. John ambulance association of England after the great apostle of St. John. Since then the universal need and utility of first aid has been increasing in this modern mechanized civilization. First aid is a skill based on knowledge, training and experience. First aid is essential before the arrival of an ambulance, doctor or other qualified persons. The “first-aid” itself signifies that the casualty is in need of secondary aid.⁴

Adolescents as a group is the most adventurous group, characterized by increased proximity to various types of accidents and emergencies as they try to explore the environment. All primary school children should receive first aid training starting in first grade. It is the need of the hour to facilitate the children with scientific knowledge⁵.

They are more prone to variety of injuries. Motor vehicle accidents are the leading cause of death in the adolescent’s years. Pubescent are especially susceptible to injury when riding snowmobiles, or motorcycles, a sport that is increasing in popularity. Pillion riders may burn their legs on the exhaust pipe. Other causes are drowning and firearms, so first aid is more needed in youngsters⁶.

First aid is the immediate and temporary treatment for a victim of sudden illness or injury. 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%).⁷

Teachers are the most important members of teaching institution. According to NFPA (National Fire Protection Act), teachers are the key of a safer future. They help the children to recognize and avoid risk by teaching and help them to lead fuller and more productive life.⁴ All the students have the right to learn in a safe school environment .Preventing unintentional injuries at school would help improve the learning environment.⁸

A first aid for scalds campaign was conducted among three ethnic groups Victanamese, Chinese, and Arabic. The campaign aimed to increase the proportion of Vietnamese, Chinese, and Arabic parents and caregivers. A media campaign was the primary strategy. It included advertisements on the Special Broadcasting Service (SBS) radio and in ethnic Newspapers. The study results revealed that there was a significant change between the two surveys in the proportion of people who reported correct knowledge of first aid, from 41.7% to 63.2% ($\div 2 = 25.7$, $p < 0.0001$). Although there were increases for all groups in knowledge of correct first aid after the campaign, the largest increase was in the Vietnamese group. The results implies that it is worthwhile to conduct campaigns specifically targeted to ethnic communities.¹⁰

A descriptive survey was done among the 654 adult parents to assess the knowledge of first aid, after publishing simple guidelines for the first aid management of ill or injured children in America. The findings of the study revealed that out of 654 adult surveyed, none of those answered all questions correctly, with roughly half being familiar with 60% of the questions. Knowledge of specific guidelines ranged from 21% to 92%. Many of the

adults are unaware of these guidelines. Further education is required to improve knowledge of first aid.¹¹⁻¹³

As a part of curriculum during field visit in Communities and Schools for health services. The investigator found that most of teachers do not possess adequate knowledge regarding first aid. During visits in schools for health check the investigator found that minor accidents and emergencies can occur during school times among students and also it has been found that accidents and minor ailments commonly happen in the schools. Finally the investigator felt that the teachers can prevent and manage the students during any disaster if they have adequate knowledge regarding first aid.. Hence the investigator finally decided that there is need to impart structured teaching programme among Teachers at selected schools of Banglore India.

2. Objectives of study

- To assess the pretest and post-test knowledge among teachers regarding first aid management in selected schools of Banglore India.
- To assess the effectiveness of structured teaching programme on knowledge regarding first aid management among teachers in selected schools of Banglore India.
- To Find the association between pretest knowledge score of teachers with selected demographic variables.

3. MATERIALS AND METHODS

A pre-experimental one group pretest posttest research design was conducted to assess the effectiveness of structure teaching programme on knowledge regarding first aid management among teachers in selected schools of Banglore India. Sixty subjects were selected by convenient sampling technique. The tool consisted of demographic variables and Self structure questionnaire. Prior to data collection informed consent was obtained from the participants. The data was collected for analysis by using descriptive and inferential statistics.

4. RESULTS

Table – 1: Distribution of frequency and percentage of selected variables
N=60

| SL No | Demographic variables | Response | No of subjects | Percent age % |
|-------|-----------------------|--------------|----------------|---------------|
| 1 | Age (in years) | 21-25 | 45 | 75 |
| | | 25-29 | 11 | 18.33 |
| | | 29-33 | 4 | 6.66 |
| | | 33 and above | 0 | 0 |
| | | Male | 11 | 18.33 |

| | | | | |
|---|--|----------------------------------|----|-------|
| 2 | Gender | Female | 49 | 81.66 |
| 3 | Educational status | NTT | 37 | 61.66 |
| | | TCH | 12 | 20 |
| | | B.ED | 10 | 16.67 |
| | | M Sc | 1 | 1.66 |
| 4 | Working experience | <1 year | 26 | 43.33 |
| | | 1-3years | 18 | 30 |
| | | 3-5 years | 13 | 21.67 |
| | | >5 years | 3 | 5 |
| 6 | Previous source of information | Mass media | 26 | 43.37 |
| | | In service education programme | 2 | 3.33 |
| | | Exposure to First aid Management | 0 | 0 |
| | | No information | 32 | 53.33 |
| 7 | Have any certification course regarding first aid management | Yes | 11 | 18.33 |
| | | No | 49 | 81.67 |

The data in table 1 showed that study subjects 45 (75%) were between age group of 21-25 years, 11(18.33%) were between the age group 25-29 years and 4(6.66%) were between the age group 29-33, 11(18.33%) were male and 49(81.66%) were female., 37(61.67%) were NTT, 12(20%) were TCH, 10(16.67%) were B.ED and 1(1.66%) was M Sc , 26(43.33%) had experience <1 year, 18(30%) had experience between 1-3 years, 13(21.67%) had experience between 3-5 years and 3(5%) had experience >5 years, 26(43.37%) had information from mass media, 2(3.33%) had information from in service education, 32(53.33%) had no information, 11(18.33%) had certificate of first aid management and 49(81.67%) did not have any certificate of first aid management.

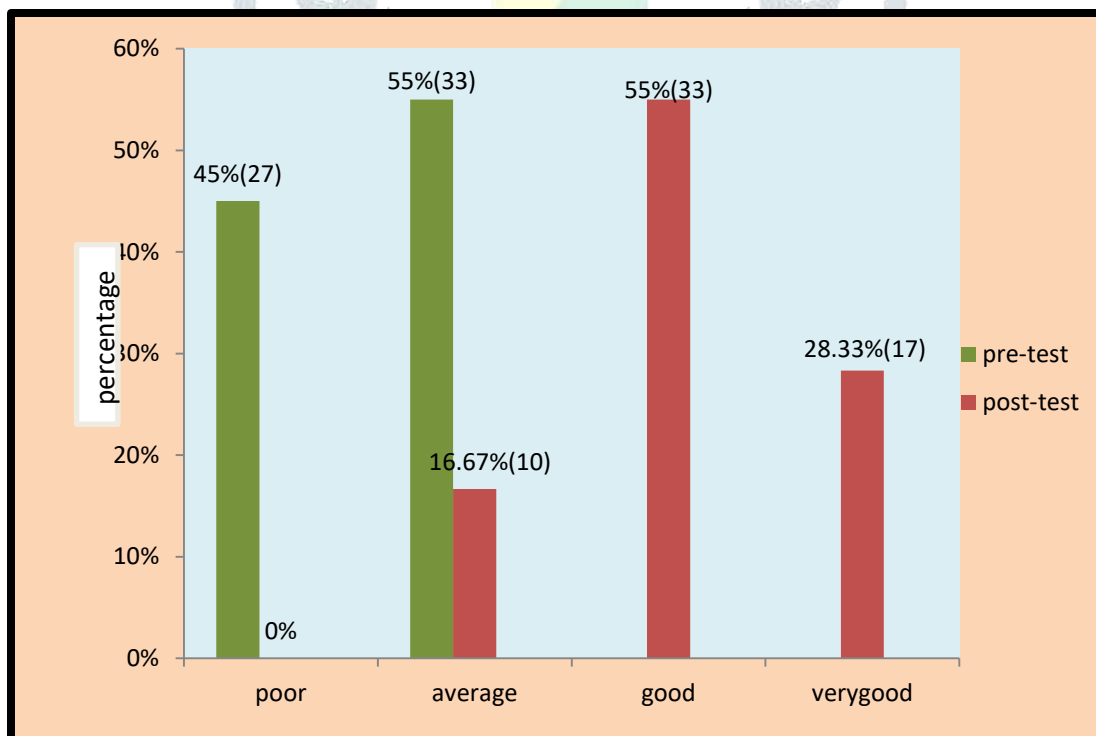


Figure 1: Distribution and frequency according to pre-test and post-test level of knowledge score among teachers in selected schools of Bangalore India.

The Data in figure 1 illustrated that during the pre-test most of the study subjects **27 (45%)** had poor knowledge, **33(55%)** had average knowledge and none of the study subjects had good and very good level of knowledge. While as most of the study subjects during the post test **33(55%)** had good knowledge, **17 (28.33%)** had very good level of knowledge, **10(16.67%)** had average knowledge, and none of had poor knowledge.

Table 2: Effectiveness of structured teaching programme on knowledge regarding first aid management among teachers in selected schools.

| Knowledge assessment | Mean | Mean difference | SD | df | Paired 't' value | P value |
|----------------------|--------------|-----------------|-------|----|------------------|---------|
| Pre test | 14.36 | 11.08 | 19.10 | 59 | 21.82 | <0.01 |
| Post test | 25.45 | | 22.38 | | | |

The Data in table 2 revealed that the mean post- test level knowledge score (**25.45**), SD **22.38** was higher than mean pre-test score (**14.36**), SD **19.10** with a mean difference **11.08** which indicated that there was significant difference between posttest knowledge score and pre-test knowledge score at ($p < 0.01$). The findings also concluded that structured teaching programme was effective in increasing the knowledge regarding first aid management among teachers in selected schools of Bangalore India . Hence research hypothesis H_1 was accepted.

Table 3: Analysis of Association between pre-test knowledge score among teachers with selected demographic variables.

N=60

| SL No | Demographic variables | | Overall pre test score level | | df | Table value | χ^2 |
|-------|--|--------------------------------|------------------------------|---------|----|-------------|------------|
| | | | Poor | Average | | | |
| 1 | Age (in years) | 21-25 | 20 | 25 | 1 | 3.84 | 0.02 NS |
| | | 25 and above | 7 | 8 | | | |
| 2 | Gender | Male | 6 | 5 | 1 | 3.84 | 0.05 NS |
| | | Female | 21 | 28 | | | |
| 3 | Educational status | Under graduates | 17 | 20 | 1 | 3.84 | 0.35 NS |
| | | Graduates | 10 | 13 | | | |
| 4 | Working experience | <1 years | 10 | 16 | 2 | 5.99 | 5.08 NS |
| | | 1-3 years | 12 | 6 | | | |
| | | >3years | 5 | 11 | | | |
| 5 | Previous information regarding First aid management. | Several sources of information | 12 | 16 | 1 | 3.84 | 0.09 NS |
| | | No information | 15 | 17 | | | |
| 6 | Any certification | Yes | 5 | 6 | 1 | 3.4 | 0.01 |

| | | | | | | | |
|--|---------------------------------------|----|----|----|--|--|----|
| | course regarding First Aid management | No | 22 | 27 | | | NS |
|--|---------------------------------------|----|----|----|--|--|----|

The Data in table 3 showed that all demographic variables were statistically not significant with their pretest knowledge score. So it indicated that there was no association between pretest knowledge score and selected demographic variables. Hence the hypothesis H₂ was rejected.

5. RECOMMENDATIONS:

1. A similar study can be conducted on a large sample in order to draw more definite conclusions and generalizations.
2. A similar study can be replicated on large sample with different demographic characteristics.
3. A similar study can be recommended by using different method of Demonstrations, Skills teaching and techniques.
4. A similar study can be recommended to compare Effectiveness of Structured Teaching Programme and other methods.
5. A comparative study can be conducted between rural School and urban School Teachers respectively..
6. An experimental study can be undertaken with control group.

6. CONCLUSION:

The following conclusions were drawn on the basis of the findings of the study.

- The present study concluded that Structured Teaching Programme was used to increase the level of knowledge among teachers regarding first aid management in selected schools of Bangalore India.
- Post knowledge score was higher than pre-test knowledge score related first aid management among teachers in selected schools of Bangalore India.
- The Structured teaching programme was found effective in increasing the knowledge, so it was evident from post intervention of knowledge score, when compared with pre-interventional knowledge score.
- There was statistically no significant association between pretest knowledge with the selected demographic variables. Hence the hypothesis H₂ was rejected.
- This indicated that Structured teaching programme can remain effective if provided regular basis to teachers during School health visits.

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