

## Effectiveness of Child to Child Approach on First AID Management in a Selected School at Mangalore



### Medical Science

KEYWORDS : child to child approach, first aid

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### ABSTRACT

#### Background of the study

Accidents account for nearly 90% of all external causes of morbidity and mortality and constitute a major cause of death in the pediatric population<sup>1</sup>. Child-to-Child's core principle maintains that children can and should be actively involved in improving their own situation and that of their family and neighbors.<sup>2</sup>**Materials and methods:**Two group pre-test post-test designs were used. Samples were selected by simple random sampling for group1 (adult to child approach) and group 2 (child to child approach). The study sample size was 60 students. **Results:**Group 1 pre- test mean knowledge score was  $9.03 \pm 2.22$  and post test mean score was  $16.96 \pm 1.75$  with mean differences of 7.93 ( $t=18.06, p<0.05$ ). Group 2 pre -test mean knowledge score was  $10.66 \pm 2.98$  and post test score was  $18.6 \pm 2.00$  with the mean difference of 7.9 ( $t=13.27, p<0.05$ ). **Conclusion:**Child to child approach was effective.

#### Introduction:

Child injuries are an important public health and development issues. In addition to the 830,000 death every year, millions of children suffer a nonfatal injury that often requires long term hospitalization (World Health Assembly). So it is our responsibility to make the children alert about the safety precautions and first aid management.<sup>3</sup> A child to child approach is a form of health education for primary school children launched in the year 1979, developed by Dr. Hugh Hawes and Dr. David Morley, the founders of Child-to-Child Trust and group of eminent paediatricians.<sup>2</sup>

The Child-to-Child Approach refers to a style of child empowerment where children are active participants in their own development and the development of other children.<sup>4</sup>

#### Objectives:

- 1) To determine the effectiveness of adult to child approach (group 1) on first aid management in terms of gaining post test knowledge score.
- 2) To determine the effectiveness of child to child approach (group 2) on first aid management in terms of gain in post test knowledge scores.
- 3) To find the association of mean pre test knowledge scores (group 1 and group 2) of school children with the selected demographic variables

#### Material and method:

1. **Setting:** St Rita's English Medium School, Mangalore.
2. **Research approach:** evaluative research approach
3. **Research design:** Two group pre test post test design.
4. **Sample:** 60 school children
5. **Sampling technique:** Random sampling technique
6. **Data collection instrument:** Baseline data and a structured knowledge questionnaire

**Data collection:** A written permission was obtained from the school authorities after explaining the importance of study. The informed consent was taken from the parents and subjects were selected for the study. Lists of English medium schools were made and St Rita's English Medium School was selected randomly by lottery method. The study sample comprise of 60

students, out of which 30 students were randomly selected from class VI with a total strength of 50 students, forming group 1 and 30 students were randomly selected of class V with a total class strength of 50 students, forming group 2 through lottery method. The pre test knowledge of children was assessed using structure knowledge questionnaire of the class VI students. Investigator taught the students about first aid management to group 1 by using a picture booklet on first aid management (adult to child approach).

After 7 days, post test was conducted using same questionnaire to group 1. On the same day, pre test of group 2 students were assessed and child to child approach was imparted by group 1 to group 2 school children. After 7 days, post test knowledge score was assessed of group 2. The data was analyzed.

#### Data analysis:

**Section I:** Description of baseline data

**Section II:** Effectiveness of adult to child approach

**Part 1:** frequency and percentage distribution of pre- test and post -test knowledge scores of children (group 1)

**Part 2:** Mean, mean difference, standard deviation and 't' test of pre -test and post- test knowledge score of subjects (group1)

**Section III:** Effectiveness of child to child approach

**Part 1:** frequency and percentage distribution of pre test and post test knowledge scores of children (group 2)

**Part 2:** Mean, mean difference, standard deviation and 't' value of pre test and post test knowledge score of subjects (group2)

#### Section IV:

**Part 1:** Domain wise distribution of mean, mean difference, standard deviation and 't' test of pre and post -test knowledge scores (group 1)

**Part 2:** Domain wise distribution of mean, mean difference, standard deviation and 't' test of pre and post test knowledge scores (group 2)

**Section V:** Association of pre test knowledge score with demographic variables group 1 and group 2

**Major findings of the study:**

**Section I:** In group 1, 30% (9) of subjects were got information from television,26.66%(8) from newspaper,80% (24)of them got information from teachers,43.33% (13)from parents . In group 2, 23.33% (7) subject got information from television,13.33%(4) from newspaper,46.66% (14) from teachers,46.66%(14) from parents.

In group1 , 63.33%(19) of subjects had seen giving first aid in case of bleeding only and10% (3) had seen in case of falls only,26.66 (8) had seen in both bleeding and falls. In group 2, 63.33% (19) of subjects had seen giving first aid in case of bleeding only,26.66% (8) had seen in case of falls only,6.66(2) had seen in both bleeding and falls and3.33% (1) had not seen in case of either bleeding or a fall.

**Section II:Part 1: Frequency and percentage distribution of pre test and post test knowledge scores of children (group 1 (adult to child approach))**

Most of the subjects in pretest were within the range of 10-14 (66.6%) and 0-9(30%)scores. In the post test majority of the subjects, 53.3% were in the range of 15-19 and 46.6% of them in the range of 20-24.

**Part 2: Mean, mean difference, standard deviation and 't' value of pre test and post test knowledge score of subjects (group1)(table 1)**

Post test knowledge score withmean ±SD was 18.6 ± 2.005.The mean difference (7.94) indicates apparently higher post test knowledge scores. The calculated't' value was 13.27 was greater than tabulated value  $t_{(29)} = 2.46, P < 0.05$ .This indicated that adult to child approach was effective (group1).

**Section III:Part 1:frequency and percentage distribution of pre test and post test knowledge scores of children (group 2 (child to child approach))**

Most of the subjects in the pre-test were within the range of 10-14 (53.3%) and 0-9(56.6%) scores. In the post test majority of the subjects, 83.3% were in the range of 15-19 and 10% of them in the range of 10 -14.

**Part 2:Mean, mean difference, standard deviation and't' value of pre-test and post test knowledge score of subjects (group2)**

Pre-test knowledge score with mean ±SD was 9.03± 2.22 and post test knowledge score with mean ±SD was 16.96 ± 1.75.The mean difference was 7.93 The calculated't' valuewas 18.06 greater than tabulated value  $t_{(29)} = 2.46, p < 0.05$ . This indicated that child to child approach was significantly effective (group2)

**Section IV: Part 1: Domain wise distribution of mean, mean difference, standard deviationand 't' values of pre and post test knowledge scores(group 1)**

Pre test knowledge score in the domain of first aid with mean ± SD was 3.7 ± 1.257 and post test knowledge score with mean ± SD was 5.7±1.25. The mean difference 2.0 indicated apparently higher post test knowledge score. In the domain of wound, the pre test knowledge score with mean ± SD was 4.2± 1.380 and post test knowledge score with mean ± SD was 7.1± 1.053. The mean difference was 2.9.The pre-test knowledge score with mean ± SD was2.0 ± 1.114 and post test knowledge score with mean ± SD was5.7 ± 1.590. The mean difference was 3.7. The calculated't' value=7.261 was greater than tabulated value  $t_{(29)} = 2.46, p < 0.05$  for the domain of first aid. The calculated 't' value= 9.294 was greater than tabulated value  $t_{(29)} = 2.46, p < 0.05$  for the domain of wound. The calculated't' value= 11.886 was greater than tabulated value  $t_{(29)} = 2.46, p < 0.05$  for the domain of bleeding.

**Part 2: Domain wise distribution of mean, mean difference, standard deviationand 't' values of pre and post test knowledge scores(group 2)**

Data shows that pre-test knowledge score on first aid with mean ± SD was 4.06 ± 1.172 and post test knowledge score with mean ± SD was 5.9 ± 1.112. The mean difference 1.84 indicated apparently higher post test knowledge score.The pre -test knowledge score on wound with mean ± SD was 3.4 ±1.431 and post test knowledge score with mean ± SD was 5.8 ±1.116. The mean difference 2.4 indicated apparently higher post test knowledge score. The pre -test knowledge score on bleedingwith mean ± SD was 1.5±1.358 and post test knowledge score with mean ± SD was 5.2±1.540. The mean difference was 3.7.The calculated't' value=7.261 was greater than tabulated value  $t_{(29)} = 2.46, p < 0.05$  for the domain of first aid. The calculated value't' value= 9.294 was greater than tabulated value  $t_{(29)} = 2.46, p < 0.05$  for the domain of wound. The calculated't' value= 11.886 was greater than tabulated value  $t_{(29)} = 2.46, p < 0.05$  for the domain of bleeding.

**Section V: There was no association of pre- test knowledge scores and their demographical variables group1 and group 2.**

**Discussion :**

Child to child approaches are not lessons learnt and forgotten, they are learnt and developed over a longer time and continue to apply for the rest of their lives.

**Conclusion:**

The study shows that Child to Child Approach on first aid management is effective.The Child to Child Approach is an educational process that links children's learning with taking action to promote the health, wellbeing and development of themselves, their families and their communities.

**Table 1:Mean, mean difference, standard deviation and 't' value of pre test and post test knowledge score of subjects (group1) N= 30**

| Group 1   | Mean ± SD    | Mean percentage% | Mean difference | 't' value |
|-----------|--------------|------------------|-----------------|-----------|
| Pre test  | 10.66 ± 2.98 | 44.41            |                 |           |
| Post test | 18.6 ± 2.005 | 77.5             | 7.94            | 13.27     |

't'  $t_{(29)}$  value=2.46,  $p < 0.05$  , Maximum score: 24

**Table 2:Mean, mean difference, standard deviation and't' value of pre-test and post test knowledge score of subjects (group2) N= 30**

| Group 2   | Mean±SD     | Mean percentage% | Mean difference | 't' value |
|-----------|-------------|------------------|-----------------|-----------|
| Pretest   | 9.03 ± 2.22 | 37.625           |                 |           |
| Post test | 16.96 ±1.75 | 70.66            | 7.93            | 18.06     |

't'  $t_{(29)}$  value=2.46, $p < 0.05$  , Maximum score: 24

**REFERENCE**

1. JH Imamura , EJ Troster , CA Oliveira .(2012 )What types of unintentional injuries kill our children? Do infants die of the same types of injuries? A systematic review. *Clinics Sao Paulo*, 67(9), 1107-1116. |
2. Celine Woznica. (2013)Building resilience through Child to child approach. *Global education magazine*. |
3. Hallworth Michael. Prevention of unintentional injuries: A global role of pediatrician. *Pediatrics* 2013 Jul 1; 132(1):4-6. |
4. Child to child approach. *Bahyatulayan*. 2015. |
5. Rekhasonavane et.al.(2012) Children as changing agents in creating peer awareness for ear health. *Al Ameen J Med Sci*,5(4),376-80. |