INTERNATIONAL JOURNAL OF NURSING EDUCATION & RESEARCH

Journal homepage: www.mcmed.us/journal/ijner

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING FIRST AID MEASURES AMONG SELECTED SCHOOL CHILDREN (13-15YEARS) AT BZ HIGH SCHOOL, CHITTOOR, ANDHRA PRADESH

Yamini T[1]*, Rathiga C[2]

[1]Associate Professor, Department of Medical Surgical Nursing, Sri Venkateswara college of Nursing, Chittoor, Andhra Pradesh, India.
[2]Principal, Department of Community Health Nursing, Sri Venkateswara college of Nursing, Chittoor, Andhra Pradesh, India.

Article Info

Received 25/08/2025
Revised 15/09/2025
Accepted 17/09/2025

Key word: - Patient safety education, Nursing students, Bibliometric analysis, Simulation training, Global collaboration.

ABSTRACT

The study to assess the effectiveness of planned teaching programme on knowledge regarding first aid measure among selected school children at BZ high school, Chittoor, Andhrapradesh. OBJECTIVES: To assess the pre-test and post-test knowledge of planned teaching programme among school children in BZ high school, chittoor, Andrapradesh. To evaluate effectiveness of planned teaching programme on Knowledge among school children. To find the association between the post-test knowledge with selected demographic variables. METHODOLOGY: Quantitative descriptive approach was adapted; Research Design selected for the present study was planned teaching program with one group pre-test and post-test design. Independent variables were First aid measure and Dependent variable s were Knowledge level of student. A total of 50 students who meet inclusion criteria by using Non-probability convenience sampling technique were selected. Knowledge was assessed by using structured questionnaire. Reliability was done Cronbachs alpha by correlation coefficient r=0.07. Chi- Square were applied to test the hypothesis. RESULTS: The study findings revealed that pre-test result shows that 50% of school children have adequate knowledge, 32% of school children have moderate knowledge and 18% of school children have inadequate knowledge. Post-test it shows that 86% of school children have adequate knowledge, 10% of school children have moderate knowledge and 4% of school children have inadequate knowledge. The Mean level of Knowledge among students were pre and post-test is12.6±16.4 and standard deviation is 3.82±3.69. Age, residence and Sources of information were significant and gender, religion, type of family, father education, mother education were non-significant association between post-test knowledge with selected demographical variable. CONCLUSION: The knowledge programme regarding first aid measures should be carried out to cover all school children at different school by utilization of mass media to educate and provide skill to perform first aid in emergency situation.

INTRODUCTION

Background of the Study

First aid is an emergency care or treatment given to an ill or injured person before regular medical aid can be obtained. First aid is an immediate and temporary treatment of a victim, accident, injury or sudden illness, before the provision of advance medical care.

Corresponding Author
Yamini T
E-mail: yaminidamu27@gmail.com

First aid should be aimed to preserve life, promote recovery, and prevent worsening of victim's condition. First aider should be assess the victim, provide the basic care and direct the patient to an appropriate medical care as soon as possible safety educator must begin with school children, since they not only represent the bulk of at-risk population with injury proneness.

School are the most suitable places where proper education due to inherent ambiance of institution which makes them more receptive to any type of educational training. Even in the schools the child may face accidental falls and injury, for which immediate first aid measures to be given to prevent complication. Children also must have enough knowledge about emergency measures to be taken in emergency situation. Nurses are the community agent, has the responsibilities to educate the teacher and school children as part of the health education and school health services.

First aid measures attention on typically administered immediately after injury or illness occurs. It usually consists of one time, short term treatment, such as cleaning minor cuts, treating minor burns, applying bandages and using non-prescription medicines.[5] It includes laceration\ allergic reaction\ wheezing\ breathing\ breathing emergencies\ choking\ CPR\ dental injuries\ fainting\ fractures\ injuries poisoning\ seizures\ shock\ splinters unconsciousness and drowning.

Children injuries caused 9% of the total death. The Global injuries mortality rate is estimated to be 98 /100,000 population, with male and female rates of 128 /100,000 (38lakh death) and 67/100,000 (19 lakh death). Hundreds and thousands of children died each year for injuries or violence and millions of others suffer the consequences of non-fatal injuries. Hence we have selected this study to provide knowledge about first aid measures to the children.

Problem Statement

"A study to assess the effectiveness of planned teaching programme on Knowledge regarding first aid measures among selected school children (13-15years) at BZ high school, Chittoor, Andhra Pradesh."

Objectives

1 To assess the pre-test and post-test knowledge of planned teaching programme among school children in BZ high school, chittoor, Andrapradesh.
2. To evaluate effectiveness of planned teaching programme on Knowledge among school children.
3. To find the association between the post-test knowledge with selected demographic variables.

Null Hypothesis

H 1: There is no significant difference between pre-test and post-test knowledge scores.

H 2: There is no significant association between the selected demographic variables with their knowledge scores.

Assumption

The school children may have moderate knowledge regarding first aid measures.

Limitations

- The study is limited for school children age group 13 to 15 years.
- This study is limited to boy and girl who know both English and Telugu.
- The study is limited for one week.

Project Outcomes

The study finding will help to improve the knowledge regarding "FIRST AID" among school children.

- It helps to prevent the accidents and injuries in the school.
- It helps school child to perform "FIRST AID" at emergency situation

Research Methodology and Approach

The present study has been aimed to assess the effectiveness of planned teaching programme on knowledge regarding first aid measures among school children at BZ High school of Chittoor, Andhra Pradesh. An appropriate design has been selected to conduct the study.

Research methodology indicates general pattern of organising. The procedure for gathering valid and reliable data for problem under investigation. It includes research approach, research design, variable, setting, population, sample, sample size, sampling technique, inclusion and exclusion criteria development and description tool, content validity, reliability, pilot study, procedures for data collection and the plan for analysis.

Research Approach

Quantitative descriptive approach was adapted to achieve the objective of the study, which is to be most appropriate in the field of education for the practicability in real life situation. It has advantage of practicability, feasibility and to certain extent for generalization.

Research Design

Research Design selected for the present study was planned teaching program and one group pre-test and post-test design.

Pre-test(o_1)	Intervention(x)	Post-test(o_2)
Knowledge questionnaires	Planned teaching program	Knowledge questionnaires

Variables

- Independent variable - First aid measure.
- Dependent variable - Knowledge level of student
- Extraneous variable which could influence the study include age, religion, place of living, education family Education study and gender

Setting

This study was conducted at BZ High School, Chittoor, Andhra Pradesh. This setting was chosen on the basis of investigator feasibility in terms of availability of required sample and cooperation extended by the students and teachers of school and to improve knowledge regarding first aid measures among school children.

Population

The population includes selected school students at BZ High School, Chittoor, Andhra Pradesh.

Sample

Sample is student age group 13 to 15 years who have attended planned teaching program.

Sample size

Sample size consists of 50 students who meet inclusion criteria.

Sampling technique

As the selection of sample depends on the availability of student of age group 13 to 15 years, non-probability convenience sampling technique was adopted based on inclusion criteria.

Criteria for sample selection

Inclusion criteria

- School children age group 13 to 15years.
- School children who can read Telugu and English.
- School children who are willing participate in the study.
- School children who are available during the study period.

Exclusion criteria

- School children age group below 13 and above 15 years.
- School children who can't read Telugu and English.
- School children who are not willing to participate in the study.

Development and description of tool

The tool was developed with the help of related literatures from textbooks, journals, websites, discussions and guidance from experts in the field of first aid measure.

The tool consists of two sections.

Section I - Consists of demographic variable
Section II - Consists of knowledge questionnaires

Scoring key

Section I - By coding demographic variable
Section II - It consists of 20 questionnaires to assess the level of knowledge

Adequate: - 70 -100 %
Moderate: - 50-69%
Inadequate :-< 49%

Validity and Reliability of the tool

The content validity was obtained from experts. Necessary modification where done and the tool was translated into Telugu language and thus tool was put to the test in the pilot study. The reliability of instrument was established by administering the tool to 10 student of municipal high school who were not included in the pilot study and who fulfilled the inclusion criteria. Internal consistency was established was by correlation coefficient r=0.07.

Pilot study

Prior formal permission was obtained from principal of municipal High school, Chittoor, Andhra Pradesh for conducting the study. The 10 sample were selected by following non-probability convenient sample technique. Participate falling under inclusion criteria were selected for pilot study. Rapport was established with self-introduction. After making student comfortable to sit, instruction was given to student regarding questionnaires. Statistical analysis was done by descriptive and inferential statistics. The finding of study revealed that the tool was reliable and feasible for conducting the study.

Procedure for data collection

The investigator obtained prior permission from the principal of school of BZ High School, Chittoor, Andhra Pradesh to conduct the study. It was decided to take 50 samples with age group of 13 to 15 year age. The sampling technique used was non-probability convenient sampling techniques. The investigator selected the samples, made them sit comfortably, introduce herself to participants. The participants who met the inclusion criteria were assessed for level of knowledge by using 20 questionnaires before giving planned teaching program. Then after planned teaching program post-test knowledge level was assessed by using same 20 questionnaires. The investigator thanks the participants for their willingness and cooperation.

Plan for data analysis

It was planned to analyze the data by using

descriptive and inferential statistics.

Descriptive statistics

- Frequency and percentage distribution of demographic variables, to know level of knowledge regarding first aid measures among school children.
- Mean and standard deviation of selected demographic variables.

Inferential statistics

The chi-square was used to analyze the association between the selected demographic variable with knowledge score regarding first aid measure.

ETHICAL CONSIDERATIONS:

The study was conducted by the approval of scientific research ethics committee, faculty of nursing, Sri Venkateswara college of Nursing. Participants were given explanation about the purpose of the study and they were also informed that they could withdraw from the study at any time before the completion of the study. Participants who agreed to complete the study were asked to sign a consent form. Confidentiality of participants was assured and the data were accessed only by the investigator involved in the study.

Data Analysis and Interpretation

The results shows that **age** 22(45%) were belong to 13 years old, 14(28%) were belong to 14years old and 14(28%) were belong to 15 years old, gender, 19(38%) were male and 31(62%) were female, religion, 37(74%) belong to Hindu, 7 (14%) belong to Christian, 6(12%) belong to Muslim, type of family, 40(80%) belong to nuclear family, 5 (10%) belong to joint family, 5(10%) belong to extended family, residence, 33(66%) were live in urban, 7(14%) were live in rural, (16%) were live in hostel, 2(4%) were live in semi urban, father education, 18(36%) were primary education, 22(44%) were higher education, 4(8%) were degree holder, 6(12%) were illiterate, mother education, 21(42%) were primary education, 17(34%) were higher education, 4(8%) were degree holder, 8(16%) were illiterate, source of information about first aid, 2(4%) received from television, 30(60%) received fromschool, 11(22%) received from books, 7(14%) received from others.

Table 1: shows that 25(50%) of school children have adequate knowledge, 16(32%) of school children have moderate knowledge and 9(18%) of school children have inadequate and in post-test that 43(86%) of school children have adequate knowledge, 5(10%) of school children have moderate knowledge, 2(4%) of school children have in adequate knowledge.

Table 2: shows that mean age of selected schoolchildren is 13.84±0.86 and the mean source information of first aid is 12.5±10.59.

Table 3: shows that mean of knowledge level in pre and post-test is12.6±16.4 and standard deviation is 3.82±3.69 and shows that there is negative correlation.

Table 1: Frequency and percentage distribution on level of knowledge of school children 13-15 years regarding first aid measures in pre-test and post-test.

Level of knowledge	Frequency (pretest)	Percentage (%) (Pretest)	Frequency (Post test)	Percentage (%) (Post test)
Adequate knowledge 70-100%	25	50	43	86
Moderate knowledge 50-69%	16	32	5	10
Inadequate knowledge Less than 49%	9	18	02	4

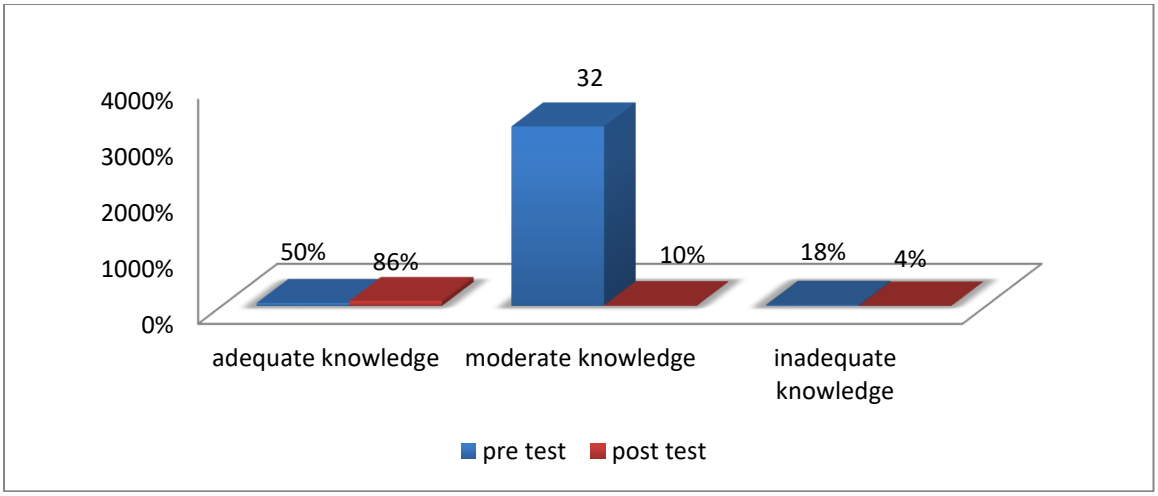
Table 2. Mean and standard derivation of selected demographical variable among selected school children regarding first aid measures.

SI.NO	VARIABLE	MEAN	STANDARD DERIVATION
1.	Age	13.84	0.86
2.	Source of information	12.5	10.59

Table 3: Mean and Standard deviation between level of knowledge in pre and post-test.

LEVEL OF KNOWLEDGE	MEAN	STABDARD DEVIATION	MEAN DIFFERENCE
Pre-test knowledge level (x)	12.6	3.82	-0.57
Post-test knowledge level (y)	16.4	3.69	Negative correlation

Figure 1: Level of knowledge in pre and post- test.



DISCUSSION

The first object of the study was to assess the pre - test and post- test knowledge of planned teaching program among school children. The pre-test result shows that 50% of school children have adequate knowledge, 32% of school children have moderate knowledge and 18% of school children have inadequate knowledge. Post-test it shows that 86% of school children have adequate knowledge, 10% of school children have moderate knowledge and 4% of school children have inadequate knowledge. At the present result shows there was significant difference in level of knowledge during pre-test and post-test.

The second objective of study was to evaluate effectiveness of planned teaching program on knowledge among school children. The result shows that there was effectiveness of planned teaching program on knowledge among school children because there is increase in post - test

The third objective was to find the association between the post-test knowledge with selected demographical variable. The result shows that there was significant association between post-test knowledge with selected demographical variable such as (age, residence, source of information about first aid). There is non-significant association between post-test knowledge with selected demographical variable such as (gender, religion, type of family, father education, mother education).

Regarding first aid measures among selected school children, the Null hypothesis Ho 1 states that There is no significant difference between pre-test and post-test knowledge scores is rejected. As there is significant difference between pre-test and post-test knowledge regarding first aid measures among selected school children. So, Null hypothesis was rejected and Ho 2 states that There is no significant association between the selected demographic variables with their knowledge scores. It is partially accepted as there is some significant association between the selected demographic variables with their post-test knowledge such as (age, residence and source of information about first aid.) So, Null hypothesis was rejected.

.

CONCLUSION

The knowledge programme regarding first aid measures should be carried out to cover all school children at different school by utilization of mass media to educate and provide skill to perform first aid in emergency situation.

Nursing Implications

The findings of the study have implication in field of nursing education, administration, practice and nursing research.

Nursing Education

The nurse educator has to prepare the nursing students to obtain skill in performing and knowledge regarding first aid measures on all minor condition. And also, to educate nursing student for educating school children about first aid measures.

Nursing Research

The finding of the study helps to expand the scientific body of knowledge, upon which further research can be conducted. Based on this study in-depth research studies can be done on first aid measures.

Recommendations

- A comparative study can be conducted to assess knowledge and practice of first aid measures among school children at different school.
- A same study can be replaced with large sample size.
- A study can be conducted in different school setting.

REFERENCE

1. Randhawa, S.S., Kumari, N., et al. (2014). *First aid and personal hygiene* (Vol. 2). Punjab, India: Medical Publishers, 200-240.
2. Gupta, L.C., & Gupta, A. (2013). *Manual of first aid management of general injuries, sports injuries, and common ailments* (3rd ed.). New Delhi, India: Jaypee Brothers Medical Publishers (P) Ltd, 300-347.
3. Randhawa, S.S., Kumari, N., et al. (2012). *First aid and personal hygiene* (Vol. 2). Jalandhar City, India: Medical Publishers, 156-175.
4. Randhawa, S.S., Kumari, N., et al. (2015). *First aid* (Vol. 2). Jalandhar City, India: Medical Publishers, 99-123.
5. St. John Ambulance, et al. (7th ed.). (n.d.). *First aid manual*. London, New York: Dorling Kindersley Publications, 46-67.
6. Muhasin, M. (n.d.). *Effectiveness of self-instructional module on knowledge regarding first aid management among adolescents*. Rajiv Gandhi University of Health Science, 120.
7. Shrestha, S., Kumar, S., & Rana, S. (2018). Awareness on prevention and first aid management of burn injury among adolescents. *Journal of College of Medical Science – Nepal*, 14, 200-205.
8. Deekshith, P. (2018). *Evaluate of knowledge, attitude and practice on first aid measure among students*. Indian Journals, 9, 50-60.
9. Semwal, J., Sharma, S., & Singh, R. (n.d.). Assess the knowledge and attitude to first aid among school children in India. *Dehradun*, 4, *International Journal of Community Medicine and Public Health*, 2934-2936.
10. Bandyopadhyay, L., Paul, B., & Ghosh, S. (2017). *Effectiveness of first aid training on school students in Singur block, West Bengal*. *Journal of Family Medicine and Primary Care*, 6, 39-42.
11. Kaur, N. (n.d.). *Descriptive study to assess the level of knowledge regarding first aid management among school teachers in Punjab*. *Journal of Health and Medical Informatics*, 8, 288.
12. Geetha, C. (2016). *Knowledge on first aid measures among school children in India*. *International Journal of Applied Research*, 2, 504-506.
13. Alhe Jaili, A. S., & Alharthi, M. (2016). *Knowledge and attitude of first aid skill among health science students*, 4, 69-80.
14. Agarwal, G. (2016). *Prospective study on epidemiological study of acute poisoning in children in tertiary care hospital*. *International Journal of Contemporary Paediatrics*, 3, 1299-1251.
15. Shinde, V. (2015). *Knowledge of higher school students in Pune about first aid and effecting of training on them*, 5, 556-559.
16. Ali, M.S., & Afifi, M.R. (2015). *First aid knowledge and attitude of secondary school students in Saudi Arabia*, 7, 1366-1378.
17. Rakhi, P., & Richa, (n.d.). *Non-experimental survey to assess first aid knowledge among health assigned teachers of primary school*. *International Journal of Research Medical Science*, 5, 1522-1523.
18. Awards. (2015). *Primary school teachers' knowledge about first aid*. *Medical Cairo University*, 83, 541-542.
19. Muneswari, B. (2014). *Effectiveness of planned health teaching programme using child-to-child approach on knowledge of selected first aid measures among school children in Tamil Nadu, India*, 3, 1-19.
20. Jose, A. (2012). *Poisoning in children from an educationally and economically advanced urban area of South India*. *Asian Journal of Epidemiology*, 5(9), 123-129.
21. Boling, G. (2011). *Conducted pilot study to teach the effect of first aid in kindergarten students in UK*, 10, 19-13.
22. Bolling, G. W., & Wahl, H.A. (2009). *Primary school children are able to perform basic lifesaving first aid measures*. Available from: http://www.ncbi.nlm.nih.gov/pubmed.
23. Duperrex, O., Blackhall, M., & Burri, M. (2009). *Education of children and adolescents for the prevention of dog bite injury*. Available from: www.cochrane.org.
24. Goel, S. (2008). *Impact of two training packages on awareness of practice of first aid for injuries and common illness among higher school students*, 11, 69-80.
25. Fauzia, K. (2017). *Effectiveness of PTP on first aid on selected school children in Udupi district*, 30-31.
26. Cormack, R.A.M.C. (2003). *Prospective study on first aid management of minor burns in children*. *Medical Journal of Australia*, 1, 31-3.