



A STUDY TO EVALUATE THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING FIRST AID MANAGEMENT AMONG PRIMARY SCHOOL TEACHERS

Bharati Keshavrao Tupe*

Dr. Hedgewar College of Nursing, Aurangabad-431005, Maharashtra, India*Corresponding Author

ABSTRACT

First aid is the first and immediate assistance given to any children with either a minor or serious illness or injury, with care provided to preserve life. The results of study showed that pre-test mean score is 15.65 with 48.9% with standard deviation of 3.862 before the administration of planned teaching programs, the post-test mean score is 25.75 with 80.46%. The comparison of overall knowledge scores on first aid management before and after the planned teaching programs. The mean difference 10.10 with standard deviation 3.549 the t-test value $t = 25.452$ and is significant. In all aspects the school teachers have improved their knowledge after the administration of planned teaching programs. The difference between pre-test and post-test knowledge score is large it is significant. Statistical significant was calculated using students paired t-test. The association between selected demographic variables significantly associated with the pretest knowledge scores. The association was determined by using Pearson chi square test.

KEYWORDS :

INTRODUCTION

First aid is the treatment of any injury or sudden illness before professional medical help can be provided.¹ According to WHO child injuries are important health issues.² 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.^{3,4} Karl Meninger said "what is done to the children, they will do to the society".⁵ An accident is defined as "an unexpected unplanned occurrence which may involve injury". Also accident is the "occurrence of sequence of events that usually produce unintended injury, death or damage to property".^{6,7} The aim is to prevent the condition getting worse, ensuring fast recovery and preserving the precious human life. Most injuries are minor and can be treated without medical attention such as bruises, minor fractures, sprains, and strain. The knowledge of first aid, when properly applied, can bridge the gap between temporary or permanent injury, rapid recovery, or long-term disability.⁸ 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.⁹

Hence, first aid should be known by school teachers to meet the urgent needs of these school children during minor injuries. Teacher is the key person in school who attend such type of victims and always in a position to save the life. Healthy safe environment is very important to avoid these hazards beside qualified teachers who can detect any health problem and can give first aid for commonly occurring emergencies in schools.¹⁰

During my clinical experience posting in the community, I have treated many school children for minor injuries in our health center and during the visit to many primary schools for health checkup. The school nurse or any other health worker would not always be at the school when first aid treatment is needed, and also when children have accidents away from the school; consequently it is desirable that teachers and other staff should be properly taught to take care of the minor accidents that occur in and around the school.¹¹ The responsibility of school teacher is also to provide a first aid care to children at school campus. Hence, they should be trained adequately to deliver health care to injured children in emergency. The primary purpose of the study was to make school teachers more competent in providing first aid care for minor injured children in primary school through structured educational package. This may apply their knowledge and practice regarding the first aid management of selected minor injuries

to encounter the children at primary school, which would further help in reducing the complications and advancement of the problem. Indirectly, it would also help in reducing absenteeism rate of primary school children due to minor injuries.

Statement of the Problem

OBJECTIVES

- To assess the pre-test knowledge regarding first aid management among primary school teachers.
- To administer planned teaching programme regarding first aid management among primary school teachers.
- To evaluate effectiveness of planned teaching programme regarding first aid management among primary school teachers.
- To find out association between pre-test knowledge score with selected demographic variables

HYPOTHESIS

H₁: There will be significant difference between pretest and post- test knowledge score level on first aid management among primary school teachers.

H₂: There will be significant association between pretest knowledge level and selected demographic variables among primary school teachers related to first aid management.

RESEARCH METHODOLOGY

RESULT

Descriptive and inferential statistics were used to analyze the data that was collected. The Findings of data has been finalized and organized in accordance with the plan for data analysis. These are presented under the following sections.

- Section-I: Demographic profile of School teachers.
- Section-II: Knowledge of School teachers regarding First aid management in pre test.
- Section-III: Knowledge of School teachers regarding First aid management in post test.
- Section-IV: Comparison of pre test and post test knowledge regarding First aid management among School teachers.
- Section-V: Association of the pre test knowledge scores of School teachers with the selected demographic variables.

SECTION II: KNOWLEDGE OF SCHOOL TEACHERS REGARDING FIRST AID MANAGEMENT IN PRE TEST

Objective 1: To assess the pretest knowledge regarding first aid management among primary school teachers.

TABLE -2: Mean percentage and standard deviation for the pre test knowledge of School teachers N=80

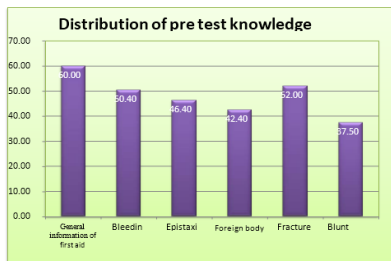
Sl. No.	Knowledge aspects	No. of Items	Mean	SD	Mean%
1	General information of first aid	7	4.2	1.237	60
2	Bleeding	5	2.52	1.079	50.4
3	Epistaxis	5	2.32	1.339	46.4
4	Foreign body obstruction	5	2.12	1.372	42.4
5	Fracture	5	2.60	1.539	52
6	Blunt injuries	5	1.875	1.083	37.5

Interpretation

Table 2 reveals the assessment of knowledge among school teachers in terms of pre test scores regarding First Aid Management. In general aspect the mean score is 4.2 with a mean percentage of 60 and a standard deviation of 1.237.

In the aspect of bleeding the mean score is 2.52 with a mean percentage of 50.4 and a standard deviation of 1.079. In Knowledge on first aid for epistaxis aspect the mean score is 2.32 with a mean percentage of 46.4 and a standard deviation of 1.339.

In the as of foreign body obstruction the mean score is 2.12 with a mean percentage of 42.4 and a standard deviation of 1.372. In the aspect of fracture the mean score of 2.6 with a mean percentage of 52 and a standard deviation of 1.539. In the last aspect of blunt injuries the mean score is 1.875 with the mean percentage of 37.5 and a standard deviation of 1.083.

**Fig 1: Bar diagram showing the mean percentage of pre test knowledge scores of School teachers.****Table 3: Pre test overall knowledge scores on First Aid Management N=80**

Questions	Mean	SD	Mea %
Overall pre test knowledge	15.65	3.862	48.9

Interpretation

Table 3 reveals the school teachers pre test overall knowledge on First Aid Management. The mean score is 15.65 with a mean percentage of 48.9 with a standard deviation of 3.862 before the administration of Planned Teaching Programme.

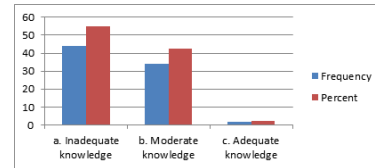
Table 4: Distribution of subjects according to Pre test knowledge level N=80

Knowledge level	Frequency	Percent
a. Inadequate knowledge	44	55.0
b. Moderate knowledge	34	42.5
c. Adequate knowledge	2	2.5
Total	80	100

Interpretation

Table 4 reveals the distribution of school teachers according to the pretest knowledge level regarding First Aid Management. In the pre test majority 55 % (n=44) of the subjects had inadequate knowledge, 42.5% (n=34) of them had moderate knowledge and remaining 2.5% (n=2) of them had adequate

knowledge regarding First Aid Management. <50% = Inadequate, 50%-75% = Moderate, > 75% = Adequate

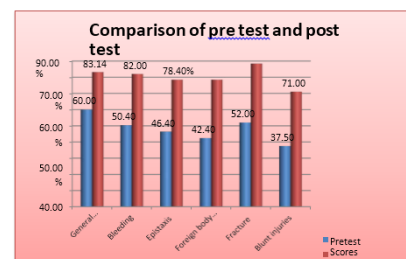
**Fig 2: Cylindrical diagram showing the distribution of subjects according to pre test knowledge level.****SECTION IV: COMPARISON OF PRE TEST AND POST TEST KNOWLEDGE REGARDING FIRST AID MANEGME**

Objective 3: To evaluate effectiveness of planned teaching programme regarding first aid management among primary school teachers.

TABLE 5: Comparison of pretest and post test knowledge scores of School teachers regarding First Aid Management. N=80

Sl. No.	Knowledge aspects	Pre test		Post test		Mean difference	Students
		Mean	S D	Mean	S D		
1	General information of first aid	4.2	1.237	5.82	0.925	1.625	18.894
2	Bleeding	2.52	1.079	4.1	0.704	1.575	17.439
3	Epistaxis	2.32	1.339	3.92	0.965	1.6	16.532
4	Foreign body obstruction	2.12	1.372	3.92	0.792	1.8	13.719
5	Fracture	2.60	1.539	4.42	0.632	1.825	11.785
6	Blunt injuries	1.875	1.083	3.55	0.926	1.675	16.447

Table 5 reveals the comparison of knowledge scores on First aid management before and after the Planned Teaching Programme. In all aspects the school teachers have improved their knowledge after the administration of Planned Teaching Programme. The difference between pre test and post test knowledge score is large and it is significant. Statistical significance was calculated using student's paired t test.

**Fig 3: Cylindrical diagram showing knowledge scores of School teachers in each aspect****TABLE 6: Determination of overall mean knowledge scores before and after the Planned Teaching Programme N=80**

AREA	Pre test	Post test	Mean difference	Students paired t test
Overall Knowledge	15.65	25.75	10.10 (SD=3.549)	25.452

HS, p-0.000, df-79

Table 6 reveals the comparison of overall knowledge scores on First aid management before and after the Planned Teaching Programme. The mean pretest score 15.65 and the

mean post test score is 25.75. The mean difference is 10.10 with a standard deviation of 3.549. The student's paired t test value $t=25.452$ and is significant.

Table 7: Comparison of average knowledge score percentage on First aid management before and after the Planned Teaching Programme. N-80

SL. NO.	Area of knowledge	Mean% of Post test	Mean % of Pre Test	% of Enhancement
1	General information of firstaid	83.14	60	23.14
2	Bleeding	82	50.4	21.6
3	Epistaxis	78.4	46.4	32
4	Foreign body obstruction	78.4	42.4	36
5	Fracture	88.4	52	36.4
6	Blunt injuries	71	37.5	33.5
Overall		80.46	48.9	31.56

Table 7 reveals the comparison of average knowledge score percentage on First Aid Management. In all aspects the teachers have improved their knowledge. The maximum gain of knowledge can be seen in Fracture, foreign body obstruction, blunt injuries and epistaxis and which are 36.4%, 36%, 33.5% and 32% respectively. The minimum gain is in the General information and bleeding and which are 23.14% and 21.6% respectively. The overall gain in knowledge is 31.56%, which indicates the effectiveness of Planned Teaching Programme.

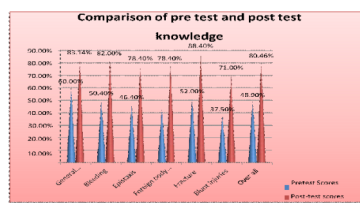


Fig 4: Conical diagram showing the comparison of Mean percentage of pre and post test knowledge scores of School teachers in each aspect.

HYPOTHESIS TESTING

H₁: There will be significant difference between pretest and post test knowledge score level on first aid management among primary school teachers.

It is revealed that there is significant difference between the pre test and post test knowledge score. Comparison was done using student's paired t test and the value is 25.452, which is significant. Therefore the research hypothesis H1 has been accepted.

SECTION V: ASSOCIATION OF KNOWLEDGE SCORES OF SCHOOL TEACHERS WITH SELECTED DEMOGRAPHIC VARIABLES

Objective 4: To find out association between pretest knowledge score with selected demographic variables

Table – 8: Association of pre test knowledge scores of School teachers with selected demographic variables N= 80

Demographic variables		Number	Level of Knowledge		Chi square test
			Inadequate	Moderately adequate	
Age	26-30 Years	38	22	16	chi square value=9.883

	31-34 Years	8	0	8	
	35-40 Years	22	8	14	
	40 years and above	12	6	6	
Gender	Male	18	12	6	Chi square value= 4.4
	Female	62	24	38	
Religion	Hindu	76	36	40	chi square value= 3.4
	Muslim	4	0	4	
Education	General Degree	12	2	10	chi square value=8.133 p=0.043*S
	Diploma in Education (D.Ed)	2	0	2	
	Bachelor of Education (B.Ed)	28	12	16	
	Post Graduation	38	22	16	
Experience	0-4 years	34	16	18	chi square value=2.293 p=0.514 NS
	5-8 years	28	10	18	
	9-12 years	12	6	6	
	12 years and Above	6	4	2	
Area of residence	Urban	54	18	36	chi square value=9.1
	Semi urban	26	18	8	
Source of information	Family members/Friends	34	16	18	chi square value=1.908 p=0.592 NS
	Colleagues	4	2	2	
	Mass media	28	14	14	
	Health Professionals	14	4	10	
Previous Exposure	Yes	30	10	20	chi square value=2.640 p=0.104 NS
	No	50	26	24	

S-Significant, NS-Non Significant, p=level of significance, N=No. of Samples Interpretation

Table 8 reveals the association between socio-demographic variables and the pretest level of knowledge regarding First Aid Management. The selected demographic variables such as age, gender, education and area of residence are significantly associated with the pretest knowledge scores. The association was determined by using Pearson chi square test.

Hypothesis testing

H2: There will be significant association between pretest knowledge level and selected demographic variables among primary school teachers related to first aid management. It is revealed that there is a significant association between pre test knowledge scores with selected demographic variables. The association was calculated using chi square test. Therefore the research hypothesis H2 is accepted.

DISCUSSION

The present study was carried out among primary school teachers to determine the effect of planned teaching programs on first management. this study revealed that The findings of the post-test Knowledge score of the School teachers shows Overall the school teachers are having 80.46 % of knowledge. The level of knowledge in Post test indicates, 75.0% of them having good knowledge and 25.0% of them are having moderate knowledgeCommunity health nurses can

conduct the periodic awareness programme and training program regarding First aid management at primary health centers and anganawadi's under the guidance of the primary health centers medical officers and doctors and also she can conduct in hospitals, schools under the guidance of pediatricians. This study also suggests that all the nursing schools and nursing college lecturers should be well trained and should conduct the seminars and training program for the nursing teachers regarding First Aid Management.

CONCLUSION

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. Hence, first aid should be known by school teachers to meet the urgent needs of these school children during minor injuries. Teacher is the key person in school who attend such type of victims and always in a position to save the life.

Healthy safe environment is very important to avoid these hazards beside qualified teachers who can detect any health problem and can give first aid for commonly occurring emergencies in schools. The responsibility of school teacher is also to provide a first aid care to children at school campus. Hence, they should be trained adequately to deliver health care to injured children in emergency.

From the findings of the present study, it is concluded that the level of Knowledge regarding First aid management among School teachers was inadequate during the pre-test assessment. However, the findings of the post-test shows that, the level of Knowledge has improved and the scores has indicated an adequate level of Knowledge among teachers. The improvement is due to the administration of the PTP. Therefore the Knowledge of the teachers can be further improved by providing on-going teaching and educational programmes.

REFERENCES

- 1) Ganguli SK, Adolescent Health. Indian Journal of Public Health, 2003, 47 (3), 5-15.
- 2) Dhingra R, Kumar A. Knowledge and Practices Related to Menstruation among Tribal Adolescent girls. Ethno-Med, 2009, 3(1), 43-48.
- 3) Lowdermilk, Perry, Bobak. Maternity and Women's Health care. 6th ed. London: Mosby; 1997.
- 4) Sharma J. Victor S, Chaudhary P, Sheikh M. A., Pre-Experimental Study to assess the effectiveness of structured teaching program on knowledge regarding first aid management among teachers in selected schools. Journal of emerging Technologies and Innovative research, 2022, 9(4), 216-222.
- 5) Parul Dutta, "pediatric Nursing "I edition ,jay pee publishers, New Delhi 2007,30-31
- 6) K. park, "text book of preventive and social medicine". 21th edition. Bhanot Publications, Jabalpur. 2005, 425, 426.
- 7) Rehana Qauser, Umer Ramzan, Sufora Yaseen, "A pre-experimental study to evaluate the effectiveness of planned teaching programme on first aid management of selected emergencies among adolescents in selected schools of district ganderbal", International Journal of Creative Research Thoughts, 2022, 10(5), 581-590.
- 8) Gupta L. C. Manual of First Aid. 1st ed. New Delhi: Jypree publisher; 2004. p. 110-6.
- 9) Gulani K. K. Community Health Nursing Principles and Practices. 1st ed. New Delhi: Jypree publisher; 2005. p. 285-444.
- 10) Basvanthappa B. T. Community Health Nursing. 2nd ed. New Delhi: Jypree publisher; 2009. p. 536-7.
- 11) Wilson C. C. First aid cabinet of a school nurse, her standing orders for first aid, and her school nursing procedure. Am J Public Health Nations Health 1930;20:147-54