



## ORIGINAL RESEARCH PAPER

Nursing

**EFFECT OF A PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PEDIATRIC EMERGENCIES AND ITS FIRST AID MANAGEMENT AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED ANGANWADIS AT ERNAKULAM DISTRICT IN KERALA.**

KEY WORDS:

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**Introduction:**

"Children are wet clay in potter's hand. Handled with love and care, they become something beautiful or else break and are discarded. The future of nation is in their hands."

-Pandit Jawaharlal Nehru

In today's world, in the developed as well as the developing countries, danger prevails not only on the roads, but it also exists in the home and playgrounds. According to WHO, 6.3 million children under the age of five died in 2013. India (21%) and Nigeria (13%) together account for more than a third of all under-five deaths.

Foreign body aspiration is an important cause of pediatric morbidity and mortality, particularly in children between the age of 6 months and five years. Foreign-body aspiration accounts for more than 300 deaths annually in the country. Approximately 80% of episodes of foreign-body aspiration occur in those younger than 3 years. The absence of the molars makes them unable to chew adequately, however. These factors increase the risk of foreign-body aspiration.

Drowning is one of the other important causes of accidental death among children. Drowning is the 3rd leading cause of unintentional injury death, accounting for 7% of all injury-related deaths. The World Health Organization's first "global report on drowning: preventing a leading killer" shows that drowning claims the lives of 372,000 people each year and is among the 10 leading causes of death for children and young people across the world. The report also says that the highest rate for drowning is among children under 5 years of age.

Burn injury are the most severe trauma a body can sustain. Approximately one fourth of burns cases are below 10 years of age, and about 65% of burnt children are below 5 years of age. According to WHO, burns are a global public health problem, accounting for an estimated 265,000 deaths annually. The rate of child deaths from burns is currently over 7 times higher in low- and middle-income countries than in high-income countries. In India, paediatric burns account for 17–25% of total burn admissions. Approximately 90% of burns are caused by household accidents. Accidental poisoning is the 12th leading cause of admissions in pediatric wards in India and accounts for about 1% of hospitalized patients. It is one of the major causes of death in children younger than 5 years of age. The highest incidence occurs in the 2-year-old group, with the second highest incidence occurring in 1-year-old children. The reported incidence of childhood poisoning in various studies varies from 0.3 to 7.6% which constitutes a significant number of admissions to the pediatric wards. The commonest accidental poisoning in children was ingestion of kerosene oil accounting for 48.9% case.

WHO shows that unintentional injuries are the leading cause of childhood death before the age of six years and that 95% of these child injuries occur in developing countries. More must be done to prevent such harm to children. It concludes that if proven prevention measures were adopted everywhere at least 1000 children's lives could be saved every day.

Mother's knowledge and practice are relevant variables and are considered to be important factors while planning an educational programme for first aid in pediatric emergencies. The mother should know about the home safety needs of under-five children because mothers are usually the caregivers and who will be at

home with the child. Hence the researcher selected the planned teaching programme which is believed to improve a mother's basic knowledge and ensure safe survival of children.

**Statement of the problem:**

A study to assess the effect of a planned teaching programme on knowledge regarding pediatric emergencies and its first aid management among mothers of under-five children in selected anganwadis at Ernakulam district in Kerala.

**Objectives:****Objectives of the study were to:**

- Assess the pre and post-test knowledge of mothers of under-five children regarding pediatric emergencies and its first aid management.
- Determine the effect of a planned teaching programme on knowledge of mothers of under-five children regarding pediatric emergencies and its first aid management.
- Find the association of the pre-test knowledge with selected sociodemographic variables.

**Hypotheses:**

- H1: The mean posttest knowledge score of mothers of under-five children regarding pediatric emergencies and its first aid management after administration of the programme is significantly higher than the mean pretest knowledge score.
- H2: There is significant association between knowledge of mothers regarding pediatric emergencies and its first aid management and selected demographic variables.

**Methodology:**

Research approach	: quantitative research approach
Research design	: quasi experimental research design
Setting of the study	: Anganwadis of Changanveli and Kaninad
Population	: Mothers of under-five children
Sample	: 60 mothers, 30 mothers each in experimental and control group
Sampling technique	: non probability convenient sampling technique
Data collection instrument	: structured knowledge questionnaire

**Data collection process:**

The study was conducted after obtaining permission from the authorities. 30 samples were selected conveniently from Anganwadi, Changanveli for the experimental group and 30 samples were selected conveniently from Anganwadi, Kaninad for the control group.

In the experimental group after introducing self and purpose of the study, written consent was obtained assuring maximum anonymity and confidentiality. Pretest was conducted to assess the knowledge of mothers of under-five children regarding pediatric emergencies and its first aid management by using knowledge questionnaire. The planned teaching programme was conducted on the same day after pretest for about one hour using powerpoint presentation. The posttest to assess the effect of planned teaching programme was conducted using same tool on 5th day.

In the control group after introducing self and purpose of the study, written consent was obtained assuring maximum anonymity and confidentiality. Pretest was conducted using the same tool and posttest conducted using the same questionnaire

after 5 days.

**Data analysis:**

**Section 1:** Description of sample characteristics

**Section 2:** Knowledge of mothers of under five children regarding pediatric emergencies and its first aid management in both experimental and control group.

**Section 3:** Effect of planned teaching programme on knowledge of mothers of under five children regarding pediatric emergencies and its first aid management in both experimental and control group.

**Section 4:** Association of pretest knowledge score of mothers of under-five children regarding pediatric emergencies and its first aid management with selected demographic variables.

**Section 1:** Description of sample characteristics

**Table 1: socio demographic characteristics**

Demographic variables	Category	Control group		Experimental group	
		f	%	f	%
Age	20-25	7	23.3	1	3.3
	26-30	12	40	19	63.3
	>31	11	36.7	10	33.3
Educational status	Primary	14	46.7	8	26.7
	Secondary	6	20	11	36.7
	Diploma / Degree	10	33.3	9	30
	Post graduate / Above	0	0	2	6.7
Occupation	Unemployed	27	90	25	83.3
	Self-employed	2	6.7	3	10
	Government employee	1	3.3	0	0
	Private employee	0	0	2	6.7
Health	Yes	0	0	1	3.3
	No	0	0	0	0
Type of family	Nuclear	26	86.7	17	56.7
	Joint family	3	10	11	36.6
	Extended family	1	3.3	2	6.7
Number of children	One	9	30	8	26.7
	Two	17	56.7	17	56.7
	Three	4	13.3	4	13.3
	More than three	0	0	1	3.3
Ordinal position of child in the family	First	14	46.7	13	43.33
	Second	14	46.7	13	43.33
	Third	2	6.6	3	10
	Fourth or above	0	0	1	3.3
Previous knowledge on Pediatric Emergencies	Yes	18	60	19	63.3
	No	12	40	11	36.7
Source of information	Mass media	1	3.3	0	0
	Books, magazines	6	20	6	20
	Health awareness classes	10	33.3	11	36.7

	Peer group	1	3.3	2	6.6
Experience of managing a child with Pediatric emergency	Yes	5	16.7	5	16.7
	No	25	83.3	25	83.3

The above table shows that the majority of the sample in the control group 12(40%) and the experimental group 19(63.3%) were in the age group of 26-30. Majority of sample in the control group 14(46.7%) had primary education and the experimental group 11(36.7%) had secondary education only. Majority of samples in the control group 27(90%) and the experimental group 25(83.3%) were unemployed. In the control group there was no health professionals in the family and only 1(3.3%) in the experimental group had health professionals in the family. Majority of samples in the control group 26(86.7%) and the experimental group 17(56.7%) belonged to a nuclear family. Majority of samples in the control group 17(56.7%) and the experimental group 17(56.7%) had 2 children each. The ordinal position of child in the family was equally distributed to first and second for both the control group with 14(46.7%) and experimental group 13(43.3%). Majority of samples in the control group 18(60%) and experimental group 19(63.3%) had a previous knowledge on pediatric emergencies and its first aid management. And majority of them in control group 10(33.3%) and experimental group 11(36.7%) had their source of information from health awareness classes. Majority of samples in the control group 25(83.3%) and the experimental group 25(83.3%) had no experience of managing a child with pediatric emergency.

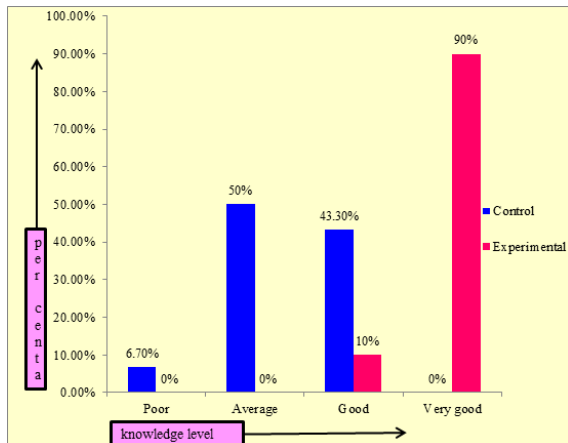
**Section 2:** Knowledge of mothers of under five children regarding Pediatric emergencies and its first aid management in both experimental and control group

**Table 2: Mean & mean percentage of knowledge regarding pediatric emergencies and its first aid management**

Group	Maximum score	Pretest			
		Mean	Percentage	Mean	Percentage
Experimental	32	14.63	45.72%	28.97	90.53%
Control	32	16.6	51.87%	16.46	51.44%

This table shows that the mean posttest knowledge score (28.97) and mean percentage (90.53%) of experimental group was higher than that of the mean pretest knowledge score (14.63) and mean percentage (45.72%) of experimental group. The mean posttest knowledge score (28.97) and mean percentage (90.53%) of experimental group was also higher than that of the mean posttest knowledge score (16.46) and mean percentage (51.44%) of control group.

**Fig 1: Posttest knowledge level of mothers of under five children**



This bar diagram shows that, in the posttest the experimental

group 90% of sample belonged to very good level of knowledge followed by 10% of sample belonged to good level of knowledge. Where as in control group 50% belonged to average level of knowledge followed by 43.3% sample in good level and 6.7% of sample belonged to poor level of knowledge.

**Section 3:** Effect of Planned Teaching Programme on knowledge of mothers of under five children regarding Pediatric emergencies and its first aid management in both experimental and control group

**Table 3: Mean, mean difference and t value of the posttest knowledge score of control and experimental group**

Group	Mean	Mean difference	Standard deviation	t (cal)	t (tab)
Control	16.47	12.5	4.29	11.815***	3.46
Experimental	28.97		3.48		

\*\*\*Significant at 0.001 level

The mean posttest knowledge score (16.47) of control group was lower than the knowledge score (28.97) of experimental group. The calculated t value (t= 11.815) was greater than the table value (t=3.46). Hence the null hypothesis (H01) at 0.001 level of significance is rejected and the research hypothesis (H1) is accepted. This shows that there was significant improvement in the knowledge score of mothers of under five children after the Planned Teaching Programme.

**Section 4:** Association between pretest knowledge score of mothers of under five children regarding Pediatric emergencies and first aid management with the selected demographic variables.

There was significant association between the demographic variable - occupation and the pretest knowledge of mothers of under five children and there was no significant association between other demographic variables and the pretest knowledge of mothers of under five children.

Hence the null hypothesis (H02) is rejected for the demographic variable - occupation and the research hypothesis (H2) is accepted. But null hypothesis is accepted for the remaining demographic variables.

**Conclusion:**

Children are a gift to this world, it is our responsibility to nurture and care for them. Understanding the common pediatric emergencies and its first aid measures are hence very important for the parents or the care givers. From the study it is clearly evident that Planned Teaching Programme on Pediatric emergencies and its first aid management help the mothers to improve their knowledge and thereby their skill in first aid practices.

**Recommendation:**

- The study can be replicated on a larger sample to generalize the findings.
- This study can be conducted as a true experimental study
- Follow up study can be conducted to evaluate the long term effect of the administration of Planned Teaching Programme and to find out the necessity of reinforcement.
- A similar study can be conducted including other Pediatric Emergencies

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