

Effectiveness of Educational Programme Regarding Febrile Seizures Management Among Mothers

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Abstract--- *Background: Febrile seizure is neurologic condition of childhood triggered by increase in the body temperature and these seizures are associated with fever but excluding those related to Central Nervous System infections. Globally 3% to 8% of children are affected by febrile convulsions. This study carried out to assess the mothers' knowledge and effectiveness of educational programme on management of febrile seizures. Methods: An evaluative research approach was used to accomplish the objectives of the study. One group pre-test post-test design was used. Data collected from 50 mothers of children's age less than five years hospitalized were through purposive sampling technique. Self structured knowledge questionnaire was administered to assess the pre-test knowledge of the mothers on 1st Day and followed by educational programme on knowledge of management of febrile seizures among mothers was conducted. Post-test was conducted on 8th day. Descriptive and inferential statistics were used for data analysis. Results: The mean, standard deviation of pre-test knowledge scores of mothers on management of febrile seizures was 9.4 ± 2.9 , which has increased in post-test to 20.7 ± 3.4 and paired 't' test value was 17.671 and p value was <0.0001 hence the educational programme was effective in increasing the mothers knowledge. Conclusion- The study concluded that there was an improvement in mothers knowledge regarding management of febrile seizures in underfive children and also it will help in preventing complications.*

Keywords- *Febrile seizures, knowledge, educational programme, mothers.*

I INTRODUCTION

Fever is most important and common symptom in children suffering from acute respiratory infection, malnutrition, diarrhoea mostly Pneumonia, measles, malaria, or combination of these and World health organization estimated the death of underfive children globally can be greater than 10 million and also if action is not taken it will be more than the estimates. If fever is not managed with interventions it can trigger seizures known as febrile seizures¹.

According to American Academy 3 percentage of underfive children are affected by febrile seizures. In Asia prevalence of febrile seizure is 3 to 9 per 1000 population and 5.59 per 1000 population in India. In south India

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prevalence rate of febrile convulsion 4.14/1000 population and predominance of males is slightly differ from boys to girls (prevalence rate of 0.1/1000 for boys, 0.02/1000 for girls) ².

Febrile seizure is febrile illness associated with seizure in children of 30 days of age and more old in which there is no history of prior febrile seizure and there is no evidence of infection of CNS and acute electrolyte imbalance and it is neurologic condition affecting approximately 3 to 8 percentage of children.³ The clinical manifestation for febrile seizures is breathing difficulty, Contraction of muscles of face, limbs, and trunk, Fever (usually higher than 102°F), illness, involuntary moaning, crying, and/or passing of urine, shaking, twitching, vomiting⁴.

In the age of underfive years children are very small and their all systems are in developing stage. Febrile episodes are relatively common associated with childhood convulsions and childhood seizures represent the majority. Because of their play activities, poor feedings and immaturity of immune system they get frequent attacks of infections like Respiratory Tract Infection, Otitis Media, Diarrhea, Gastroenteritis etc⁵.

Fever is most common medical condition for which mothers approach to medical care immediately. Parents experience severe anxiety when child suffers from fever is known as fever phobia. Mothers are responsible for care of children in first 6 years life and the care she provides to children depends up on her knowledge on child care.⁷ Mother play primary role in health issues affecting their children. Underfive children's mothers having anxiety and less awareness hence they require educational programmes. It must be noted that mothers as primary caregivers are more involved in this challenge. Most mothers lack an appropriate knowledge of the disease and some of them get panicked when their child develops fever and become demented when they are unable to control the fever and its negative effects, but little is known about the experiences of mothers from their own perspective. Mother's challenges in facing with their child's febrile seizures might have unknown aspects. These aspects can influence the mother and other family members⁶.

II MATERIALS AND METHODS

Research Approach

In view of the nature of problem selected for the study, evaluative research approach was appropriate for the study.

Sources of Data

Mothers of underfive children admitted in pediatric ward in Krishna hospital Karad.

Research Design

Experimental research design was used for the study.

Variables of the Study

- Independent variables

In this study independent variable was educational programme.

- Dependent variables

In this study dependent variable was knowledge regarding management of febrile seizures among mothers of underfive children.

Research Setting

This study was conducted in pediatric ward of Krishna Hospital, Karad.

Population:

In present study the population was comprised of all mothers of children under five years of age admitted in pediatric ward of Krishna hospital, Karad.

Sample:

Mothers of underfive children admitted in paediatric ward of Krishna hospital, Karad.

Sample size: 50 mothers of children under five years of age admitted in pediatric ward of Krishna hospital, Karad.

Sampling Technique: Mothers in the present study were selected by purposive sampling technique.

Criteria for Sample Selection:

Inclusion criteria

- The mothers of children in underfive age group admitted with fever in pediatric ward Krishna hospital, Karad.
- Mothers willing to be part of the study.
- Those who were available the time of data collection.

Exclusion criteria

- Mothers of children in underfive age group not willing to be the part of study.
- Mothers of children in underfive age group not accessible during data collection period.

III METHODS OF DATA COLLECTION:

Tool for data collection:

Structured knowledge questionnaire was used for assessment of mothers knowledge.

The tool for data collection consist of following sections

Section A- It consist of ten items describing the socio-demographic variables like age, type of family, place of residence, religion, educational status, occupational status of mothers income.

Section B- Knowledge questionnaire regarding management of febrile seizures was developed with 26 questions. Each question had four options, score one was given to correct answer and zero for wrong answer was allotted.

Permission to conduct the study was obtained from concerned authority of Krishna Hospital and Medical Research Center, Karad. On pre-test day of the study mothers were explained the purpose of study and informed consent was obtained from mothers and pre-test knowledge was assessed by administering self structured knowledge questionnaire regarding management febrile seizure and Educational programme was delivered on management of febrile seizure by using lesson plan and A.V. aids (charts and posters) and post-test was conducted on 8th day.

IV PLAN FOR DATA ANALYSIS:

Demographic data was analyzed by descriptive statistics like frequency distribution table. Mean and standard deviation were used to assess knowledge regarding management of febrile seizures. Paired 't' test was used to test the effectiveness of educational programme on knowledge of mothers. Chi-square test was used to find association between mothers' knowledge and socio-demographic variables.

V ETHICAL CONSIDERATION

The Ethical permission was obtained from Institution Ethics Committee of Krishna Institute of Medical Sciences Deemed to be University, Karad.

VI RESULTS:

Part I: Descriptive statistics of mothers of underfive children according to demographic variables.

Table No. 1: Descriptive statistics: n=50

Sr. No	Demographic variables	Frequency	Percentage
1.	Age in years		
	20-24 years	19	38
	25-28 years	22	44
	29-33 years	9	18
2.	Place of residence		
	Rural	28	56
	Urban	22	44
3.	Religion		
	Hindu	28	56
	Muslim	22	44
4.	Type of family		

	Nuclear family	28	56
	Joint family	22	44
5.	Education		
	Primary	1	2
	Secondary	18	36
	Higher secondary	17	34
	Graduate	14	28
6.	Occupation		
	Homemaker	43	86
	Private employee	4	8
	Government employee	3	6
	Self business	0	0
7.	Family income (monthly) in Rs		
	5000-10000	16	32
	10001-25000	25	50
	25001-50000	8	16
	50000-100000	1	2
8.	Number of children		
	One	26	52
	Two	20	40
	Three	3	6
	More than three	1	2
9.	Source of information regarding febrile seizures		
	Family members	12	24
	Neighbor	15	30
	Mass media	9	18

	Healthcare professional	14	28
10.	History of Previous hospitalization		
	Yes	16	32
	No	34	68

The data presented in the table 1 shows that majority of 22 (44%) mothers belong to the age group of 25-28 years, 28(56%) were residing in rural area, 28(56%) belongs to Hindu religion, and nuclear family. Majority of mothers 18(36%) studied up to secondary school, 43(86%) mothers were house maker, 25(50%) had monthly income of Rs 10001-25000, 26(52%) had one child, 15(30%) received information regarding febrile seizures from neighbor, and 34(68%) mothers were not had previous history of hospitalization of their child.

Part-II: Distribution of mothers according to knowledge scores regarding management of febrile seizures.

Table no-2: Frequency and percentage of knowledge scores of mothers .

n=50

Sr. No.	Level of Knowledge	Score	Pre Test		Post Test	
			Frequency	Percentage	Frequency	Percentage
1.	Poor	1-8	19	38	0	0
2.	Average	9-17	31	62	10	20
3.	Good	18-26	0	0	40	80
	Total		50	100	50	100

The table No.2 shows the comparison of pre- test knowledge of mothers on management of febrile seizures. The pre-test table depicts that majority of mothers 31(62%) had average level of knowledge about management of febrile seizures, whereas only 19(38%) of mothers of underfive children had poor and no mothers had good level of knowledge. In post- majority of mothers 40 (80%) had good level of knowledge about management of febrile seizures whereas 10(20%) had average knowledge and no mother had poor level of knowledge regarding management of febrile seizures.

Part-III: Testing of hypothesis (H1) for evaluation of effectiveness of health education on knowledge of mothers regarding management of children suffering from febrile seizures.

Table no-3: Mean and Standard deviation of mother’s knowledge scores on management of febrile seizures.

Sr. No.	Area of analysis	Mean	Standard Deviation	“t” value	P value
1.	Pre-test	9.44	2.9		

2.	Post-test	20.78	3.4	17.671	<0.0001
3.	Difference	11.34	0.4		

Table No.3 shows the effectiveness of educational programme on knowledge scores of mothers of underfive children on management of febrile seizures. In pre-test mean knowledge scores was 9.44 with standard deviation of 2.9 which has increased in the post-test to 20.78 with standard deviation of 3.412. The computed “t” test value is 17.671 and p value is less than 0.0001. It shows that educational programme was effective.

Part-IV: Association of knowledge score of mothers with selected demographic variables.

The analysis revealed that there was no significant association of knowledge score found with selected socio-demographic variables of mothers.

VII DISCUSSION-

Study was conducted to determine the effectiveness of PTP regarding management of febrile seizures among mothers of children under five years of age at Krishna hospital, Karad. The results shows that majority of mothers in pre-test 31(62%) had average level of knowledge about management of febrile seizures and in post test 40 (80%) had good level of knowledge. Pre-test mean knowledge score was 9.44 and it has increased in post-test to 20.78 and the paired t-test showed that the PTP was effective as the paired t-test value was 17.671 (p<0.0001)and showing a improvement in the mothers knowledge on management of febrile seizures in children. The chi-square test results that there was no significant association of knowledge scores was found with selected demographic variables of mothers.

The Similar study conducted by **Kumari S** shows that the majority of 55% of people in pre-test of study group were having poor knowledge score 41.7% of people in pre-test of study group were having average knowledge score 33% of the study group were having good knowledge score where in post test majority 93.3% of the people had good knowledge score and 6.7% of people in post- test of study group were having average score. Findings of paired ‘t’ test to compare difference between average scoring of pre and post health teaching shows that health teaching was effective in increasing care givers, since p value is less than 0.05(p value =0.000) difference . Statistically significant association was present between the knowledge, types of family & education.⁸

Above findings were supported by a study shows that the pre-test average knowledge score was 6.25 and post-test mean knowledge score was 16.65 .The post test score of group is significant at P<0.05%. There was improvement in the mothers knowledge in post-test and there was significant association of knowledge scores with age of the mother.⁷

Another similar study to present study carried out by **George J, Joseph J** at Bangalore shows improvement in mothers’ knowledge regarding management of febrile convulsion after structured teaching programme (STP) and also concluded that if mothers are having a appropriate knowledge can protect the child during episodes of febrile convulsion and prevent the complications.²

VIII CONCLUSION-

Mothers are primary care giver in first five years of life and the health of child is determined by the mother's knowledge on child care. Mothers are provided with health education on care during febrile convulsions will help in appropriate management of prevention of its complications so regular educational programme should be conducted by health care workers.

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CONFLICT OF INTEREST-NIL

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