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## RESEARCH ARTICLE

### EFFECTIVENESS OF HEALTH EDUCATION PROGRAMME ON KNOWLEDGE REGARDING FEBRILE SEIZURE AMONG MOTHERS OF UNDER FIVE CHILDREN AT SELECTED VILLAGES OF DISTRICT SIRMOUR, HIMACHAL PRADESH

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#### ABSTRACT

**Background:** Febrile seizure is “a seizure in association with a febrile illness in the absence of a central nervous system infection or acute electrolyte imbalance in children older than 1 month of age without prior febrile seizure” Febrile seizure refers to the seizure associated with fever but excluding those related to CNS infections. It is the commonest cause of seizure in early childhood. It is related to abrupt increase in body temperature rather than degree of temperature rise. A relatively high prevalence of this disease due to the simultaneous combination of two major phenomena at a time, i.e. fever and seizure in children, cause severe anxiety in their parents so that sometimes they announced that their children are dying. **Methods:** In this study Pre-experimental (one group pre-test and post-test) research design was used and study was conducted in Karyuth, Kulath and Haloni Pul villages of District Sirmour, H.P. A total of 30 mothers of under five children were selected by convenience sampling technique.

**Results:** Data analysis was done by descriptive and inferential statistics. Findings of the study reveals that the mean  $\pm$  SD of post-test mean  $\pm$  score ( $17.90 \pm 1.561$ ) which was higher than the knowledge pre-test mean  $\pm$  SD ( $6.10 \pm 1.626$ ) Thus, the improvements mean score is 11.8. There was significant difference between pre-test and post-test knowledge score with the ‘t’ value is 25.330 found to be significant at level of  $p < 0.001$ .

**Conclusion:** The results of the study suggest that mothers have inadequate knowledge and health education programme improved and updated the knowledge of the mothers to manage the febrile seizure conditions.

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#### INTRODUCTION

The *International League* against epilepsy defines a febrile seizure as “a seizure in association with a febrile illness in the absence of a central nervous system infection or acute electrolyte imbalance in children older than 1 month of age without prior febrile seizure”. Febrile seizure is one of the most common neurologic conditions of childhood and it refers to the seizures associated with fever but excluding those related to CNS infections affecting approximately 3% to 8% of children. Most febrile seizure occurs between 6 months and 3 year of age and the average age of onset of febrile seizure is between 12 to 30 months.

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They are unusual after 5 year of age. Boys are affected about twice as often as girls (Hockenberry, 2010). A febrile seizure usually happen during first few hours of fever the may look strange for a few moments, then stiffen, twitch and roll his eyes he will be unresponsive for a short time. Child breathing will be disturbed and skin may appear little darker than usual. After the seizure child quickly returns normal (<https://www.stonybrookmedicine.edu/sites/default/files/40105155.pdf>). Parents also need education on how to protect the harm and observe exactly what happens to the child during the event. Long-term antiepileptic therapy is usually not required for children with simple febrile seizures. Antipyretic therapy during febrile illness offers symptomatic relief for fever-associated symptom but appears to be ineffective in preventing a seizure (Hockenberry, 2010). A relatively high prevalence of this disease due to the simultaneous combination of two major phenomena at a time, i.e. fever and seizure in children, cause

severe anxiety in their parents so that sometimes they announced that their children are dying. Followed by observing the first febrile seizure, many parents are afraid and every time their children have fever, it can be disturbing and problematic for them. However, despite what parents think, fortunately, this disease in children is benign and is easily preventable, and rarely causes cerebral injuries (Najimi et al., 2016). According to WHO report of 2012 Febrile seizures (FS) are common, with a life time prevalence of 2-6% (WHO, 2012). The cumulative incidence of febrile seizures is estimated 14% in India. Febrile seizures have a peak incidence at 18 months and are most common between the ages of 6 months and 6 year (Gadgi et al., 2011).

## OBJECTIVES

- To assess the pre-test knowledge regarding febrile seizure among the mothers of under five children.
- To measure the post-test knowledge regarding febrile seizure among mothers of under five children.
- To evaluate the effectiveness of health education programme regarding febrile seizure among mothers of under five children.

## ASSUMPTIONS

- Mothers may have some knowledge regarding febrile seizure.
- Knowledge of mothers of under five children regarding the febrile seizure can be assessed by structured interview schedule.

## MATERIALS AND METHODS

The present study was carried out in selected Karyuth, Kulath and HaloniPul villages of District Sirmour H.P. A Quantitative Research Approach and Pre-experimental (one group pre-test and post-test) research design was used. Total sample of study was 30 mothers of under five children. Non probability convenient s technique was used to select the sample. In view of the nature of the problem and to accomplish the objectives of the study, structured interview schedule tool was used. Validity was ensured in consultation with guides and experts in the field of nursing and community medicine. Reliability of the structured interview schedule was tested by using the Karl Pearson's correlation coefficient formula ( $r=0.82$ ). After obtaining formal permission from concerned authority structured interview schedule was used to collect the needed data. Both descriptive and inferential statistics was used to analyse the data.

## RESULTS

Demographic data of study revealed that that all 30(100%) mothers under five belonged to the age group 21-30. It was also found out that education status majority of them 20(67%) were no formal education and 3(10%) in secondary and high secondary education.

20(67%) having no formal education of father. 30(100%) of mothers under five fall in home maker. Occupation of father 21(70%) fall in agriculture and 2(7%) were self-employee. Majority of 21(70%) fall in Hindu religion. Majority of the subjects' 26(87%) were nuclear family. It was also found out that majority of them 10(33%) were 6001 to 8000 monthly

family income and 4(13%) were fall in 8001 & above. No. of child 16(53%) were fall in 1 and more than 3 no. of children were having 2(7%). Half of the age of children 15(50%) were fall in 2-3 year and minimum 2(7%) were in 4-5 year. Mostly 19(63%) were having female gender and another 11(37%) were fall in male gender. Maximum subjects 16(53%) were vegetarian. 30(100%) do not have any episodes of febrile seizure was in your child and hospitalization of the child due to febrile seizure. The study findings of pre-test knowledge level depicts that 18(60%) of subjects had average knowledge, 12(40%) had poor and none of the subjects had good and excellent knowledge regarding febrile seizure (Table 1, Fig 1)

**Table No. 1 -Level of pre-test knowledge regarding febrile seizure (N=30)**

Level of knowledge	Range of scores	f	%
Poor	5	12	40%
Good	6-10	18	60%
Maximum Score=20		Minimum Score=0	

The findings of post-test knowledge score depicts that majority of subjects 27(90%) had excellent knowledge, 3(10%) had good and none of the subjects had poor and average knowledge regarding febrile seizure. The mean score knowledge regarding febrile seizure was 17.90 with standard deviation 1.561 (Table 2, Fig 2)

**Table No.2 Level of post-test knowledge regarding febrile seizure (N=30)**

Level of knowledge	Range of scores	f	%
Good	11-15	3	10%
Excellent	16-20	27	90%

Maximum score=20 Minimum score=0

The mean knowledge post-test mean  $\pm$  score ( $17.90 \pm 1.561$ ) which was higher than the knowledge pre-test mean  $\pm$  SD ( $6.10 \pm 1.626$ ). Thus, the improvements mean score is 11.8. There will be no statically significant difference between pre-test and post-test knowledge score with the 't' value is 25.330 found to be significant at level of  $p < 0.001$ . Hence, null hypothesis was rejected (Table 3, Fig 3).

**Table No.3 Comparison of pre-test and post-test knowledge regarding febrile seizure among the mothers of under five children (N=30)**

Knowledge	Mean $\pm$ SD	df	Paired 't' test	p value
Pre-test	6.1 $\pm$ 1.62	29	25.33	0.000**
Post-test	17.9 $\pm$ 1.56			

Statistically significant  $p < 0.001$

## DISCUSSION

The findings of the study were disused in terms of objective. The present study was to assess the effectiveness of health education programme on knowledge regarding febrile seizure among mothers of under five children at selected villages of District Sirmour, H.P. The study finding were consist with the study conducted by Jyothy George and Jophin Joseph (2015), there study result showed that in pretest 48(80%) having inadequate, 12(20%) moderate and no one having adequate knowledge regarding management of febrile convulsion. In posttest 45(75%) having adequate, 15(25%) moderate, and no one having inadequate knowledge regarding management

of febrile convulsion and the overall knowledge post-test mean  $\pm$  score (17.90 $\pm$ 1.561) which was higher than the knowledge pre-test mean  $\pm$  SD (6.10 $\pm$ 1.626). Thus, the improvements mean score is 11.8. There was significant difference between pre-test and post-test knowledge score with the 't' value is 25.330 found to be significant at level of  $p < 0.001$ .

## IMPLICATIONS

### Nursing Practice

- Training programme should be planned for nurses where the nurses will be trained regarding management febrile seizure promoting the health of child
- Implementation of health education programme regarding febrile seizure to Anganwadi workers and mothers of under five in enhancement of knowledge.

### Nursing Education

- The nurse educator should educate the students in the nursing profession regarding febrile seizure. All the nursing students must be posted in clinical area and community are provided comprehensive services and they will acquire more knowledge and will be able to help in knowing the importance of the safety of the children.
- Nursing personnel working in various health setting should be given in service education to update the knowledge and abilities in identifying the learning needs of the clients with febrile seizure regarding and planning for prevent the further complications.

### Nursing Administration

- The nursing administrator should plan to organize educational programme for nursing personnel and Anganwadi workers regarding febrile seizure so that it will be helpful for them to impart knowledge to mothers of under five children.
- Encourage employers to provide appropriate facilities and adequate time in the workplace for the implementation of the services related to febrile seizure.

### Nursing Research

- There is a growing need for furnishing nursing research in the area of the prevalence, identification, specific nursing care as per preventing strategies of febrile seizure among mothers of under five children in India.

## Recommendation

In the light of the above finding and personal experience of the investigator the following recommendations are offered A similar comparative study may be conducted to assess the knowledge and attitude of mothers under five children regarding febrile seizure in urban and rural communities. A quasi experimental study can be conducted to assess the knowledge and attitude of febrile seizure among mothers of under five children for large population. A true experimental study can be conducted to assess the knowledge regarding management of febrile seizure among the mothers under five children.

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