



**A PROSPECTIVE STUDY ON ASSESSMENT OF KNOWLEDGE, ATTITUDE,  
PRACTISES OF IN PARENTS OF CHILDREN WITH FEBRILE SEIZURE IN A  
MULTISPECIALITY TERTIARY CARE CENTRE**

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**ABSTRACT**

A febrile seizure, also known as a fever fit or febrile convulsion, is a seizure associated with a high body temperature but without any serious underlying health issue. Regarding the high prevalence of febrile seizure in children and parents apprehension due to seizure episode, parents can be counselled and advised to take necessary precaution at time of seizure episode. A prospective study was conducted to assess effect of parental counseling by using Knowledge, Attitudes and Practices (KAP) Questionnaire. The study was conducted for 1 month i.e. February 2018. A suitably designed KAP questionnaire will be administered on all the parents of enrolled patients before and after the introduction of the information leaflet. A pilot study will be conducted in a small population of 25 patients. The data thus gathered was analyzed using SPSS (Statistical Package for Social Sciences). Difference between the knowledge level in pre-counselling and post-counselling is not significant at 0.05 level of significance(Critical ratio=114.722;p<0.05). This indicates that two groups of pre counselling and post counselling are differed significantly in their initial knowledge level of diseases. Difference between the attitudes in pre-counselling and post counselling is not significant at 0.05 level of significance (Critical ratio = 12.095; p < 0.05). This indicates that two groups of pre counselling and post counselling are differed significantly in their initial attitudes of diseases. Difference between the practice pre-counselling and post counselling is not significant at 0.05 level of significance (Critical ratio = 19.321; p < 0.05). This indicates that two groups of pre counselling and post counselling are differed significantly in their initial practice of diseases. This study confirmed that Knowledge, Attitudes and Practices parents of children's with febrile seizure improved.

**KEYWORDS:** febrile seizure, Knowledge, Attitudes and Practices, pre-counseling and post-counseling.

**INTRODUCTION**

Febrile Seizure (FS) is one of the common convulsive events in children. A febrile seizure, also known as a fever fit or febrile convulsion, is a seizure associated with a high body temperature but without any serious underlying health issue. It occurs in children between 6 months to 6 years of age. There are mainly classified into simple febrile seizure and complex febrile seizure. During febrile seizures, the body will become stiff and the arms and legs will begin twitching. The child loses consciousness, although their eyes remain open. Breathing can be irregular. They may become incontinent; they may also vomit or have increased secretions (foam at the mouth). The seizure normally lasts for less than five minutes. The child's temperature is usually greater than 38 °C (100.4 °F). Regarding the high prevalence of febrile seizure in children and parents apprehension due to seizure episode efforts have to be made identifying the influential risk factors so that

parents can be counseled and advised to take necessary precaution at time of seizure episode.

Febrile seizures are caused by fever, usually higher than 102°F (38.8°C). There are several risk factors for febrile seizures. When more than one risk factor is present, the risk is even higher. Risk factors for febrile seizures include Age (occurs between the ages of 6 months and 6 years), Family history of seizure disorders, Frequent fevers (e.g., caused by viral or bacterial infection children who have a seizure associated with a relatively mild fever (below 102°F), and children who experience a seizure quickly after developing a fever are at increased risk for additional febrile seizures.), High fever (above 102°F), breast feeding duration, duration of fever before seizure residential location, antenatal and natal complications, day care attendance, gender, type of initial seizure, underlining causes of fever, urinary tract infections (UTIs) also may increase the risk and the

objective data's include Hemoglobin, serum calcium, serum sodium, blood sugar etc. Blood testing, imaging of the brain or an electroencephalogram (EEG) is typically not needed for the diagnosis. Examination to determine the source of the fever is recommended. Anti-seizure medication nor anti-fever medication are recommended in an effort to prevent further simple febrile seizures. In the few cases that last greater than five minutes a benzodiazepine such as lorazepam or midazolam may be used. Febrile seizures are managed conservatively with the primary aim of reducing the temperature of the child. Tepid sponging and use of paracetamol is usual. Prolonged febrile convulsions lasting 10 – 15 minutes or longer or in a child with risk factors require active management to avoid brain damage. The drug of choice is diazepam by intravenous or rectal administration. Prophylactic management of febrile convulsions may be required in some children, such as those with pre existing risk factors or a history of previous prolonged seizures.

The aim of the study is to assess the effect of parental counseling by using KAP questionnaire. To help parents of children with febrile seizure to reduce anxiety and help in understanding and improving parental knowledge, attitudes, concerns and practice towards febrile seizure. Febrile seizure causes anxiety in most of the parents and relatives. High level of anxiety found in parents with little or no knowledge on febrile seizure and with low education level. By parental counseling helps in reducing their anxiety and improving the knowledge and care for the febrile seizure occurring patients.

## METHODS

A prospective study was conducted to assess effect of parental counseling by using Knowledge, Attitudes and Practices (KAP) Questionnaire. The study was conducted in Pediatric Neurology Department of Cosmopolitan Hospital, Pattom, TVM, Kerala. The study was conducted for 1 month i.e. February 2018. A written informed consent will be taken from the parents of children with febrile seizure satisfying the inclusion and exclusion criteria.

### Inclusion Criteria

- Parents of children with febrile seizure who are willing to participate in the study.
- Patients between the ages of 6 months to 5 years with febrile seizure episode.

### Exclusion Criteria

- Parents who are not willing to participate in the study.
- Patients with the back ground of chronic neurological conditions or metabolic disorder.

A pilot study will be conducted in a small population of 25 patients. To assess the Knowledge, Attitudes and Practices (KAP) of the parents of children with febrile seizure, a suitably designed KAP questionnaire will be administered on all the parents of enrolled patients

before and after the introduction of the information leaflet. The data thus gathered was analyzed by using SPSS (Statistical Package for Social Sciences). The study employed chi square test, mean square test, correlations. P value indicate probability value, CR indicate critical ratio.

## RESULTS

The critical ratio is 114.722, which is greater than the table values at 0.01, 0.001Levels of significance (2.576, 3.291) and greater than the table value at0.05 level of significance (1.96). Hence it is clear that the difference between the knowledge level in pre-counselling and post counselling is not significant at 0.05 level of significance (CR= 114.722; p < 0.05). This indicates that two groups of pre counselling and post counseling are differed significantly in their initial knowledge level of diseases. The means of pre counselling and post counselling are 6.100 and 1.3055respectively. This shows that the knowledge level for diseases of pre counseling and post counseling. (Table-1)

The critical ratio is 12.095, which is greater than the table values at 0.01, 0.001Levels of significance (2.576, 3.291) and greater than the table value at0.05 level of significance (1.96). Hence it is clear that the difference between the attitudes in pre-counselling and post counselling is not significant at 0.05 level of significance (CR= 12.095; p < 0.05). This indicates that two groups of pre counseling and post counseling are differed significantly in their initial attitudes of diseases. The means of pre counseling and post counseling are 1.3350and 1.7350respectively. This shows that the attitudes about diseases of pre counseling and post counseling.(Table-2)

The critical ratio is 19.321, which is greater than the table values at 0.01, 0.001Levels of significance (2.576, 3.291) and greater than the table value at0.05 level of significance (1.96). Hence it is clear that the difference between the practice pre-counselling and post counselling is not significant at 0.05 level of significance (CR= 19.321; p < 0.05). This indicates that two groups of pre counselling and post counseling are differed significantly in their initial practice of diseases. The means of pre counselling and post counselling are 1.3350and 1.7350respectively. This shows that the practice related to diseases of pre counseling and post counseling.(Table-3)

**Table 1: Data and result of test of significance of the difference between the mean of pre counselling and post counselling in knowledge level of diseases of guardians.****Paired Samples Statistics.**

	Mean	Sample size(N)	Std. Deviation	Std. Error Mean	Critical ratio	Degree of freedom	Sig. (2-tailed)
Knowledge (Post)	3.7200	25	.04484	.00897	114.722	24	.000
knowledge (pre)	1.3055	25	.09777	.01955			

**Table-2: Data and result of test of significance of the difference between the mean of attitude in pre-counselling and post-counselling of diseases of guardians.****Paired Samples Statistics.**

	Mean	N	Std. Deviation	Std. Error Mean	Critical ratio	Degree of freedom	Sig. (2-tailed)
Attitude(post-counseling)	1.7350	25	.05496	.01099	12.095	24	.000
attitude pre-canceling)	1.3350	25	.15190	.03038			

**Table 3: Data and result of test of significance of the difference between the mean of practice in pre-counselling and post-counselling of diseases of guardians.****Paired Samples Statistics**

	Mean	N	Std. Deviation	Std. Error Mean	t	Degree of freedom	Sig. (2-tailed)
Practice Post counseling	1.6667	25	.00000		19.321	24	.000
practice pre counseling	1.2807	25	.09988				

## DISCUSSION

Febrile seizure is common in childhood. Majority of febrile seizure are benign. Anxiety found in parents of no knowledge on febrile seizure and by parental counseling helps in reducing their anxiety and improving the knowledge and care for the febrile seizure patients and there for reduces further complications this achieved through awareness through the public or private sector.

To assess the Knowledge, Attitudes and Practices (KAP) of the parents of children with febrile seizure, a suitably designed KAP questionnaire will be given before the patient counselling (pre counselling) and after patient counseling with the introduction of the information leaflet (post counselling). In pre counselling anxiety found in parents with little or no knowledge on febrile seizure and with low education level. After post counselling with the aid of information leaflet helps in reducing their anxiety and improving the knowledge and care for the febrile seizure patients. By comparing both the pre counseling and post counselling there is a significant improvement after post counselling for the parents of children with febrile seizure.

The other studies it was found that the efficacy of the written questionnaire was enough in determining the KAP of mothers in the hospital, and in illustrating bird's-eye view of the situation in Iraq in general within regards to mothers' KAP about FS. It was noticed that the scores that were collected had slightly higher values than previous studies done in other countries. This shows that a humble campaign to raise awareness for KAP regarding FS can go to great lengths as the foundation to receive such information is clearly present. A simple effort with posters and short but effective advertisements

with encouragement from health workers can greatly increase the KAP score numbers in Iraq. This will help to create a more fluid health care system and certainly improve the infant mortality rate, the life expectancy, and quality of life in Iraq. While KAP scores weren't poor, there is much room for improvement within regards to mothers' KAP for FS in Iraq. (Maysaloun Muhammed Abdulla1, Feras Sadi Abdulhadi 2(2015). Knowledge, attitudes, and practices (KAP) regarding Febrile Convulsions among Iraqi under 5 children's mothers attending pediatric department in a teaching hospital in Baghdad International Journal of Advanced Research, Volume 3, Issue 6, 973-983) and Parents of children being treated for febrile seizures had a variety of different answers when asked to describe their action when their child had a fit. The study suggests clues regarding parent's anxiety and fear when witnessing a seizure. These include: Lack of Knowledge about the disease and lack of education regarding first aid and basic life support. This study is limited by the relatively small sample size. The study results do however describe prevalent views of the disease and provide indications regarding the connection between education, knowledge, and attitude of parents of children with febrile seizures (ZEGLAM Adel M. 1 ALHMADI Suad 1BESHISH Asaad 1 (2010). AUDITING THE ATTITUDE AND KNOWLEDGE OF PARENTS OF CHILDREN WITH FEBRILE SEIZURE, African journal of neurological science, (1) vol 29. For research purposes, the KAP questionnaire measures parental responses with a moderate level of reliability and validity. Cross – cultural investigation of the questionnaire is needed to facilitate its use in other countries. (Mei-chih huang, chao-ching huang, Karen Thomas (2006) febrile convulsion: Development and validation of questionnaire to measure

parental knowledge, attitude and practice, formos med assoc, (1) vol 105. This study suggests that written materials in the form of a pamphlet can be an effective teaching strategy for educating parents on febrile seizures. However, written and verbal information should be given together where possible.(Mohammad Barzegar, 1 Sousan Valizadeh, 2 Morteza Gojazadeh, 3 Mohammad Asghari Jafarabadi, 4Vahid Zamanzadeh, 2 and Shahla Shahbazi5, (2016) June; 5(2): e33411. This study confirmed the efficiency of educational interventions improving mothers knowledge, attitude and practice regarding prevention of febrile seizure in children. (Arash najimi. etal. The effect of educational program on Knowledge, attitudes, and practices of mothers regarding prevention of febrile seizure in children. (2013) 2; 26 and the parental fear of fever and febrile convulsion is a major problem with serious negative consequences affecting daily familial life. (RC Parmar et al.(2001) Knowledge, attitudes, and practices of parents of children with Febrile seizure.(1) vol 47 pp19-23. And other study Well-informed parents manage febrile convulsions better when they occur. Better understanding may help the parent cope better with the frightening experience of watching their child convulse. Knowledge may reduce anxiety. (EVANGELINE WASSMER & MARIE HANLON (1999) Effects of information on parental knowledge of febrile convulsions 8: 421–423.

## CONCLUSION

Patient counseling on febrile seizure was found to be most useful for parents having febrile convulsive children. Those parents who experienced febrile convulsions for the first time with the children were found to be most interested in its management. Febrile seizure causes anxiety in most parents and relatives. High level of anxiety was found in parents with little or no knowledge, attitude, and practice towards febrile seizure. On assessment of KAP questionnaire before and after the introduction of information leaflet, it was found out that parent's knowledge, attitudes and practices improved much better. So parental counseling helps in reducing their anxiety, improving parental knowledge and this knowledge empowers parents. Well informed parents manage febrile convulsions better.

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