

### Mothers' Knowledge, Believes and Practices Regarding Febrile Convulsions and Home Management

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#### 1 INTRODUCTION

Febrile convulsions are the most common seizure disorders in childhood. Usually it occurs in children who are at six months to five years of age (Zyoud *et al.*, 2013). There are two types of febrile convulsions; simple and complex. Majority of the children get simple febrile convulsions and they have minor risk of getting recurrent afebrile seizures, but who had complex febrile convulsions are at greater risk of developing recurrent afebrile seizures.

Children who are having febrile seizures end up with lot of complications including psychological cognitive impairment, effects. social impact, prolonged hospitalization and increased health costs in the country (Najimi et al., 2013). After getting the first febrile convulsion, parents are unknowingly become shocked and many think that child may die (Parmer, Sahu, and Bavdekar, 2001). It can cause severe anxiety among mothers due to the simultaneous occurrence of two major phenomena at once; fever and seizure. Suffering their child from febrile convulsion is a very stressful experience for parents and it can significantly influence their emotions and family life (Sajadi and Khosravi, 2017). The

outcomes of febrile convulsions are known to be poor in developing countries due to various inaccurate information, and traditional beliefs and harmful practices (Iloeje, 1989).

### 2 METHODOLOGY

Quantitative research approach and descriptive research design was utilized. Study was conducted among 150 mothers who were having children under five years of age admitted to the pediatric wards of the Teaching Hospital Kandy. Convenience sampling technique was used to recruit the sample.

Self-administered questionnaire was used to collect data. It consists of four parts: demographic characteristics of the mother, mothers' knowledge regarding febrile convulsion, mothers' believes and their practices of febrile convulsion at home environment. Participants' level of knowledge was assessed by 10 multiple choice questions. When scoring, each correct answer was given "1" and incorrect answers and unattempt questions were given zero. The total score was



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ranged from zero to 10 and the level of knowledge was categorized in to three as poor (<5 marks), fair (5-7 marks) and good (8-10 marks). The content validity of the questionnaire was ensured through literature review and subject experts. It was pretested among ten mothers who did not participate in the real study. Data were analyzed by using Microsoft Excel 2010 using frequencies and percentages.

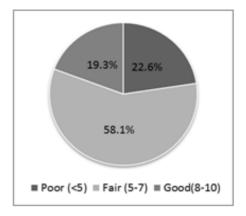
Ethical approval was obtained from the Ethics Review Committee of Teaching Hospital, Kandy and permission for data collection was taken relevant hospital authorities. Voluntary participation was participants encouraged and informed about purpose of the study, risks and benefits and their rights to withdraw from the study at any time. Written informed consent was signed by all participants completion prior questionnaires.

### **3 RESULTS AND DISCUSSION**

**Table 1:** Demographic characteristics of participants

Variable	Frequency	%
Age (in years)		
18- 22	25	16.67
23 - 28	57	38.00
29- 35	38	25.33
Above 35	30	20.00
Religion		
Buddhism	101	67.33
Islam	27	18.00
Hindu	17	3.30
Education level		
No Schooling	8	5.33
Upto Grade 8	34	22.67
Up to O/L	71	47.33
Up to A/L	35	23.33
Higher Education	2	1.33
Employment status		-
Yes	53	35.33
No	97	64.67

# 3.1 Mothers' knowledge regarding febrile convulsion



**Figure 1:** Mothers' knowledge on febrile convulsion

The summative knowledge score revealed that majority (77.4%) of the participants had adequate knowledge regarding febrile convulsion (Figure 1). Similar results were found in studies done in Ghana and Turkey (Nyaledzigbor et al., 2016; Kayserili et al., 2008). But it is contrasting with the findings of Wassmer and Hanlon (1999) as the general knowledge of febrile convulsions among parents of young children found to be low in UK. Furthermore, 88% of mothers of the present sample were able to mention various signs and symptoms of the febrile convulsion such as stiffness of the body parts (hand legs) eye rolling up and loss of consciousness and 65.3% of mothers understand that it is associated with high body temperature (Figure 2). These findings were similar to a recent study conducted in Taiwan (Huang, Huang and Thomas, 2006). 47.3% of mothers were able to identify 98.4° F as the normal body temperature which is contrasting with the findings of the study done in may be due to nature of the knowledge area assessed. Ghana as majority of the mothers could not be able to specify the number of degrees of Fahrenheit.



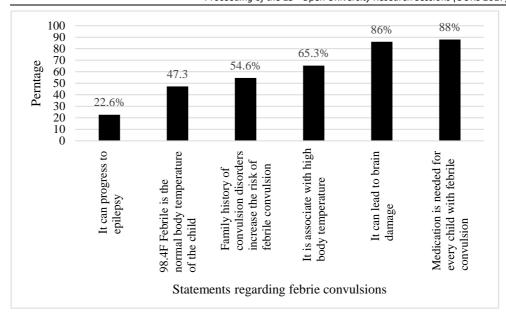


Figure 2: Mothers' knowledge on febrile convulsion

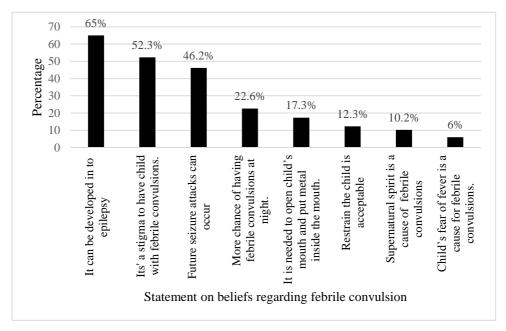


Figure 3: Mothers' belief on febrile convulsion

# 3.2 Mothers' beliefs regarding febrile convulsion

Regarding the beliefs of mothers on febrile convulsion, 65% of mothers

thought that it can be developed into epilepsy in the later age of their children and 62% of mothers believe that if one child have febrile convulsions, his or her siblings will also have a chance of getting febrile convulsions.



Furthermore, less number of mothers believed that supernatural spirit (10.2%) and child's fear (6%) are the causes for febrile convulsion (Figure 3). Same results were given by Deng *et al.* (1996) indicating that "ghosts" and "spirits" as the cause of the seizure. According to the Nyaledzigbor et al African countries greatly influence their health seeking behaviour for sick children, as they described febrile convulsion as a sickness in children which is caused by

enchantment, evil spirits and sore in the abdomen of the child and abnormal functioning of tbrain. Similar results were found in Nigeria by Anigilaje and Anigilaje (2013). More than half of the mothers believed that having a child with febrile convulsion is a stigma. Also previous studies have shown that incidence of febrile convulsion has much impact on families, parental behaviours and relationship with parents and children (Najimi *et al.*, 2013; Sajadi and Khosravi, 2017 and Wassmer and Hanlon, 1999).

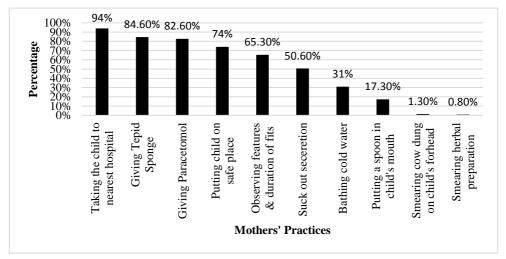


Figure 3: Mothers' practices to manage febrile convulsion at home

# 3.3 Mothers practices regarding febrile convulsion

When the mothers were asked about practices taken at home to manage febrile convulsions, more than 94% of mothers immediately took their child to the nearest hospital, about 74% of mothers kept their child on safe and smooth place and 50.6% of mothers sucked out secretions and kept the child in lateral position when the child is drooling. These findings were very similar to the studies done in Indonesia and Malayasia as they brought their children to hospital or emergency department (Gunawan, et al., 2008; Deng et al., 1996). The other forms of pre-

hospital interventions given were tepid sponge bathing (84.6%),giving paracetomol (82.6%) and bathing with cold water (31%). Nyaledzigbor et al. (2016) highlighted that herbal preparation was the most common form of prehospital treatment, given in 15 (10.2%) of the cases in Ghana which is totally contrasting with the findings of this study as smeared herbal preparation are used by only 8% of mothers in the case of febrile convulsion. The findings further revealed, few of others (1.3%) used smeared cow dung on the child's forehead when their children had febrile convulsion at home.



### **4 CONCLUSIONS**

According to the findings of this study, it was concluded that mothers who have children under five years of age, have adequate knowledge regarding causes, signs and symptoms of febrile convulsion, but still some areas needed to be improved. Tepid sponge bathing, bathing with cold water and giving paracetomol found to be most common practices of mothers in the case of febrile convulsion. Furthermore, negative beliefs are still persist among mothers regarding febrile convulsion and those misconceptions can lead to take inappropriate or even harmful actions in an attempt to control the convulsions.

#### **5 RECOMMENDATIONS**

Mothers require further education on alarming signs and symptoms of febrile convulsion rather than absolute temperature rises. Also it is required a reliable evidence based information about the care of a child with febrile convulsion and it will increase the self-confidence and reduce anxiety of mothers. Spending more time for educating and training parents on home management of febrile convulsion conducting public awareness programs are timely needed.

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