## **ORIGINAL ARTICLE**

# Mothers' Experiences about Febrile Convulsions in Their Children: A Qualitative Study

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#### Abstract

**Background:** Febrile convulsion in children is a frightening experience for the mothers. This experience may have unknown aspects, which must be investigated in order to plan better support for the mothers and children. This study is conducted with the aim of exploring the experiences of mothers whose children suffer from febrile convulsion.

**Methods:** This study was based on a qualitative content analysis. 12 mothers in Amir Kabir hospital of Arak city participated in the study and shared their experiences through semi-structured interviews. The gathered data were analysed using Graneheim and Lundman's (2004) method.

**Results:** Exploring the experiences of mothers whose children suffered from febrile convulsion reflected three themes: perceived threat, seeking solution, and difference in adaptation.

**Conclusion:** Regarding the findings of this study, comprehensive supportive care plans can be designed for enabling the mothers to better cope with their children's febrile convulsion.

Keywords: Febrile convulsion, Child, Mother, Experience, Qualitative research

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#### INTRODUCTION

Febrile convulsion (FC) is a temporary nervous disorder occurring in childhood which develops with fever.<sup>1</sup> It is the most common seizure disorder during childhood, and is prevalent among children between the ages of nine months to five years old, but it is rare before or after this period.<sup>2,3</sup> However, another report stated that most cases of FC occur between the ages of 6 and 36 months.<sup>4</sup> Overall, FC is seen in about 5% of children, and it is estimated 460 out of 100,000 children under 4 years old.<sup>5</sup> In North America and Europe, it is estimated about 3 to 5% and in Asian children up to 14%.<sup>6</sup>

Despite having a good prognosis, FC is a very difficult condition for parents to handle. Concerns about the future health of the child are the most common cause of fear among the parents. Sources of concern include fear of the recurrence, mental retardation, physical disabilities, and even death. FC in children can cause stress and anxiety for parents and may lead to disturbance in the parents' sleeping pattern, family's quality of life, and social activities.<sup>7-9</sup> Witnessing their child suffering from convulsions is a horrifying and stressful experience for parents which stir up their emotions.<sup>4</sup> In a study, Turkish parents were shocked observing their child during FC and considered it as life-threatening.<sup>10</sup> Febrile seizure in a child causes changes in family structures and have a negative effect on the family's daily life.7,10 A review on the related literature indicated that nursing, as a familycentred profession, has paid little attention to the problems of mothers whose children suffered from FC, and it seems that the performed studies were not sufficient to gain a deep insight into the mothers' experiences.

It must be noted that mothers as primary caregivers are more involved in this challenge.<sup>9</sup> It is said that most mothers lack an appropriate knowledge of the disease<sup>11</sup> and some of them get panicked when their child develops fever and become agitated when they are unable to control the fever and its negative effects,<sup>12,13</sup> but little is known about the experiences of mothers from their own perspective. Mothers' challenges in facing with their child's convulsions might have unknown aspects. These aspects can influence the mother and other family members.<sup>7</sup>

A deeper understanding of these unknown aspects can facilitate the planning of a comprehensive healthcare plan. Considering that a similar research was not found in Iran, researchers in the present study made an attempt to gain a deeper understanding of these mothers' experiences by entering into their world and making qualitative interpretations. This study was conducted with the aim of exploring the experiences of mothers whose children had suffered from FC.

#### MATERIALS AND METHODS

A better understanding of the mothers' experiences and challenges cannot be achieved without a qualitative approach. In the present study, the researchers decided to use qualitative content analysis because they aimed to obtain a good understanding of the mothers' experience of their children's febrile convulsion. Qualitative content analysis is an approach of analysing written, oral and visual information and it is a systematic and purposeful method to describe a phenomenon or event. In qualitative content analysis, raw data is summarized and categorized to form the main concepts.<sup>14,15</sup>

This study was performed in summer 2014. A total of 12 mothers participated in the study. Participants were selected purposively from mothers who had children with FC and referred to Amir Kabir hospital in Arak city, Iran. Mothers were willing to participate in the study and at the time of the study their child was hospitalized. In order to have the mother's full attention, we performed the interviews when the child was stable, generally at the second day of admission. The mother was out of the study if, for any reason, she refused to continue the interview.

In order to have maximum variation, sampling was conducted at different stages of the disease (i.e. first convulsion and relapsing convulsion). Sampling continued until data saturation, so that in the last two interviews, no new data was found.

Data were gathered through semi-structured interviews using an interview guide, sound recording and field notes. Mothers' experiences of their child's convulsion was the focus of the questions. First, a general question was asked: 'Tell me about your child's condition', then some detailed questions such as 'What did you feel when your child had a convulsion?' or 'What happened to you when your child developed a convulsion?'

Data collection and analysis were done simultaneously. Data analysis was done using Graneheim and Lundman's (2004) method. After each interview, the recorded data were listened carefully, and transcribed verbatim. Data were double reviewed by researchers against the recorded data to increase data accuracy and the mastery of researchers over data for good interpretation. The written contents were read several times to find the meaning units. Meaning units were condensed, abstracted and labeled as codes. Codes were categorized based on their similarities to form categories. Categories conveying common concepts were organized in themes.<sup>16</sup> No software was used in data analysis.

Trustworthiness of the findings was examined in terms of credibility, dependability, conformability, and transferability.<sup>17</sup>

Credibility: Prolonged engagement with research participants was considered. The transcript interviews, derived codes and some subgroups were discussed with participants and two qualitative research experts, and their opinions were considered. Also, a combination of data collecting methods was used (interviews and field notes).

Dependability: All accomplished activities were recorded precisely from the first step of the study.

Confirmability: Various participants were selected among mothers who had children in different stages of the disease (i.e. first convulsion and relapsing convulsion). Also, a peer examination was done on the process of the work and research finding. Transferability: An extensive description of details regarding the methodology and context was included, and sampling was done purposively.

This study was conducted after approval of the ethics committee of Arak University of Medical Sciences (ethic code: 92-153-7, date: 92.8.6). All participants were well informed of the aims and content of the research and signed informed consent forms. Other principles of ethics, including anonymity, confidentiality, and participants' right to withdraw from the study were considered.

## RESULTS

Twelve mothers whose children suffered from FC participated in this study. The mothers' age range was 22-35 years; most mothers were housewives and had high school education (Table 1). The children's age range was between 6-32 months, and most of them were male and first child (Table 2).

 Table 1: Mothers' Characteristics

Table 1. Wothers Characteristics		
N (%)		
2 (16.7)		
6 (50)		
4 (33.3)		
8 (66.7)		
4 (33.3)		
31±0.4 years		

Table 2:	Children	S	Characteristics

Characteristics	N (%)
Children's Mean Age	18±0.3 months
Children's Sex	
Female	5 (41.6)
Male	7 (58.4)
Birth order	
First child	5 (41.7)
Second child	4 (33.3)
More	3 (25)
Disease stage	
First convulsion	8 (66.7)
Relapsing convulsion	4 (33.3)

The experiences of these mothers were reflected within three themes of "Perceived threat", "Seeking solution" and "Difference in adaptation" (Table 3).

**Table 3:** Categories and subcategories of the mothers' experiences in having a child suffering from FC

Themes	Categories
Perceived threat	Fear and Concern
	Feeling deep sorrow
Seeking solution	Finding best care
	Searching for
	information
	Overprotection
Difference in adaptation	Adjustment
	Uncertain
	adaptation

#### 1. Perceived Threat

Confronting the child's seizure was challenging for the mother and was considered a great threat. This theme involves the sub-themes of fear and concern and feeling deep sorrow.

#### 1.1. Fear and Concern

After being faced with their child's first FC, the mothers were shocked and entered into a difficult stage in their lives. They experienced feelings of disbelief, anxiety, sadness and fear. These feelings were evoked due to the fear of the probable loss of their child or her/his health. One of the mothers stated:

"Following my child's convulsion, I was afraid of losing my child or seeing him/ her handicapped. I thought my child was going to be mentally retarded or low in IQ" (Participant#2, age 30, Housewife, Diploma).

Another mother said:

"My neighbour's kid is mentally retarded and always had seizures. I was afraid that my child would be the same. The neighbour warned me about the possibility of mental retardation in my child" (Participant#10, age 29, Housewife, 2<sup>nd</sup> High school).

Sensitivity and concern were frequently reported by these mothers and this suggested the seriousness of these feelings.

#### 1.2. Feeling Deep Sorrow

The stressful condition after the occurrence of FC led to hopelessness, disappointment and impatience among the mothers.

One of the participants stated:

"I was in no good mood to talk with anybody. I became sort of hopeless. I was indifferent in caring for my other child due to being exclusively engaged with my sick child" (Participant#4, age 29, Self-employed, Diploma).

#### Another mother said:

"I had no hope for the future. I thought everything was over. I reached the end of the world. I had no motivation and joy" (Participant#6, age 33, Employee, Bachelor's degree).

#### 2. Seeking Solutions

Participants tried to avert this threat in some way and maintain their child's wellbeing. They actively sought for mechanisms to resolve this crisis. This theme includes: "Finding the best care", "searching for information" and "overprotection".

#### 2.1. Finding the Best Care

After the occurrence of convulsion, upon transferring to the medical centre and emergency treatment, mothers were constantly asking for better and more complete treatment for their children. They asked about the doctor and sought for the best one.

One of the mothers said:

"At first, my child was admitted in another hospital. But I was told that we can receive better medical care here, so I took my kid here, with the hope to have a better care" (Participant#7, age 33, Teacher, Bachelor's degree).

Another mother said:

*"If I knew who and where the best doctor was; I would take my child there even if I had to sell our house"* (Participant#2, age 30, Housewife, Diploma).

#### 2.2. Searching for Information

The most common way used by mothers after facing with their child's FC was to search

for information. They actively sought for information from any sources. They did so in order to overcome the problem and reduce their stress. One of them stated:

"I paid close attention to what the doctors and nurses said about this disorder. I wanted to know what to do later in order to prevent further convulsions in my child and what to do when he developed a fever" (Participant#1, age 34, Housewife, Bachelor`s degree).

Another participant said:

"I searched the internet as soon as possible, looking for symptoms, prevention, control and treatment of convulsion. I frequently asked the doctor because I wanted to know more and more about this disorder" (Participant#3, age 33, Employee, Bachelor's degree).

The need for learning and information was considered so important that some mothers felt they had to give up their normal activities in favour of seeking advice on the subject of FC from multiple sources. The healthcare team was the most commonly referred source of information.

## 2.3. Overprotection

Mothers persistently screened their child's physical and psychological condition in order to have complete control over their child's situation and do whatever they think necessary to deal with problems.

## A mother stated:

"I became totally swamped with taking care of my child. I am always beside him and look at him most of the time. I even keep waking up several times, from night until morning, to check on him" (Participant#11, age 22, Housewife, Diploma).

## 3. Difference in Adaptation

Mothers tried to reduce the threat, using all the available resources. Some of them returned to their normal life but some others did not reach the goal. This theme includes: "adjustment", "uncertain adaptation".

## 3.1. Adjustment

The initial fear, anxiety and stress in some

mothers were reduced after a certain period of time, during which they gradually accepted their child's condition.

One of the mothers mentioned:

"At first, it was extremely fearful for me, but I gradually got used to it and accepted that I could do nothing more" (Participant#3, age 33, Employee, Bachelor's degree).

These mothers finally returned to their normal life and came to terms with their child's condition as they became aware of the controllable nature of FC.

In this regard, one of the mothers said:

*"Thank goodness, my child has become fine; he does not have any more convulsions"* (Participant#8, age 35, Housewife, Diploma).

## 3.2. Uncertain Adaptation

Despite their child's recovery, some mothers had become more sensitive and concerned, compared to how they were acting before the occurrence of the disorder.

One of the mothers said:

"Although I know that I have to go back to my usual activities, I think I cannot leave her with anybody else and instead try to be with her all the time" (Participant#12, age 27, Housewife, Bachelor's degree).

## DISCUSSION

The experiences of mothers whose children suffered from FC were complicated. The findings indicated that the experiences of these mothers were reflected in three themes, namely perceived threat, seeking solution, and difference in adaptation.

In terms of perceived threat, mothers believed that although FC often had a good prognosis and usually had no serious complications, the disease was still a threat to the child. Observing children during convulsion was reported as a scary event by mothers. They talked about their concerns about growth and development disruptions in the future life of their child. Studies have shown that seizures in children created serious concerns and fear in parents.<sup>7</sup> Fear of death, repeated seizures, low IQ, mental retardation, learning disabilities, paralysis, physical disability and an uncertain future for the child were some sources of fear for parents.<sup>4,8</sup>

About seeking solution, the results showed that mothers tried to find the best treatment and care for their child in order to restore her/ his health. They also constantly searched for information in order to learn how to care for their child, so as to prevent relapsing convulsions and their complications. It was found that fever and FC were particularly worrisome for parents, causing them to frequently seek medical advice. They often required information which could enable them to manage their child's illness.<sup>18</sup> One of the necessary supports for parents was informational support. Such support includes the information delivered by healthcare personnel and the individuals in close contact with the child.<sup>19</sup> Overprotecting the child was seen in some mothers. They felt that they have to monitor the child frequently to protect her/ him. Several studies have shown that some sick children were under excessive control and monitoring.<sup>12,13</sup>

In terms of the difference in adaptation, our findings showed two different points. Some mothers gradually adjusted to the situation. This helped them to resume their usual activities and return to their normal life. It was shown that the strategies employed by the parents of asthmatic children to adapt to their children's situation included attempting to understand the situation, working together with family members, and maintaining an optimistic attitude towards their child's sickness.<sup>20</sup> Also, a study found that the parents of children who suffered from chronic sicknesses not only accepted their children's condition and its concomitant limitations, but also tried to remain optimistic about the future and hoped for the emergence of future effective medical treatments for the disease.<sup>21</sup> In some studies, which were in the same line with the present research, certain points were highlighted, such as re-organising the condition, adapting to the child's sickness and

normalizing the family life.<sup>9,22,23</sup> On the other hand, the findings also showed that some other mothers did not adequately adapt to the situation. It is said that despite experiencing their child's sickness for an extended period of time, some parents were unable to come to terms with it.<sup>23</sup>

A mother who has witnessed her child's seizure and hospitalization is emotionally under a lot of pressure. She is always afraid of complications and recurrence of the event. Nurses in a family-centered profession are in such an excellent place to support mothers and families in coping with the situation and providing them with sufficient information in order to help them to gain a better understanding of the disease and also prevent its possible recurrence.

The small number of participants in this study is not necessarily representative of all mothers experiencing similar situation. Also, restricting the study to the mothers who were in the hospital at the time of the study was another limitation.

#### CONCLUSION

According to the findings of the present study, despite the benign nature of the disease, mothers experience some levels of stress and anxiety, and have many concerns regarding their child's situation and future. They try to find the best way for caring of their child and in order to overcome the situation, they need professional help.

Recognition of the experiences of these mothers leads to a better understanding of their needs, so the health care team can provide appropriate planning for support and education. Nurses, as the care providers who are at the front line of caring programs, must help these mothers to cope with the situation by providing support and information they need.

The findings of this study can be used to design interventions for families of these children to cope better with the situation. Similar studies can be done in families of children with other conditions.

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