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# KNOWLEDGE, ATTITUDES, AND PRACTICE (KAP) REGARDING FEBRILE SEIZURE AMONG PARENTS ATTENDING TERTIARY CARE HOSPITAL

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#### ABSTRACT

**Background:** Febrile Seizure is a traumatizing event for most of the parents. Inadequate knowledge regarding febrile seizure can cause anxiety and fear among parents. **Aim:** This study was conducted to assess the level of parental knowledge, attitude and practices regarding Febrile seizure. **Methods:** It was a prospective questionnaire study conducted over a period of one year from Aug 2020 to July 2021 in Department of Paediatrics in Civil Hospital, Kandaghat. 120 children with Febrile Seizure were enrolled. **Results:** A total of 120 patients were recruited. There were more male patients compared to female. 98 had single episode and 22 has recurrent episode. 84 parents could not recognize the seizure.86 parents did not carry out any intervention at home. The commonest immediate effect of the seizure on the parents was fear of death (n=96, 80%) and long term concern was fear of development of epilepsy in future (n=77, 64.1%). 98 parents did not have thermometer at home and among the remaining 22 parents who were having thermometer only 9 knew how to use it properly. **Conclusion:** A higher level of awareness regarding febrile seizure was shown to have in higher socioeconomic class. The efficiency of parental first aid practice can be significantly improved by giving adequate awareness and education.

KEYWORDS-Febrile Seizure, KAP.

#### INTRODUCTION

Febrile seizures are seizures that occur between the ages of 6 and 60 months with a temperature of 38°C (100.4°F) or higher, that are not the result of CNS infection or any metabolic imbalance and that occur in absence of a history of prior afebrile seizures.<sup>[1]</sup> Between 2% and 5% of neurologically healthy infants and children experience at least one, usually simple, febrile seizure. [2] Simple febrile seizures do not have an increased risk of mortality even though they are concerning to the parents when they first witness them. Complex febrile seizure may have an approximately 2 fold long-term increase in mortality rates, as compared with the general population, over the subsequent 2 year, probably secondary to a coexisting pathology. [3] There are no long-term adverse effects of having one or more simple febrile seizures. Febrile seizures recur in approximately 30% of those experiencing a first episode, in 50% after two or more episodes, and in 50% of infants younger than 1 year of age at febrile seizure onset.<sup>[4,5]</sup>

Parental anxiety and apprehension is due to inadequate knowledge of fever and febrile convulsion. Most of the parents witnessing seizure for the first time are shocked and many think that their child may die because of it. It creates a sense of fear of fever and febrile seizure. [6] It

will be frightening for parents to see their child experiencing febrile seizure. In their panic, their initial reaction is usually not correct. This shocking event causes a wrong belief among parents that febrile seizure will cause brain damage, mental retardation, learning disability, epilepsy or even death. [7]

It is necessary to assess the factors influencing prevention of febrile seizure through patterns which identify and reinforce factors that affect behavior. [8] Therefore understanding and improving parental knowledge towards febrile convulsion is very essential. A quick assessment tool for obtaining information about parental responses to febrile seizure is required for educating parents and practice of parents of children with febrile seizure.

#### **METHODS**

This prospective study was conducted over a period of one year from August 2020 to June 2021 at a tertiary health care. 120 parents of children with febrile seizures were enrolled after a proper informed consent. A well prepared self-administered questionnaire was completed by parents of each child with febrile seizure at the time of discharge after an observation period of 24-48 hours

or at the time of follow up visit in OPD under supervision.

Febrile seizures were diagnosed as seizures associated with a temperature of 38°C or higher, ruling out central nervous system infection and other metabolic causes. All those children who had afebrile seizures or seizures due to any other cause were reasonably excluded and those children in whom doubt existed about the diagnosis or with atypical presentation were also excluded.

The questions included demographic details like parent's educational qualification, occupation, socioeconomic status, age and sex of child, age at first febrile seizure, previous history of convulsion and medication. Questions were asked to parents regarding their knowledge, attitude and concerns regarding febrile seizure, about their source of knowledge, how they perceived the seizure, how they recognized and responded, first aid given during episode, if temperature was measured, availability of thermometer, knowledge about normal and high grade temperature, how to use thermometer correctly and their future concerns and worries about their child and his/her siblings. The data was collected and analyzed.

#### RESULTS

120 completed questionnaires were assessed and analyzed at the end of 1 year period. Among the affected children, 62% were male and 38% were female as shown in Table 1. Fathers answered 24% and mothers answered 76% questionnaire. Age of the child ranged from 6 months to 5 years. Of these children, 69% had single seizure and 31% had recurrent seizure. The mean age of onset of seizure was 22 months.

Table 1.

Characteristics	Number(Percentage)
Child Gender	
Male	75 (62.5%)
Female	45 (37.5%)
Responder	
Father	29 (24.1%)
Mother	91(75.8%)
Socioeconomic status	
Upper	3(2.5%)
Upper middle	13(10.8%)
Lower middle	25(20.8%)
Upper lower	72(60%)
Lower	7(5.8%)
Episode	
First	98(81.7%)
Recurrent	22(18.3)

30% parents were able to recognize the 1<sup>st</sup> seizure episode in their children and remaining 70% perceived seizures as shivering 37 (30.9%), loss of consciousness/fainting episode 29 (24.2%), lethargy 11 (9%), and as evil spirit effect 7 (6%) as shown in Figure

1. 86 (72%) parents did not carry out any home intervention prior to getting the child to the hospital while the other 34 (28.3%) used measures like shaking the baby 12 (35.3%), putting object in the mouth 10 (29.4%), antipyretic medication 5 (14.7%), sponging 4 (11.7%), cardiac massage 3 (8.8%). None of the parents were aware of risk of aspiration or any other preventive measures.

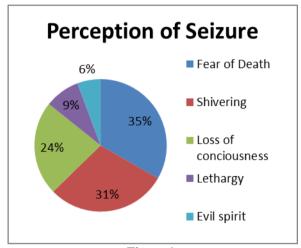


Figure 1.

The immediate concern of parents of child with febrile seizure was fear of death 96 (80%) followed by fear of recurrence 86 (71.6%), fear of future development of Epilepsy 77 (64.1%), fear of brain damage 54 (45%), fear of mental retardation 32 (26.6%), fear of febrile seizure affecting their siblings 22 (18.3%) as shown in Figure 2. Prior to 1<sup>st</sup> episode of febrile seizures 104(86.6%) parents did not know the fact that seizures occur due to fever. Only 22 (18.3%) had thermometer at home and only 3(13.6%) knew the normal range of temperature and 9(40.9% knew how to use it properly. Most of parents were relying on touch method for temperature assessment. Awareness of febrile seizure and the preventive measure was more in higher socioeconomic class.

#### DISCUSSION

Although febrile seizure is a benign condition with excellent prognosis but witnessing their child throwing a fit is a frightening experience. So understanding about the parent's knowledge and their attitude towards the disease will help in improving the health outcomes. [9] In our study parents of 120 children who presented to us over a period of 1 year were interviewed on the basis of pre formulated questionnaire. In this study only 30% parents were able to recognize seizure. Others perceived seizures as shivering, loss of consciousness/fainting spell, lethargy. Some even perceived it as evil spirit effect. Our study found out that 87% of the parents knew nothing about febrile seizure. This unawareness of seizures was noted to be higher in developing.

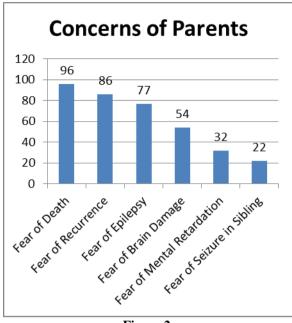


Figure 2.

Countries. [10,11] The most common immediate concern was fear of death (80%) and long term concern was fear of development of epilepsy (64%). Our findings were supported by similar findings shown by Srinivasa S et al who stated that fear of death was 82.7% during initial seizure episode. [12] Similarly Baumer JH et al stated that fear of death was a major concern among parents with febrile seizure. [13] The reason being the poor knowledge, lack of proper education and socioeconomic strata of population that we cater.

Of the total 120 parents interviewed, 82% did not have any thermometer at home and among the remaining 18% who were having thermometer, only 9 knew how to use thermometer correctly and 2 knew the normal temperature range. These were findings at discharge speaking volume about the poor communication skill between doctor and parents. Although parents of children with recurrent seizure were able to recognize seizure and were more proactive with preventive measures like sponging and antipyretics the accurate documentation of temperature was not done and mostly relied on touch method for temperature assessment. Awareness of preventive measures were high in higher socioeconomic class.

### **Conflict of Interest**

None.

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