

Description Of Parents' Knowledge Level In Handling Febrile Seizures In Children At Home Before Being Taken To The Hospital

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ABSTRACT

Good initial help for children with febrile seizures is to try to be calm and not to panic. These efforts include actions to reduce the child's body temperature, adjusting the child's position appropriately by tilting the child's head, placing it on a flat mat, keeping away from objects that risk making the child injured or actions that can endanger the child. Other actions that parents need to take, especially mothers, are to maintain the patency of the child's airway by not putting any objects in the mouth and not putting food or drinks in the mouth.

The research method used in this study uses a descriptive method with a quantitative approach. The sample used was 76 respondents using a purposive sampling technique.

The results showed that most of the respondents had good and sufficient knowledge in handling febrile seizures in children at home, 31 (40.8%) respondents and 14 (18.4%) respondents had insufficient knowledge.

From the results above, it can be concluded that knowledge is good and sufficient because respondents who are well-informed have a fairly good education, namely Senior High School so that it will affect knowledge about handling febrile seizures in children at home.

Keywords: Knowledge, Fever Seizures

INTRODUCTION

Childhood is the most important period in human life. Children always grow and develop from the time of their birth until the end of adolescence. In its development, childhood is the most vulnerable period to various diseases. Especially in the first five years of life. Infants and children under five years old are susceptible to various diseases because their immune systems are not yet fully developed (Hidayah, 2015).

One of the symptoms that children are susceptible to and often experience is fever. Fever is not a disease. Usually, fever symptoms occur due to the possibility of the entry of a disease seed in the body. Naturally, the body temperature defends itself from the attack of a disease by increasing body temperature. Fever in children cannot be ignored because at this time, the child's brain is very vulnerable to sudden increases in body temperature. If fever is not treated immediately, febrile seizures often occur (Elsevier Saunders, 2017).

Fever seizures are a condition where seizure symptoms appear due to an increase in body temperature (temperature reaches $\geq 380C$), febrile seizures can occur due to intracranial or extracranial processes. Febrile seizures occur in 2-4% of the population of children aged 6 months to 5 years (Huda et al, 2013). Febrile seizures are one of the most common problems that occur in childhood. The estimated incidence of febrile seizures is 2-5% of children between the ages of 3 months and 5 years in the United States and western Europe. The incidence of febrile seizures in Asia is 3.4%-9.3% of children in Japan, and 5%-10% in India. Febrile seizures are rare in children over 5 years of age. The incidence is most frequent at 18 months of age and decreases until 6 years of age. More than 50% of children under age have recurrent febrile seizures and 15% of cases have more than 1 recurrent seizure. (Najimi, et., al, 2015).

The cause of febrile seizures is still unknown. Fever seizures do not always occur at high temperatures, sometimes not too high a fever can cause seizures (Taslim, 2013). According to Riyadi, 2013 conditions that cause febrile seizures include: infections that affect extracranial tissues such as tonsillitis, acute otitis media, bronchitis. As according to IDAI, 2015 the causes of febrile seizures include: drugs, chemical imbalances such as hyperkalemia, hypoglycemia and acidosis, fever, brain pathologies, eclampsia (mothers who have prenatal hypertension, toximea gravidarum) (IDAI, 2015). In addition to the causes of febrile seizures among upper respiratory tract infections, there are also diseases that accompany febrile seizures according to data from the Indonesian health profile in 2012, namely 10 diseases that are often hospitalized in hospitals including diarrhea and gastroenteritis diseases by certain infectious causes, dengue hemorrhagic fever, typhoid and paratyphoid fever, pregnancy complications, dyspepsia.

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In Indonesia, especially in Blora, Central Java, 8 toddlers died from febrile seizures out of 84 cases of febrile seizures. In developing countries, including Indonesia, there are two factors, namely nutrition and infection, which have a huge influence on child growth, about 70-90% of all febrile seizures are febrile seizures are simple febrile seizures and the rest are complex febrile seizures. In Indonesia in 1967 febrile seizures were included as the five most important pediatric diseases in Cipto Mangunkusumo Hospital at 7.4%, increasing in 1971 with the incidence of febrile seizures at 22.2% (Kuncoro, 2014).

Data reports from patient medical records at Permata Blora General Hospital, in the first semester of 2022 obtained data on 884 pediatric patients, in the top ten diseases obtained including: Febrile convulsions 17%, Diarrhea 13%, Dengue fever 12%, Febris 9%, Moderate dehydration 7%, ARI 6%, DHF 6%, Viral Infection 4%, Acute Bronchitis 3%, Dyspepsia 2%.

Recurrent febrile seizures can occur with a prognosis that 33% of children will experience a one-time frequency (recurrence), and 9% of children experience a frequency of 3 or more times (Reza, et al, 2008). Febrile seizures are not dangerous and rarely cause neurological damage, but febrile seizures have an impact on the child's psychosocial life, cognitive disabilities, hospitalization, long hospital days, and increased treatment costs due to febrile seizure complications. After 12 years, children who had febrile seizures with neurological complications were found to have 12% neurological developmental delay, 10% neurological damage and 5% learning delay (Najimi, et.al, 2015).

Fever seizures can cause feelings of excessive fear, emotional trauma and anxiety in parents (Jones & Jacobsen, 2007). The first experience of parents when seeing a child with febrile seizures, causes fear in parents, parents are afraid that their child will have a seizure every time they have a fever. This is a problem and very disturbing (Najimi, et.al, 2015).

Some of the characteristics and signs of symptoms of toddlers experiencing febrile seizures such as, high temperature rises, pallor, fainting, biting tongue or cheeks, tightly clenched jaw teeth, urinating and feces outside of consciousness, respiratory disorders, bluish skin, eyes located upwards accompanied by stiffness and weakness, seizures lasted briefly, clonic

attacks (can stop on their own) accompanied by repetitive jerking movements (Lumbantobing, 2017).

Factors that influence the incidence of recurrent febrile seizures are: family history of febrile seizures, age less than 18 months, body temperature during seizures, the lower the temperature during seizures the more often they recur, the duration of fever (IDAI, 2015). In addition, the factors that influence parents' efforts in handling febrile seizures include knowledge, the ability of parents to manage febrile seizures and must have correct knowledge about febrile seizures. This knowledge can be obtained through formal and non-formal education, parents' experience in caring for children who have seizures and experience due to information from others. Personal experience can be used as an effort to improve by repeating the experience gained in solving the same problem such as handling febrile seizures. What is equally important in dealing with seizures and handling children who have seizures is the ability and maturity of parents, so that parents can behave positively. (Wiharjo, 2019).

Research conducted by Dr.M. Halon and Dr.E. Wassmer states that most parents, especially mothers, who have children with febrile seizures take them to the doctor and are hospitalized within the first hour. None of the mothers knew exactly what to do if the seizure recurred. In addition, mothers took inappropriate and unnecessary actions such as placing the child in warm water, opening the child's mouth, holding the child tightly, blowing air into the child's mouth, or putting alcohol on the soles of the feet. This shows the mother's lack of knowledge and inappropriate attitude towards febrile seizures.

The first proper handling that parents can do when a child has a febrile seizure is to stay calm and think positively, try to make the child's body temperature drop, position the child appropriately, namely the position of the child's head tilted, placed in a flat place, keep away from objects or actions that can injure the child. In addition, the most important action to be taken by parents, especially mothers, is to maintain the child's airway smoothness such as not putting any objects in the mouth and not putting food or drinks in the mouth. (Windawati, 2020).

Based on medical record data at Permata Blora General Hospital in 2019 the number of children aged 6 months - 5 years with febrile seizures was 127, in 2020 there were 107 patients and in 2021 the number of children was 120. In July 2022 children aged 6 months - 5 years suffering from febrile seizures at Permata Blora General Hospital were 35, in August 2022 there were 28 and in September 2022 there were 31 children. Preliminary studies have been conducted by researchers regarding the first handling of febrile seizures by mothers in May 2022 at Permata Blora General Hospital. The researcher conducted simple interviews with 5 mothers whose children were being treated for febrile seizures. All five parents were from Blora. The first mother said that when the child started having seizures, the mother panicked and did nothing. She did not even dare to approach her child. Finally, the mother decided to ask for help from her mother-in-law. After her mother-in-law came, the child was compressed and immediately carried to the hospital while still having a seizure. The second mother said that when her child had a seizure, she immediately put her hand into her child's mouth. She tried to find a spoon and wrapped it around a cloth to put in her child's mouth instead of her finger. The third mother said that when her child had a seizure, she felt anxious and confused, so she asked her husband to help her take her to the hospital so she could get

further treatment. The fourth mother said that when her child had a seizure at home, she immediately undressed the child so that it was loose after the child calmed down and did not have a seizure, she was immediately taken to the hospital. The fifth mother said that when her child had a seizure at home she panicked but after the seizure stopped, she immediately gave fever-reducing medicine and applied a warm compress on the forehead and after that was immediately taken to the hospital.

Handling fever in children is very dependent on the role of parents, especially mothers. Because mothers are the most knowledgeable about fever and have a good attitude in providing care, it can determine good fever management for their children. The management of fever in children that occurs in the community varies greatly, ranging from mild, namely in the form of self management and to serious ones by means of non-self management, namely relying on treatment in medical personnel. To reduce fever in children by self management, physical therapy, therapy, drugs or a combination of both can be done. Physical therapy such as placing the child in a normal temperature room, giving plenty of drink and doing compresses (Kayman, 2015).

Based on these various studies, it can be seen that parents' knowledge about fever and fever management in each country varies greatly. The level of parental knowledge about fever and fever management in Indonesia is also very varied considering that this is influenced by many factors. The phenomenon in Permata Blora Hospital made the researcher interested in examining "Overview of Parents' Knowledge Level in Handling Fever Seizures in Children at Home Before Being Taken to Permata Blora General Hospital".

RESEARCH METHOD

This study uses a quantitative descriptive approach that reveals how the level of knowledge of parents in handling febrile seizures in children at home before being taken to Permata Blora General Hospital using numbers. The population in this study were parents of children who suffered from febrile seizures as many as 35, in August 2022 as many as 28 and in September 2022 as many as 31 children with a total of 94 febrile seizures. The sample used in this study was 76 samples with purposive sampling technique. Data analysis in the form of frequency distribution.

RESULTS AND DISCUSSION

1. Characteristics of Respondents
 - a. Age of Respondents

Table 1.
Characteristics of Respondents Based on Respondents' Age
at Permata Blora General Hospital

Mean	Median	Modus	SD	Minimal	Maksimal
28,32	29,00	29	4,392	20	36

b. Gender of Respondents

Table 2.
Frequency Distribution Based on Respondents' Gender
at Permata Blora General Hospital

Gender	Frequency	%
Male	23	30,3
Female	53	69,7
Total	76	100

c. Education of Respondents

Table 3
Frequency Distribution Based on Respondents' Education
at Permata Blora General Hospital

Education	Frequency	%
Elementary School	18	23,7
Secondary School	32	42,1
High school	26	34,2
Total	76	100

d. Occupation of Respondents

Table 4
Frequency Distribution Based on Respondents' Occupation
at Permata Blora General Hospital

Occupation	Frequency	%
Housewife	24	31,6
Laborer	31	40,8
Self-employed	21	27,6
Total	76	100

2. Univariate Analysis

Table 5

Overview of Parents' Knowledge Level in Handling Fever Seizures in Children at Home Before Being Taken to Permata Blora General Hospital

knowledge	Frequency	%
Good knowledge	31	40,8
Fair Knowledge	31	40,8
Poor Knowledge	14	18,4
Total	76	100

According to research conducted by researchers, it was found that out of 76 most respondents had knowledge in handling febrile seizures in children at home both good and sufficient as many as 62 (81.6%) respondents. This is evidenced by many respondents who answered correctly about handling febrile seizures in children at home before being taken to the hospital such as placing the child on a flat place, loosen the clothes, especially on the neck, do not force to restrain the child's body movements during seizures, call the child's name or say soothing words during seizures, stay with the child during and after the seizure, record how long the child has a seizure and give antipyretic drugs (fever reducers). Good knowledge above is because respondents who have good knowledge have a fairly good education, namely Advanced High School so that it will affect knowledge about handling febrile seizures in children at home as well. The results of research on maternal education, namely respondents who have a high school education equivalent to 26 (34.2%) respondents. The above statment is also corroborated by related research conducted by Ritawani (2018) with the title "Relationship between Maternal Knowledge and First Handling of Febrile Seizures in Toddlers". The results showed chi square with a value of $p = 0.028$ so that $P\text{value} < 0.05$ then H_0 was rejected, which means that there is a relationship between maternal knowledge and the first handling of febrile seizures in toddlers.

The above is also in accordance with the theory of Notoatmodjo (2014) that a person's knowledge is influenced by the level of formal education taken. The higher the formal education taken, the better the knowledge. Parents of children with higher education have wider access to information than parents of children with lower education. In addition, parents with higher education will more easily absorb health information.

The results of further research found that respondents with poor knowledge were 14 (18.4%) respondents. This lack of knowledge is due to the fact that many respondents work and are housewives so that many respondents lack information about handling febrile seizures in children at home because their work takes up a lot of time. Meanwhile, parents who work as housewives are always at home a lot so that the information absorbed by mothers about handling febrile seizures in children at home is very lacking. The above is evidenced by the fact that most of the respondents are laborers as many as 31 (40.8%), as housewives (IRT)

as many as 24 (31.6%) respondents and as self-employed as many as 21 (27.6%) respondents. While the respondents' lack of knowledge is due to the respondents' lack of education, namely still many elementary schools and junior high schools. These results show that the results of research based on education obtained most respondents have a junior high school education equivalent to 32 (42.1%) respondents and elementary school education equivalent to 18 (23.7%) respondents.

This is also in accordance with Khasanah (2015) which states that knowledge as a parameter of economic level and social conditions can greatly determine public health. People can avoid disease as long as knowledge about health can be improved, so that attitudes and behavior become healthy. Meanwhile, according to Pariani (2014), which states that one of the factors that influence knowledge is work. Working is generally a time-consuming activity, working for someone will have an influence on his physical and mental life. In this study, what is meant above is that parents who work will take up time in looking for health information so that parents pay less attention to the illness suffered by their children, namely handling febrile seizures in children at home.

Related research was conducted by Shahiba (2019) with the title "Overview of Parents' Knowledge Level of Febrile Seizures in Children in Neighborhood X Tegal Sari Mandala II Medan Village". The results showed that of the 109 respondents, 67% of respondents were aged 30-65 years, and 43.1% had a high school education. A total of 39.4% worked as housewives. Most respondents (45.0%) had sufficient knowledge about febrile seizures, 19 people (17.4) respondents had a poor level of knowledge about febrile seizures, and 41 people (37.6%) had a good level of knowledge about febrile seizures.

Further supporting research was conducted by Langging (2018) with the title "The Relationship Between Maternal Knowledge and Management of Febrile Seizures in Toddlers at Anggrek Tlogomas Posyandu, Dinoyo Health Center Working Area, Malang City". The results of the study of maternal knowledge showed that most respondents, namely 60%, had knowledge in the moderate category. Management of febrile seizures most of the respondents were 62.22% in the moderate category. The results of the correlation test analysis of the calculated r value are 0.475 with a significance of 0.001, so the H_a hypothesis is accepted, namely there is a correlation or relationship between maternal knowledge and management of febrile seizures.

According to the researcher's perception, the results of the above study have many mothers who have good knowledge. This is also influenced by parents' experience in handling febrile seizures in their second or third child so that mothers are more experienced in handling children's febrile seizures at home. This needs to be maintained for handling febrile seizures in children at home. There is also a lack of knowledge in mothers about handling febrile seizures in children at home. This needs to be socialized by the hospital to the families of visitors who have children, especially on how to handle febrile seizures in children at home.

Knowledge of proper handling of seizures in children will affect the child's further condition, namely the child avoids the condition of shortness of breath and the risk of injury to the child. The above is in accordance with research (Langging et al., 2018) showing that a person's knowledge is a factor that can influence a mother in taking action, the better the mother's knowledge about a disease or health problem, the better the handling and vice versa if the mother's knowledge is lacking then the management of health problems will be less

good. Lack of knowledge about febrile seizures results in a reduced ability to apply information in everyday life and is one of the causes of mishandling febrile seizures so that children experience injury due to seizures and even if the child experiences shortness of breath for too long due to improper handling. This can be caused by parents who have just had their first child so that the parents lack experience in handling febrile seizures.

CONCLUSIONS

The results showed that most respondents had good and sufficient knowledge in handling febrile seizures in children at home as many as 31 (40.8%) respondents and less knowledge as many as 14 (18.4%) respondents.

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