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The Experience of Bugis Makassar Mothers in Managing Febrile Seizures in Children

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ABSTRACT

Febrile convulsions are seizures that occur due to an increase in body temperature. Data from the Makassar City Health Office in 2012 reported the incidence of fever of unknown causes as many as 54,782 cases. The study aimed to know the experience of Bugis mothers in handling febrile seizures in children in the working area of the Tamamaung Health Center, Panakkukang Sub-District, Makassar. Qualitative research design with phenomenological study, through semi-structured interviews with in-depth interview method. The number of participants was 6 people obtained by purposive sampling. Data were collected in the form of interview recordings and field notes using the thematic analysis method. There are four points of results, Bugis Makassar mothers understand the description of febrile seizures, Bugis Makassar mothers are able to handle febrile seizure children, psychological experience of Bugis Makassar mothers in handling febrile seizures, Bugis Makassar mothers ability to prevent febrile seizures in children. Housewives play an important role in child care at home. Health workers need to increase the knowledge of Makassar Bugis mothers about how to handle febrile seizures at home.

1. Introduction

Febrile seizures are one disorder neurology the most often found in childhood, especially between the ages of 6 months and 5 years. Febrile seizures are seizures that occur due to an increase in body temperature (rectal temperature above 38°C. Seizures occur when the fever is caused by an infection that affects extracranial tissues, such as tonsillitis, acute otitis media, and bronchitis. In addition to high fever, seizures can also occur due to inflammatory diseases of the lining of the brain, tumors, trauma or lump on the head, and electrolyte disturbances in the body. The World Health Organization (WHO) recorded that there were about 21.65 million who had febrile seizures and 216,000 resulted in death, in 2017 in developed countries there were 2-5% of children aged 6-5 years

experienced febrile seizures, and there were 18.3 million cases, and 154 thousand of them died from febrile seizures in 2015. Meanwhile, In Indonesia in 2016 there were 2-5% of children had febrile seizures, with 85% caused by ISPA. In 2017 and 2018, there was an increase of 17.4% and 22.2%, Where in 2020, there are 271,066,366 children under five in Indonesia who are at risk for febrile seizures.¹⁻⁵

The incidence of febrile seizures is estimated at 2-4% in the United States, South America, and Western Europe. In Asia, it is reported to be higher. Approximately 20% of cases are complex febrile seizures. Generally, febrile seizures occur in the first year of life (17-23 months). Febrile seizures are slightly more common in boys. Seizures will affect intelligence. If it's too late to deal with seizures in children, there is

a possibility of epilepsy or even mental retardation. For this reason, it is necessary to have a fast and correct treatment of febrile seizures. Treatment of febrile seizures must be carried out quickly and precisely because proper treatment will minimize unwanted events. Mother's knowledge and actions during febrile seizures are important for parents, such as the temperature range that can cause seizures.⁶⁻¹⁰ This study aimed to find out how the experience of Bugis Makassar mothers in handling febrile seizures in children at home.

2. Methods

This study is qualitative research using a phenomenological approach so as to gain an in-depth understanding of the experiences of Bugis Makassar mothers in handling febrile seizures in children, which can only be explained and cannot be measured. Participants in this study were housewives who had children with a history of febrile seizures in the working area of the Tamamaung Public Health Center and were willing to become participants who were selected using purposive sampling. In qualitative phenomenological research, a recommendation the number of participants required to be interviewed is five to twenty-five mothers or determined at the time of the interview based on the level of data saturation. In this study, saturation data were obtained after interviewing 6 families.

Data were collected by conducting in-depth interviews (in-depth interviews). The type of interview used is a semi-structured interview. That is before the interview was conducted, the researcher had made a design in the form of an interview guide. In conducting these interviews, interview tools such as notebooks, tape recorders, and cameras are needed as evidence that the researcher has conducted interviews with participants. The researcher conducted each participant and assisted the participants in describing their experiences in dealing with febrile seizures in children without leading the discussion. The interview process in this study lasted approximately 30-60 minutes or was processed until data saturation was

obtained. The location of the interviews in this study was held at the mother's house. To improve the accuracy of data collection, the researchers used open-closed interviews, recorded interviews, and made transcripts verbatim (verb). In addition, the researcher also made field notes to further ensure the achievement of the description results. Participant demographic data was collected before the interview was conducted to provide a brief description of the participants. For data compilation and verification, the researcher listened to the recorded interviews while reading the transcripts for accuracy and providing corrections if an error occurred. After the interviews with all participants were completed, the data from the interviews and field notes were collected for management and analyzed. Verbatim transcripts were written according to the results of the interviews and field notes, which contain records of the non-verbal responses of participants and all events during the interview process. After the data is collected, the data is then analyzed using the method of thematic analysis.

3. Results and Discussion

A total of 6 participants were in this study. The age varies between 31 years to 40 years who have children with a history of febrile seizures. All participants with Bugis ethnic backgrounds were 3 people and 3 people with Makassar ethnic backgrounds. There were 2 participants with a diploma 3 educational background and 4 others with elementary, middle, and high school education backgrounds. They were all mothers who had children with a history of seizures in the age range of 6 months to 1 year. The number of seizures experienced by children varies from one time to more than one time. Nonetheless, almost all of them tell a similar experience in handling the first time a child has a febrile seizure. The number of themes generated in this study were two, namely "a description of the occurrence of febrile seizures" and "handling given during seizures".

Overview of febrile seizures

This theme explains that the phenomenon that occurs in society already know the signs and symptoms of febrile seizures, The theme "Description of febrile seizures" is formed by two sub-themes based on the phenomenon of experience that occurs, namely "Symptoms of febrile seizures and causes of febrile seizures.

Symptoms of febrile seizures

This sub-theme explains the signs and symptoms when a child has a febrile seizure.

"The seizure begins with a high fever accompanied by a stiff body, the eyes go up, and foaming at the mouth (P1), the body is bluish, the mouth is grumbling open (P2), and the jaw is tightly closed (P6)."

Febrile seizures are seizures associated with fever (body temperature above 38°C), without central nervous system (CNS) infection, electrolyte or metabolic disturbances, occurring in children over 1 month of age, and there is no history of seizures without fever. Febrile seizures are caused by an increase in body temperature in children and generally occur 12 hours after experiencing a high fever. These febrile seizures are characterized by decreased consciousness, eyeballs turning upside down, teeth clenching, foam coming out of the mouth, and other symptoms. Severe febrile seizures can be accompanied by epilepsy and can cause death. If the child often has seizures, more and more brain cells will be damaged and have a risk of causing lateness development, mental retardation, and paralysis, and also 2-10% can develop into epilepsy.¹¹⁻¹³ From the interview results, it can be obtained that the results of this study are in accordance with the theoretical concept of febrile seizure symptoms where the mother already knows and understands febrile seizures obtained from the mother's own experience of seeing her child directly.

Causes of febrile seizures

This sub-theme explains that the family already knows the cause before the fever starts with a high

fever. This is in accordance with what was expressed by the following mother:

"...for example, if the children have a normal high fever followed with eyes up"(P2). and it happens over and over again." (P6).

The cause of febrile seizures is still uncertain. In most children, the high body temperature, but not the speed of increase in body temperature, is the triggering factor for febrile seizures in cases where the fever exceeds 38.8°C and occurs when the body temperature rises, not when it occurs long temperature rise. Fever due to viral infection occurs in 80% of cases of KD. The most common causes are ARI, roseola infantum, influenza A, otitis media, pharyngitis, and dysentery. There is a risk of KD after whole-cell DPT vaccination, but the absolute risk is very small.¹⁴⁻¹⁶ From the results of this study, it was found that it was in accordance with the theoretical concept of the causes of febrile seizures, where mothers as participants stated that the cause of febrile seizures begins with high fever or due to rising body temperature.

Handling given when febrile seizures

Take the child to the doctor or health center

This sub-theme explains that when a child has a febrile seizure, the family immediately takes the child to a health service center, whether to a doctor, a midwife in private practice, a clinic, or a hospital, as stated by one of the participants as follows.

"... then in that village, I also took the medication that day to the hospital until I was hospitalized that day..." (P5).

"...if the fever goes down and because I'm afraid if you have a fever again I will take you to the hospital..." (P6).

The first action a mother thinks when she sees a child having a febrile seizure is to take the child to the doctor immediately. This is because the mother feels panicked and does not know the first treatment for a febrile seizure in a child. Even though the decision to take a child to a health service center is a good one,

when it is done while the child is still in a state of seizure and in a hurry, of course, this becomes very dangerous. The most common action parents take when their child has a fever is to take their child to the hospital. Actions to bring children directly to the health service center can provide good benefits but can also be the opposite. This action can be good if done after the seizure is over. But it can be dangerous if done in a hurry while the seizure is still happening.¹⁷⁻

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Handling before being taken to a doctor or health center

This sub-theme explains that when a child has a febrile seizure, the family does not immediately take the child to the health service center to take other actions first rather than being taken to the health service by giving warm compresses and giving drinking water, such as expressed by the following participants below:

"..I compress the water, so that the heat goes down. If it's hot once, people usually say compression so that the heat comes down..."(P2). "...Give me some fever-reducing medicine too because it's normal for the fever to go down.."(P5)

Objective parents giving warm water compresses and giving drinking water can reduce the fever that occurs, and therefore the seizures that occur will also disappear immediately. In fact, the actions taken by the family are sometimes not just one action. They also use several measures when a child has a febrile seizure. Like opening a child's mouth by force to put a spoon in his mouth.²¹⁻²³ These two actions are still widely practiced today because of the belief in tradition and knowledge passed down from generation to generation, as expressed by the following participants. *"..Compressed, new given drink.... Put a spoon in the mouth,..." (P1). "put a spoon in the teeth to remove the teeth....(P2).*

The mother puts objects such as wood, a spoon, or cloth into the child's mouth because the mother is

afraid of the child's tongue being bitten. This is not in line with the theory that putting any object into a child's mouth, such as inserting a spoon, wood, a parent's finger, or another object into the mouth of a child who is having a febrile seizure, has the risk of causing airway obstruction and can obstruct the child's breathing so that the child has difficulty breathing and this will be dangerous. Child and worsen seizures.

In the treatment that is being carried out, there are still many who apply for help. The actions that are commonly carried out are such as applying oil or traditional ingredients such as telon oil, a mixture of oil, and shallots. Many relief measures still prioritize traditional medicine first compared to modern medicine. This is evident from. This action was chosen not only because it uses ingredients from nature that are cheap, easy to obtain, and have minimal side effects but also because there is still a growing perception in society that inheritance has been proven effective, as expressed by the following family members:

"...this time too given onions and oil in the stomach. also called paranormal to be blown away..."(P1).

"..Just got a massage behind the ears or armpits using eucalyptus oil "(P4).

There are many things a mother can do to deal with fever before having a seizure and then bringing her to the hospital, such as giving medication to measure the temperature and give antipyretics, compressing warm water (which is approximately the same as the child's body temperature), place the child in a flat place, tilt face/head to one side, give medication anti-seizure Diazepam rectally or Midazolam for seizures going on more than 5 minutes, and be calm. In addition, keep away from dangerous objects, and avoid actions that have the potential to cause new injuries, such as restraining the child's convulsive movements, using a pillow or pad to support the child's head, do not put anything in the child's mouth, loosen the child's tight clothing, especially in the neck area, keep it damp child during a seizure and ask someone else to call an

ambulance, check the child's chest movement and breathing if the seizure has stopped, perform cardiopulmonary resuscitation if there is no pulse and breathing in the child.²⁴⁻²⁶

One of the success rate factors for reducing cases of febrile seizures is the role of parents, one of which is the mother's knowledge and attitude are closely related to the prevention of recurrent febrile seizures. Treatment of febrile seizures in children is very dependent on the role of parents, especially mothers. Mother's knowledge about febrile seizures plays an important role in influencing the management of febrile seizures. Mothers who have good knowledge about febrile seizures can do good treatment for their children. Mothers who have good knowledge about febrile seizures will understand the prevention and treatment of febrile seizures at home, namely by applying warm compresses and giving febrifuge. This is based on the theory, which states that the knowledge a person has about an object contains two aspects, namely positive and negative, which determine the person's attitude, where the more positive aspects of knowledge obtained, the more positive attitudes towards certain objects will be. The existence of knowledge can change one's beliefs and paradigms so that it creates an attitude toward an object. Therefore knowledge is one of the factors that influence parents' attitudes in first handling febrile seizures in children.²³⁻²⁶

In addition, a person's ability to receive the information given to him is related to the ability of the brain and one's health. Someone who is getting older, the more influential is in the process of increasing or decreasing knowledge, changing attitudes, and strengthening behavior. Education is a supporting factor so that the information obtained can influence one's understanding. The level of education can also affect the way of thinking and perspective of parents, especially mothers, in the first treatment of febrile seizures. In line with the times, information or knowledge is not only obtained in formal education, but parents can increase their knowledge in various ways, for example reading newspapers, magazines,

television, and other social media from the internet, so many conveniences are obtained by parents. Parents seeking information that causes higher formal education does not guarantee that parents will be better prepared to handle febrile seizures.^{27,28}

4. Conclusion

Housewives play an important role in child care at home, and health workers need to increase the knowledge of Bugis Makassar mothers about how to handle febrile seizures at home.

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