



Health Education on Parents' Attitudes in Handling Early Seizures of Fever in Children in the Children's Room of Toto Kabila Hospital

Nur Fadila Manti^{1*}, Herlina Jusuf², Ibrahim Suleman³

¹Mahasiswa Program Studi Ilmu Keperawatan UNG

^{2,3}Dosen Program Studi Ilmu Keperawatan UNG

*Corresponding Author: nurfadilamanti22@gmail.com

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ABSTRACT

Fever spasms are one of the emergency conditions that often occur in children and can cause anxiety in parents. Parents' attitudes play a very important role in providing early treatment of febrile seizures and preventing complications in children. The purpose of the study was to determine the influence of health education on the attitude of parents in the early treatment of febrile seizures in children in the children's room of Toto Kabila Hospital.

The type of quantitative research uses a pre experiment design with one group pre test-post test. The sampling technique used non-probability sampling with a purposive sampling approach. The study population was parents who had children aged 1-5 years in the Children's Room of Toto Kabila Hospital as many as 96 people, and a sample of 49 respondents. Data analysis was conducted using the Wilcoxon Sign Rank Test.

The results showed that there was a significant difference between the pretest and posttest scores with ($p\text{-value} = 0.000 < \alpha = 0.05$).

In conclusion, there is an influence of health education on the attitude of parents in the early handling of febrile seizures in children in the Children's Room of Toto Kabila Hospital. For health workers, it is expected to develop a routine health education program or brief counseling for each service related to signs/symptoms and early treatment of febrile seizures.

INTRODUCTION

Childhood is the most important time in human life. Children grow and develop from birth to the end of adolescence. During the period of growth and development, children are most susceptible to various diseases, especially at the age of the first 5 years of life. Children under the age of 5 are susceptible to various diseases due to their imperfect immune system. (Lesmana, 2022)

One of the symptoms that is vulnerable and often occurs in children is febrile seizures. Fever is not a disease, usually fever symptoms occur due to the possibility of a disease seed entering the body. Naturally, body temperature defends itself from the attack of a disease by increasing body temperature. Fever in babies or toddlers cannot be ignored simply because at this time, the child's brain is very susceptible to a sudden increase in body temperature. Fever is one of the conditions that can trigger seizures in children. (Rahman et al., 2022)

According to , febrile convulsion (Stuart et al., 2024) is one of the most common neurological disorders found in infants and children. This problem is a convulsive awakening that occurs when the body temperature rises by more than 38°C and is caused by extracranial processes. Fever seizures are divided into 2 types, namely Simple febrile seizures, which are seizures that last a short time, usually occur for less than 15 minutes and generally stop on their own, and complex febrile seizures, which are seizures that occur for more than 15 minutes. Seizures recur more than 2 times and between the awakening of seizures of the unconscious child (Puspitasari, 2022)

Based on the World Health Organization (WHO) in , it is estimated that in 2020 there will be 21.65 million children in the world experiencing febrile seizures while 216 thousand children will die. The incidence of febrile seizures aged 6-36 months in the United States reaches 1.5 million people, in Europe it is recorded as much as 2-4%, and in Japan it is 8.8% and in India it is 5-10% recorded each year. (W. T. Astuti et al., 2024) Meanwhile, according to , (Taqiyah et al., 2024) in Indonesia it is reported that the incidence of febrile

seizures has increased every year, in 2019 the incidence of febrile seizures was 67 children, in 2020 as many as 73 children, and in 2021 as many as 76 children.

Data from the Gorontalo Provincial Health Office was obtained that the number of seizures under five in 2023 at the Toto Kabila Regional General Hospital was 156 toddlers, at the Dr. M. Mohammad Dunda Regional General Hospital as many as 139 toddlers, at the Boliyohuta General Hospital as many as 10 toddlers and at the Gorontalo Islamic Hospital as many as 4 toddlers.

From the data above, one of the main causes of complications or lack of treatment in the incidence of febrile seizures is because most parents are not aware of the dangers posed by febrile seizures. Some parents' perceptions related to seizure severity are still low, because they only bring their children after a seizure at home because as far as they know, seizures only appear when a high fever is high while a fever that is not too high cannot cause seizures. (Pujiastuti, 2022)

The phenomenon that occurs in Indonesia is fever that is not handled properly such as not giving fever-reducing drugs, not immediately giving compresses to children and instead taking children to shamans, causing delays for officers in handling fever seizures. Such behavior can endanger the safety of children so that it can cause complications, namely seizures, fever and decreased consciousness. (Puspitasari, 2022)

A person's attitude is also influenced by personal experience, the influence of others who are considered important, culture, mass media, educational and religious institutions, emotional factors, A person's attitude can also be influenced by three factors, namely: knowledge, belief, and culture. One of the factors that can change a person's behavior is health education. Health education is the application of education in the field of health which is operational, namely all efforts to improve knowledge, attitudes, in maintaining the level of health of individuals or groups. Health education can provide accurate information to parents about the early signs of febrile seizures, appropriate treatment measures, and preventive measures that can be taken. (Siregar & Damanik, 2022) (Indryana et al., 2023) (Laughter, 2020) (Marsia et al., 2025)

Based on the above background description, the researcher is interested in researching the Influence of Health Education on Parental Attitudes in the Early Handling of Fever Seizures in Children in the Children's Room of Toto Kabila Hospital.

RESEARCH METHODS

This research is a quantitative research using an experimental type of research with a pre experiment design with one group pre test-post test. Sampling used a non-probability sampling technique with a purposive sampling approach. The population in this study is parents who have children aged 1-5 years in the Children's Room of Toto Kabila Hospital which is 96, and the sample obtained is 49 respondents. The data was analyzed with the Wilcoxon Sign Rank Test.

RESULTS

Respondent Characteristics

Table 1. Respondent Characteristics

Respondent Characteristics	Frequency (n)	Percentage (%)
Age		
Late Teens (17-25 Years)	21	42,9
Early Adult (26-35 years)	17	34,7
Late Adult (36-45 years)	11	22,4
Education		
SD	11	22,45
Junior High School	13	26,53
High School/Vocational School	20	40,82
S1	5	10,20
Jobs		
Teacher/Lecturer	2	4,08
Private Investigator	1	2,04
Self-employed	1	2,04
Others	8	16,33
Not Working	37	75,51
Have dealt with a child with a fever seizure		
Ever	7	14,3
No	42	85,7

Source: Primary Data 2025

Table 1 shows that the age of the most respondents in this study was 17-25 years old with a total of 21 respondents (42.2%). The education level of the most respondents was high school/vocational school with a total of 20 respondents (40.8%). The majority of respondents in this study did not work with a total of 37 respondents (75.51%) and most of the respondents in this study had never handled children with febrile seizures with a total of 42 respondents (85.7%).

Univariate Analysis

Table 2. Frequency Distribution of Parental Attitudes

No.	Parental Attitudes	F	(%)
1.	Good	9	18,4
2.	Enough	40	81,6
3.	Less	0	0,0
Total		49	100

Source: Primary Data 2025

Table 2 shows that before being given health education, 40 people (81.6%) were in the adequate category and a small percentage of parents' attitudes were included in the sufficient category as many as 9 people (18.4%).

Table 3. Frequency Distribution of Parental Attitudes

No.	Parental Attitudes	F	(%)
1.	Good	45	91,8
2.	Enough	4	8,2
3.	Less	0	0,0
Total		189	100

Source: Primary Data 2025

Table 3 shows that after being given health education, most of the respondents had a good attitude as many as 45 people (91.8%) and a small number of respondents had a good attitude as many as 4 people (8.2%).

Bivariate Analysis

The Effect of Health Education on Fever Seizures on Parents' Attitudes in the Early Treatment of Febrile Seizures in Children in the Children's Room of Toto Kabila Hospital

Table 4. Wilcoxon Sign Rank Test Results

		N	Mean Rank	Z	Asymp.Sig. (2-tailed)
<i>Post Test – Pre Test</i>	<i>Negative Ranks</i>	0	.00	-6.099	.000
	<i>Positive Ranks</i>	49			
	<i>Ties</i>	0			
	<i>Total</i>	49			

Source: Primary Data 2025

Based on the results of the Wilcoxon Signed Ranks Test shown in Table 4, a significance value (p value) of 0.000 ($p < 0.05$) was obtained, so there was a significant difference between the attitude of parents before and after being given health education. All respondents experienced an increase in positive attitudes (positive ranks = 49) without any decrease or fixed scores (negative ranks = 0, ties = 0). Thus, there is an influence of health education on improving parental attitudes in the early treatment of febrile seizures in children in the Children's Room of Toto Kabila Hospital.

DISCUSSION

Parents' Attitudes in Handling the Initial Seizures of Febrile in Children Before Being Given Health Education in the Children's Room of Toto Kabila Hospital

Based on the results of a study conducted on parents in the Children's Room of Toto Kabila Hospital before being given health education to 49 respondents, it was found that the attitude of parents was included in the sufficient category with the number of respondents as many as 40 people (81.6%). This result is in line with the total questionnaire answer score obtained, which is between 46-73 (46%-73%).

The attitude of the respondents was in the category of sufficient before being given health education if it was associated with the questionnaire, namely it was found that the attitude of parents in the initial handling

of febrile seizures in children was mostly not knowing the appropriate actions in the early treatment of febrile seizures in children. Parents are still not able to handle febrile seizures in children and think that if their child has a fever or is sick at home, due to excessive thoughts, parents will immediately take the child to a health worker without providing any first aid to the child. This incident is caused by the minds of parents who only think about how to keep their children safe without thinking about the impact if parents do not provide proper initial treatment.

Low attitudes are also caused by parents' beliefs and emotional levels, where parents feel very anxious and panicked when their children have febrile seizures. The anxiety experienced by parents is due to the lack of knowledge and lack of information received by parents. Parents' hesitant and insecure attitude tends to cause panic when the child has seizures. This panic can have a negative impact on decision-making in the early treatment of febrile seizures in children.

According to the theoretical review of the (Swarjana, 2022) state, parents are the closest people to the child and are required to have good knowledge and attitudes about the prevention and handling of diseases in their children. This is also in line with research (Siregar & Mother's Market, 2022) that suggests that parents' wrong or erroneous understanding can result in panic and mistakes in handling diseases, especially the first handling of febrile seizures in children. Incorrect handling can lead to the onset of other emergency conditions such as aspiration or airway blockage, injury or shock due to fever.

Lack of experience is also one of the reasons why parents do not know the steps that must be taken, such as a safe and effective body position when a child has seizures at home. The first experience of facing febrile seizures often leads to confusion and panic, which can lead them to make mistakes in handling. This wrong action can cause additional injuries to the child which will increase the work of the officer in handling the child when he has been taken to health services.

According to a person's attitude, it is greatly influenced by previous experiences and learnings. Less experience will lead to uncertainty and hesitation in acting. Lack of experience causes emotional responses to increase, leading to panicky and undirected actions. These results are in line with research conducted which suggests that lack of experience is one of the reasons why parents do not know the steps to take when their child has a febrile seizure, respondents who have more than one child may be more accustomed to dealing with this emergency condition, but for parents with one child, the first experience of facing a febrile seizure often causes confusion and panic, which can cause them to make mistakes in handling. (Supartini, 2018) (Hendrila et al., 2024)

Based on the results of the study, as many as 9 respondents (18.4%) were found that parents' attitudes were in the good category. Parents already know if seizures arise at a child's temperature of more than 38°C and seizures are a serious problem in children, also measure the child's body temperature during fever to anticipate the occurrence of fever seizures and can immediately give fever-reducing drugs or compresses the child so that the temperature drops, loosen the child's clothes, especially on the neck and will take the child to the doctor, A health center, clinic, or hospital nearby if the seizure lasts for 5 minutes or more. Based on these results, it shows that parents are aware of the importance of simple actions in the early treatment of febrile seizures in children and prevent more serious conditions in children, because this is important because febrile seizures left untreated can cause complications.

Parents' Attitudes in Handling the Initial Seizures of Fever in Children After Being Given Health Education in the Children's Room of Toto Kabila Hospital

Based on the results of a study conducted on parents in the Children's Room of Toto Kabila Hospital after being given health education to 49 respondents, it was found that the attitude of parents was in the good category with the number of respondents as many as 45 people (91.8%) and the rest had a sufficient attitude of 4 people (8.2%). This result is evidenced by the total score of most of the questionnaire answers on average around 74-100 in the category of good attitude.

The attitude of the respondents after being given health education is in the good category if it is associated with the questionnaire, namely it was found that the attitude of parents in the initial handling of febrile seizures has increased from not knowing how to know how to take actions and steps in handling children who have seizures such as positioning the child on his side to keep the airway open, not putting objects in the child's mouth, does not cover the child when he has a fever and pay attention to the duration of the seizure. This shows that parents understand what to give their child when they have a seizure without having to be too worried and immediately take the child to the hospital when the child is still in a seizure.

This is based on the theory that states that the knowledge that a person has about an object contains two aspects, namely positive and negative that determine the person's attitude. These two aspects will determine a person's attitude towards a certain object. These two determine a person's attitude towards a certain object. The more positive aspects of the object are known, the more positive attitudes towards the object are. This is in line (Febriyanti et al., 2024) with research that (Siregar & Damanik, 2022) states that the existence of knowledge can change a person's beliefs and paradigms so as to cause an attitude towards an object. Therefore, knowledge is one of the factors that affect the attitude of parents in carrying out the first

treatment of febrile seizures in children. Good knowledge will create a good attitude in the first handling of febrile seizures in children at home.

Based on the results of the study after being given health education to 49 respondents, there are still respondents who have an attitude in the sufficient category, namely 4 respondents (8.2%). This can be seen from the respondent who thinks that every fever in a child will always cause seizures, without distinguishing between an ordinary fever and a fever that is at risk of seizures. Parents do not understand that seizures usually occur due to a rapid rise in body temperature, not all fevers, this can be prevented by monitoring the child's body temperature when the child has a fever. In addition, respondents also do not fully understand the importance of measuring temperature and observing the length and form of seizures, where this simple action is the first step in handling seizures. Therefore, it is still necessary to provide further guidance and information to parents.

According to the theory of (Azwar, 2015) explanation, attitudes consist of three main components, namely cognitive (knowledge), affective (feeling), and conative (tendency to act). If a person has the desire to act, but the knowledge he has is still not right, then the attitude shown has not been fully formed ideally.

In line with research conducted by those who reported that 30% of parents have high concern for the condition of children who have seizures but have not understood the proper handling measures, so their attitude is categorized as sufficient. (Dwiyatna et al., 2022)

The Effect of Health Education on Parents' Attitudes in the Early Handling of Febrile Seizures in Children in the Children's Room of Toto Kabila Hospital

Based on the results of the research on parental attitudes in the early treatment of febrile seizures in children in the children's room of Toto Kabila Hospital using the Wilcoxon Signed Ranks Test, a significance value (p value) of 0.000 ($p < 0.05$) was obtained, so that there was a significant difference between parents' attitudes before and after being given health education.

The results of the study are in line with the study (Abidah & Novianti, 2021) which shows that there is a significant difference in the mean value before and after the intervention, with a significance value of 0.000 ($p \text{ value} < 0.005$), meaning that there is an influence of health education on the attitude of parents in handling the emergency management of febrile seizures in children. Health education can improve knowledge so that it can change the attitude of parents in handling early febrile seizures in children.

The significant difference in the average attitude of parents in this study was greatly influenced by the procedures for delivering materials and methods of health education as well as the application in health education given in accordance with SAP. The questionnaire will be distributed to respondents twice, namely before and after health education with a sufficient duration to provide basic understanding, namely ± 10 minutes each pre-test and posttest. According to a questionnaire, a written instrument contains a series of questions designed to be answered by the respondent. The provision of health education on the attitude of parents in the initial handling of febrile seizures in children was carried out with ± 15 minutes. The material was delivered through a lecture method that allowed the researcher to convey information directly and was supported by (Suleman et al., 2024) leaflet media that made it easier for respondents to understand and remember important points.

Leaflet media is one of the print media that is widely used in health education activities because it has a number of advantages over other media, namely small, lightweight, and easy-to-carry leaflets that make it easier for respondents to read and store them as re-reading materials at home. Thus, health messages can be received and remembered longer by respondents. According to the theory, leaflets are one of the printed media that contain short messages accompanied by interesting images. This media is easy to disseminate, can be read repeatedly by the target, and is effective in increasing public knowledge. (Notoatmodjo, 2017)

In addition, the implementation of pre-test and post-test makes respondents more focused and motivated to pay attention to the material. This combination of direct delivery, supporting media, and evaluation allows for an increase in knowledge which ultimately affects the respondents' attitude to be better in dealing with febrile seizures in children.

According to the theory of health education, it is the process of providing information and skills to individuals or groups so that they can improve knowledge, attitudes, and behaviors that support health. This is in line with research conducted by explaining that health education is a form of intervention or effort aimed at behavior so that this behavior is conducive to health. Education can increase a person's knowledge that can be used to change attitudes or just add insight. (Sudayasa et al., 2025) (R. K. Astuti, 2024)

This study shows that health education is effective in changing parents' attitudes in increasing understanding of the importance of proper early treatment of febrile seizures in children, which can be seen from the answers to the questionnaire of parental attitudes, the majority of which have improved. This is in line with research that states the need for efforts to increase parental knowledge about the management of febrile seizures in children at home by providing counseling on the handling of febrile seizures, as well as explaining the benefits of regular treatment in children so that with proper treatment minimizes complications in children. (R. S. Sari et al., 2022)

CONCLUSION

Before health education was carried out on the attitude of parents in the initial treatment of febrile seizures in children, respondents had a sufficient attitude, namely 40 people (81.6%)

After health education on the attitude of parents in the initial treatment of febrile seizures in children, respondents had a good attitude, namely 45 people (91.8%)

There was a significant influence between health education on the attitude of parents in the early treatment of febrile seizures in children in the Children's Room of Toto Kabila Hospital with the value of the Wilcoxon test result being $p\text{-value} = 0.000$ ($p < 0.05$).

ADVICE

For Educational Institutions

It is hoped that it can add information in the field of pediatric nursing and emergency nursing and the community, especially becoming a new knowledge base for students about the influence of health education on the attitude of parents in the early handling of febrile seizures in children.

Share Nursing Installations

It is expected to develop a routine health education program or brief counseling for each service related to the signs, symptoms of febrile seizures and early treatment or first aid that can be provided when a child has a febrile seizure to parents using leaflet, poster or other media

For the Next Researcher

The results of this study can be used as a reference in conducting similar research and add insight into knowledge related to the factors that affect the attitude of parents in the initial management of febrile seizures in children and can be a reference for future researchers by conducting further research by taking into account other variables and the media used can be added or use other media to support and increase the knowledge of the respondents later.

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