Journal Of Global Research Publications

Volume 2 ; Number 1 ; January 2025 ; Pages 42-54
Doi : https://doi.org/10.59435/jgrp.v2i1.2025.70
Web: https://journal.padangtekno.com/index.php/jgrp
E- ISSN: 3032-372X

Parents' Knowledge Level About First Aid For Children Experiencing Fever Seizures In Sei Mencirim Village, Sei Mencirim Public Health Center, Sunggal District, Deli Serdang Regency In 2025

Nove Kasman Sarful Zendrato[1], Indra H. Perangin-angin[2], Ance M. Siallagan[3]

[123] Program Studi Sarjana Keperawatan, Sekolah Tinggi Ilmu Kesehatan, Santa Elisabeth Medan, Indonesia
*novekasmanzendrato@gmail.com

ABSTRACT

Febrile seizures are a common emergency in children aged 6 months to 5 years and can cause significant anxiety in parents. Proper early management of febrile seizures largely depends on parent's knowledge as the primary caregivers. Inadequate knowledge may lead to inappropriate first aid measures that can worsen the child's condition. This research aims to identify the level of parent's knowledge regarding first aid management for children experiencing febrile seizures in Sei Mencirim. This study uses a descriptive design method with a cross-sectional approach. The population in this study are all parents who brought their children for treatment to the Sei Mencirim Community Health Center in the last three months, wiht a sample of 36 respondents taken using an accidental sampling technique. The research instrument is a questionnaire consisting of 25 questions. Data analysis was carried out univariately to describe the level of respondents' knowledge. The results of the study show that parental knowledge based on the management of febrile seizures, parents have a good level of knowledge of 55.6%. Based on the administration during seizures, parental knowledge is in the sufficient category of 38.9%. Based on the administration of medication from the hospital after the child is treated, parental knowledge is in the good category off 66.7%. Based on information about seizures, parental knowledge is in the good category of 75.0%. concluded that the level of parental knowledge about first aid for children experiencing febrile is in the good category of 80.5%..

Keywords: Febrile Seizures, First Aid, Parental Knowledge

INTRODUCTION

Toddlers are at an age group that is highly susceptible to various health problems and is a crucial issue in the Indonesian health sector. During their growth and development phase, toddlers begin to actively interact and explore their surroundings (Valle et al., 2021). Their immature immune systems make them highly susceptible to various illnesses, including febrile seizures, which are caused by an increase in body temperature (above 5°C). 38 ° C) and various disease agents, including viruses, bacteria, and fungi, commonly affect children aged 6 months to 5 years (Darsini, Fahrurrozi, & Cahyono, 2019) . If not treated promptly and appropriately, this condition can cause panic among parents and ultimately lead to nerve damage. This condition is not only found in healthcare facilities but is also a leading cause of acute seizures in children and one of the most common causes of hospitalization (Anggraini & Hasni, 2022) .

Febrile seizures are a global problem generally considered a benign and relatively harmless health issue with a high risk of death if treated correctly, promptly, and appropriately. However, if left untreated, febrile seizures can recur, potentially leading to permanent brain damage and even death (Carroll, Schlundt, Bonnet, Mixon, & Williams, 2023) .

Children with a history of febrile seizures are at greater risk of experiencing another episode in the future. The general impact of parents witnessing their child experiencing a seizure can be frightening and traumatic, triggering anxiety, panic, and fear of the possibility of serious and recurring complications. The negative impacts of febrile seizures can be detrimental to a child's health, including the risk of dehydration, decreased oxygen levels in the body (hypoxia), and possible damage to the nervous system (neurological disorders) (Dhewa & Haryani, 2024) .

Febrile seizures have various causes (multifactorial), including genetic factors such as a family history of seizures, febrile seizures that appear due to a drastic increase in body temperature from the first day, brain immaturity, infections that attack the central nervous system, respiratory tract, and pneumonia. In general, febrile seizures occur due to infections outside the brain (extracranial), in this case the infection causes a sudden increase in body temperature, which is one form of the body's immune system response to infection which then triggers seizures (Dolorosa, Rosida, & Utami, 2023) .

In Sylviani's research (2021), it is estimated that there are around 1.5 million cases of febrile seizures in the United States each year, with most incidents occurring in children aged 6 months to 36 months, with the highest incidence recorded at around 18 months of age. The number of fever cases shows variation between countries (GC & HM, 2021) . In Western Europe and the Americas, the prevalence of febrile seizures is reported to range from 2% to 4% per year (Pokhrel, 2024). According to estimates from the World Health Organization, in 2022 there were around 18.3 million cases of febrile seizures worldwide, with around 154 thousand of them resulting in death (Gulo, Sinabariba, Sitepu, & Manik, 2023) . According to WHO data, there are an estimated 18 to 34 million cases of febrile seizures with an annual mortality rate of around 500-600 thousand people (Priono et al., 2024). In Asia, the highest incidence of febrile seizures is recorded in Guam at 14%, followed by India with an incidence rate of 5-10%, and Japan with a prevalence of 6-9%. Based on percentage data, approximately 3-4% of cases occur in children under 4 years of age, while approximately 6-15% occur in children after 4 years of age (M. K. Sari et al., 2021).

Data from the Indonesian Ministry of Health in 2020 showed that 271,066,36 toddlers in Indonesia were at risk of experiencing febrile seizures (Hastutiningtyas, Maemunah, & Susmini, 2022) . Cases of febrile seizures in Indonesia were reported to reach 6.5%, with 5 of 83 patients showing the development of febrile seizures that progressed to epilepsy. Approximately 16% of children with a history of febrile seizures are estimated to be at risk of recurrence. Based on epidemiological data, the age ranges most frequently experiencing febrile seizures are children aged 0-5 months, 36-47 months, and 48-59 months (Husni & Randi, 2024) . The prevalence of fever in Indonesia was recorded at 1.5%, which means there are approximately 1,500 cases of fever per 100,000 population. Based on national health survey data on children's health status, it is known that almost half of babies under 1 year (49.1%) and more than half of toddlers 1-4 years (54.8) are susceptible to disease, with a prevalence of febrile seizures of 33.4% in children 0-4 years.

Data shows that 72% of children aged 0-24 months in North Sumatra Province experience recurrent febrile seizures, with a higher prevalence in boys (73.8%) and those with a family history. Simple febrile seizures were recorded in 74.7%, with 65.2% occurring without a family history of epilepsy, and 76.7% occurring in children with a body temperature >38°C at the time of the first seizure (Ismael, Widodo, & Handryastuti, 2016).

According to Sianipar's research (Maghfirah & Namira, 2022), cases of febrile seizures in children in North Sumatra Province show a significant trend. In 2020, Dr. Pirngadi Medan Regional Hospital recorded 86 cases, while H. Adam Malik Medan Regional Hospital recorded 108 cases of febrile seizures in the pediatric ward from January to December 2020. In 2022, 16 cases of febrile seizures were recorded in children (Siregar, 2024). Based on a report from the North Sumatra Health Office (2023), the highest number of febrile seizure cases came from Deli Serdang Regency/City at 60.04%, followed by Tebing Tinggi at 24.93%, Langkat at 17.91%, and Pematang Siantar at 13.10% (Manchanayake, Bandara, & Samaranayake, 2020).

The causes of febrile seizures are generally caused by various multifactorial factors, including viral infections such as certain vaccines, genetic predisposition is a major risk factor that can affect the child's

nervous system which is still in the developmental stage and is susceptible to increased body temperature, intrauterine exposure such as maternal smoking and experiencing stress during pregnancy, a history of febrile seizures in first-degree relatives, and having second-degree relatives who also have a history of febrile seizures (Nabilah Siregar, 2022).

According to Tarhani et al., (Nada Syifa, 2025), medically, febrile seizures are classified into two categories: simple and complex. Simple febrile seizures usually occur once in 24 hours and last less than 15 minutes. In contrast, complex febrile seizures generally last longer, can involve more than one body part, and have the potential to recur within a single day. The lack of public knowledge, especially among parents, regarding the treatment of febrile seizures has serious implications for children's health . Lack of knowledge in providing appropriate treatment can result in febrile seizures not being optimally managed, such as permanent neurological damage, the emergence of epileptic disorders, and can even be life-threatening. Therefore, education and counseling regarding the early management of febrile seizures are crucial to reduce the risk of long-term complications (Nasriati & Verawati, 2020).

Repeated febrile seizures can have serious consequences for a child's brain development, including the risk of neurological complications. Furthermore, seizures can increase the risk of additional hazards such as aspiration or choking (Beal et al., 2018). The dominance of anaerobic metabolism can lead to metabolic disorders such as hypoxemia, hypercapnia, and lactic acidosis, followed by increased oxygen demand and intense skeletal muscle contractions, ultimately leading to systemic disorders such as apnea, especially in febrile seizures lasting more than 15 minutes (Purwaningtyas et al., 2019). This condition can also be accompanied by arterial hypotension, arrhythmias, and an increase in body temperature triggered by excessive muscle activity. These overall physiological responses lead to increased brain metabolism, which can ultimately lead to neuronal damage if seizures are not promptly treated (Pokhrel, 2024).

Parents play a crucial role in childcare because they are in the most intense physical and emotional proximity. Therefore, they are expected to possess the appropriate knowledge and attitudes to prevent and treat various illnesses in children. A lack of understanding or misconceptions regarding febrile seizures and their management can negatively impact the quality of life of both the child and the family as a whole. Therefore, parents' level of knowledge is a crucial factor influencing their attitudes and ability to provide initial treatment when a child experiences a febrile seizure (Nabilah Siregar, 2022).

Knowledge can be defined as the impressions in the mind obtained through stimuli and interpretations of the five human senses. Knowledge is the answer to various questions and problems that arise in life, encompassing all thoughts, conceptual ideas, concepts, and understanding. Furthermore, some viewpoints define knowledge as transformative information that has the potential to become a basis for action. Thus, mastery of knowledge empowers individuals to take action significantly or more optimally than individuals with less knowledge (Nelli & Ernawati, 2023).

In a study by Utami et al. (2021), the management of febrile seizures in the home environment is significantly influenced by the behavior of parents as the child's primary caregivers. This behavior is formed through the interaction of knowledge, attitudes, and motivation. Among these three aspects, parental knowledge plays a central role in determining the effectiveness of initial febrile seizure management. Mothers who have a good understanding of the seizure condition are able to make informed decisions and provide appropriate initial treatment for their children (Rohanah, 2024).

Parental knowledge about febrile seizures is very crucial and can have a significant positive impact in determining readiness and ability to respond to certain situations, including in emergency situations of febrile seizures in children (Oktavirela, Purwaningsih, & Zulfatunnisa, 2024). Parents' experience in providing first aid when their child experiences a seizure includes tilting the child's body, loosening clothing, and looking after the child during and after the seizure (Pasaribu & Siallagan, 2024) .

According to research by Kristianingsih (2021), the better a parent's knowledge of a disease or health problem, the more appropriate their response and actions in an emergency. Conversely, a lack of parental understanding can lead to errors in treatment, which can actually worsen the child's condition. Mothers who have an adequate understanding of febrile seizures and demonstrate a positive attitude in providing care are more likely to make informed decisions, both in providing first aid and in determining when their child needs to be taken to a health facility (Yesi Maifita, 2023).

Thus, febrile seizures are a condition that requires immediate treatment, and parental knowledge and attitudes regarding initial seizure management are crucial aspects to assess. Appropriate parental knowledge and attitudes play a crucial role in implementing initial treatment, thereby reducing the risk of complications resulting from febrile seizures (Perdana, 2022) .

On July 9, 2025, researchers conducted an initial survey of 10 parents at the Sei Mencirim Community Health Center using a questionnaire as a measuring tool (Beal et al., 2018). The study showed that most respondents did not know how to provide first aid when their child had a febrile seizure (Polit & Beck, 2018) . From the results of filling out the questionnaire, data was obtained that as many as 7 parents still carried out inappropriate actions, such as putting a spoon, finger, food, or drink into the child's mouth, not loosening clothing, and not taking body temperature. This indicates that they had not received information or direct experience regarding the treatment of febrile seizures. As many as 3 parents were able to provide assistance correctly because they had previously received education and information regarding the treatment (Pokhrel, 2024) .

Based on this background, the author wants to examine the level of parental knowledge about first aid for children experiencing febrile seizures in Sei Mencirim Village, Sei Mencirim Health Center, Sunggal District, Deli Serdang Regency in 2025.

METHOD

Research design is the process of researchers determining the methods, approaches, and procedures for implementing a study so that it can proceed systematically and in accordance with the objectives to be achieved. (Nursalam, 2020). This study was designed to apply a descriptive design based on a cross-sectional approach. The descriptive design aims to describe the level of parental knowledge about first aid for children experiencing febrile seizures in Sei Mencirim Village, the working area of the Sei Mencirim Community Health Center, Sunggal District, Deli Serdang Regency in 2025. This study uses a cross-sectional approach, so the data is collected only once at one time without any follow-up, so that the conditions or characteristics of the respondents at that time can be seen (Polit & Beck, 2018) .

A population is defined as a collection of individuals or objects that share common characteristics and become the focus of observation in research (Polit, D. & Beck, 2018). The population in this study was all parents who brought their children for treatment to the Sei Mencirim Community Health Center in the last 3 months (April-June 2025) with a percentage of 116 people, so the average per month is 39 people (Pratikwo & Hartono, 2021) .

A sample is a portion of a population that is considered capable of representing the entire population. The sampling technique used in this study is non-probability sampling, with the accidental sampling method (also known as convenience sampling), which is a sample selection method carried out based on subjects who are coincidentally encountered by the researcher at a certain time at the research location, and are willing to participate as respondents in the research (Priono & Nurhayati, 2024) .

The research location was carried out at the Sei Mencirim Community Health Center, Sunggal District, Deli Serdang Regency in 2025. The reason the author chose this area was because there were still cases of children experiencing febrile seizures, so further understanding was needed regarding information and parental perceptions regarding first aid for children experiencing febrile seizures, both by health workers and the community (Kable et al., 2024).

The data collection method in this study used primary and secondary data, utilizing questionnaires as the data source. Primary data was obtained directly by the researcher from the children's parents when the researcher distributed the questionnaires, and secondary data was obtained from the pediatric clinic at the Sei Mencirim Community Health Center regarding the number of children and data on those experiencing fever. (Ramanda, 2023) .

Data collection is a process of approaching research subjects and collecting various relevant characteristics of the subjects to support the implementation of the research (Ratna & Wijayaningsih, 2022) . Data collection in this study was carried out by distributing questionnaires to parents of children who came to the Sei Mencirim Community Health Center for treatment or during Posyandu service activities at the Sei Mencirim Community Health Center. Data processing is the next stage in the research process, carried out after data collection. The raw data obtained is systematically organized, classified, and analyzed to obtain

relevant and meaningful information (Purwaningtyas et al., 2019). This stage also includes the process of organizing the information methodologically in accordance with the research objectives, research questions, and established hypotheses.

RESULTS AND DISCUSSION

Sei Mencirim Community Health Center was established in 1979 with a land area of 1604.28 M ^{2} . Sei Mencirim Community Health Center has a working area in part of Sunggal District which oversees seven villages and is located on Jl. Purwo Sei Mencirim Village with an area of 2,150 Ha, the working area of Sei Mencirim Community Health Center has a working range of boundaries, namely: bordering the northern part of Sei Semayang Village, the southern part borders Pancur Batu District, the eastern part borders Payageli Village, and the western part borders Kutalimbaru District. In 2017, the Sei Mencirim Community Health Center building was added with 2 floors which came from the Sei Mencirim Village APBD funds (Rohanah, 2024) .

This community health center is one of the community health centers classified as a first-level health facility under the auspices of the Deli Serdang District Health Office as a form of health service to the community with the Vision: "Creating a Healthy, Smart, Prosperous, Religious, and Sustainable Deli Serdang". The Mission of the Sei Mencirim Community Health Center is (Rupang, Simanullang, & Tamba, 2024) :

1. Healthy Public Services

Ensuring that all public services run effectively, transparently, and accountably for the sake of quality service to the public.

2. Healthy Society

Realizing a healthy and quality life through education, health, and character building in the community.

3. Healthy Economy

Supporting inclusive and productive economic growth that has a real impact on the wider community.

4. Healthy environment

Building a clean, safe and sustainable environment through an environmentally conscious approach.

Sei Mencirim Community Health Center, as a first-level health service facility, provides various basic health services that include public health efforts (UKM), essential and individual health efforts (UKP) which include: General medical services/general polyclinics, dental and oral health services, maternal and child health services (KIA) and family planning (KB), immunizations, nutritional services, environmental health services, disease prevention and control, elderly health services (LANSIA), simple laboratory and pharmacy, and is active in health promotion activities and health education to the local community. (Sari, Kurniawan, Ruminem, & Widiastuti, 2023) .

Geographically, the Sei Mencirim Community Health Center is the main community health center building that is strategically located, namely in the vicinity of the community's homes, especially residents of Sei Mencirim Village, with adequate road access, transportation can reach the Sei Mencirim Community Health Center (Siregar, 2024) . For the network, there are absolutely no obstacles that can disrupt access to the use of technology and communication tools for digital health services except during storms.

Research result

Research results of the level of parental knowledge about first aid for children experiencing febrile seizures in Sei Mencirim Village, Sei Mencirim Community Health Center, Sunggal District, Deli Serdang Regency in 2025. This research was conducted in November, with 36 respondents (Simamora, 2024) .

Respondent Demographic Data (Age, address, Education, occupation, gender) in Sei Mencirim Village, Sei Mencirim Health Center Area, Sunggal District, Deli Serdang Regency in 2025.

Table 1. Frequency Distribution and Percentage of Respondents' Demographic Data in Sei Mencirim Village, Sei Mencirim Community Health Center Area, Sunggal District, Deli Serdang Regency, 2025 (n=36).

Characteristics	F	%
Age:		
17-25 Years	8	22.2
26-35 Years	22	61.1
36-45 Years	6	16.7
Total	36	100.0
Address:		
Sei Mencirim Village	36	100.0
Total	36	100.0
Education:		
Elementary School	0	0
JUNIOR HIGH SCHOOL	6	16.7
High School/Vocational School	22	61.1
College	8	22.2
Total	36	100.0
Work:		
housewife	25	69.4
Private sector employee	2	5.6
Self-employed	4	11.1
Farmer	1	2.8
civil servant	2	5.6
Businessman	2	5.6
Total	36	100.0
Gender:		
Man	3	8.3
Woman	33	91.7
Total	36	100.0

Based on table 5.1, the demographic data classification of 36 respondents living in Sei Mencirim Village is that the largest age group is in the 26-35 year range of 22 people (61.1%), the smallest age group is 6 people (16.7%). The education level of respondents is dominated by high school/vocational school graduates as many as 22 with a percentage (61.1%) (Wicaksana, Hariastuti, & A., 2022) . Based on the type of work, the majority of the most work as housewives as many as 25 people (69.4%). Based on gender, female respondents are the largest group, namely 33 people with a percentage (91.6%) (Wahyuni, Yusriana, Husna, Clarissa, & Dwiyanti, 2023) .

Level of Parental Knowledge Based on Management of Febrile Seizures.

Table 2. Frequency Distribution and Percentage of Parents' Knowledge Level Regarding First Aid for Children Experiencing Febrile Seizures Based on Febrile Seizure Management.

Management of Febrile Seizures	F	%
Good	20	55.6
Enough	11	30.6
Not enough	5	13.9
Total	36	100.0

Based on the research results, most respondents showed a good level of febrile seizure management, namely 20 respondents (55.6%), Meanwhile, 11 respondents (30.6%) were in the sufficient category, while

respondents who were in the less category were 5 respondents (13.9%) (Widyaningsih, Wulandari, Kanita, & M., 2024) .

Level of Parental Knowledge Based on Medication Administration When Children Have Seizures.

Table 3. Frequency Distribution and Percentage of Parents' Knowledge Level Regarding First Aid for Children Experiencing Febrile Seizures and Administering Medication During Seizures.

Administering Medication During Seizures	F	%
Good	12	33.3
Enough	14	38.9
Not enough	10	27.8
Total	36	100.0

Regarding the frequency distribution related to drug administration during seizures, it can be noted that only 12 respondents (33.3%), 14 respondents with a percentage (38.9%) are in the sufficient category, Meanwhile, 10 respondents with a percentage (27.8%) are classified in the insufficient category. (Widyasari et al., 2023) .

Level of Parental Knowledge Based on the Administration of Medicines from the Hospital After Children Are Treated.

Table 4. Frequency Distribution and Percentage of Parents' Knowledge Level Regarding First Aid for Children Experiencing Febrile Seizures Based on the Administration of Medication from the Hospital After the Child Was Treated.

Administration of medication from the hospital after the child is treated	F	%
Good	24	66.7
Enough	10	27.8
Not enough	2	5.6
Total	36	100.0

Regarding the indicator of medication administration from the hospital after a child is admitted, the majority of respondents (24 respondents or 66.7%) were in the good category. Ten respondents (27.7%) were in the adequate category, and only two respondents (5.6%) were in the poor category.

Level of Parental Knowledge Based on Information About Seizures.

Table 5. Frequency Distribution and Percentage of Parents' Knowledge Level Regarding First Aid for Children Experiencing Febrile Seizures Based on Information About Seizures.

Information About Seizures.	F	%
Good	27	75.0
Enough	3	8.3
Not enough	6	16.7
Total	36	100.0

Based on the research results, researchers obtained information indicator data on seizures, indicating that the majority of respondents had a good level of knowledge, namely 27 respondents (75.0%). Three respondents (8.3%) were in the sufficient category, and six respondents (16.7%) were in the poor category. (Yunerta, 2021) .

Level of Parental Knowledge About First Aid for Children Experiencing Febrile Seizures in Sei Mencirim Village, Sei Mencirim Community Health Center, Sunggal District, Deli Serdang Regency, 2025

Table 6. Frequency and Percentage Distribution of Parents' Knowledge Level Regarding First Aid for Children Experiencing Febrile Seizures in Sei Mencirim Village, Sei Mencirim Community Health Center, Sunggal District, Deli Serdang Regency, 2025 (n=36).

Level of Knowledge	F	%
Good	29	80.5
Enough	6	16.7
Not enough	1	2.8
Total	36	100.0

Based on Table 5.6, the research shows that the level of parental knowledge is categorized as good at 80.6%, sufficient at 16.7%, and poor at 2.8% (Nursalam, 2020) .

Discussion of Research Results

Level of Parental Knowledge Based on Management of Febrile Seizures.

Based on table 5.2, the results of the study indicate that the majority of respondents showed a good level of febrile seizure management, namely 20 respondents (55.6%), indicating that more than half of the respondents were able to carry out febrile seizure management actions appropriately according to guidelines. The researcher assumes that with good parental knowledge in handling febrile seizures, it is possible to minimize the risk of complications or the risk of unwanted injuries from occurring. The researcher's opinion is supported by research (Paizer & Lindesi, 2022) entitled The Effect of Providing Health Education with Audiovisual Media on Family Knowledge in Handling Febrile Seizures in Children. A total of 11 respondents (30.6%) were in the sufficient category, which indicates that some respondents have understanding and skills that still need to be improved, this is supported by research (Handayani, 2024) that sufficient knowledge can be caused by a lack of information that can be accessed by parents both from health education and information from the media and people around them. Meanwhile, 5 respondents (13.9%) fell into the "less than" category, indicating a group that still lacks a proper understanding of the steps for managing febrile seizures. This is in line with research (Nasriati et al., 2020), which explains that the most common cause of errors in managing febrile seizures in children is a lack of family knowledge about febrile seizures, their factors, causes, and proper treatment methods before they are taken to the hospital. (Rahmawati et al., 2022).

Level of Parental Knowledge Based on Medication Administration When Children Have Seizures.

Regarding the frequency distribution related to medication administration during seizures, it can be noted that only 12 respondents (33.3%) were classified as good. This indicates that the level of compliance regarding medication administration procedures during seizures is still low. This is supported by research (Yesi Maifita, 2023) which explains that non-compliance is defined as not taking medication according to the dose (too much or too little), failing to administer medication correctly, not taking medication according to the time limit, taking or administering other medications that are not recommended. 14 respondents with a percentage (38.9%) were in the sufficient category, indicating that most respondents had a basic understanding but did not fully comply with standard medication administration procedures. Previous research has shown that patient understanding of medication administration instructions is often only at an intermediate level, so that not all aspects such as dosage, frequency, and duration are understood correctly (P, Gaol, & Tarigan, 2024) . Meanwhile, 10 respondents with a percentage (27.8%) were classified as poor, indicating that respondents did not have sufficient or almost no ability to administer medication correctly during active seizures. According to research (Margina et al., 2022), it is explained that giving medication during seizures is a treatment for febrile seizures in children which is very dependent on the role of parents, especially mothers. Lack of knowledge in administering medication regularly according to prescription can lead to changes or increases in medication dosage that are not actually necessary.

Level of Parental Knowledge Based on the Administration of Medicines from the Hospital After Children Are Treated.

Regarding the indicator of medication administration from the hospital after the child was admitted, the majority of respondents (24 respondents) were in the good category. This finding indicates that most

respondents had implemented the medical instructions given after the child's hospitalization. This opinion is supported by previous research that explains that when a child transitions from the hospital and returns home, the responsibility for administering medication falls to the child's primary caregiver, the parent. Therefore, nurses need to provide education to parents about dosage accuracy and medication administration (Carroll et al., 2023). Ten respondents (27.7%) were in the adequate category, indicating a group that still needs to improve their understanding of the follow-up treatment regimen. Previous research explains that one of the roles of nurses is as educators, where nurses demonstrate correct medication administration procedures and provide important information to parents aimed at supporting, guiding, and increasing individual knowledge in dealing with emergency situations (GC & HM, 2021). Only two respondents (5.6%) were in the poor category, indicating a relatively low level of compliance in this aspect.

Level of Parental Knowledge Based on Information About Seizures.

Based on the research results, researchers obtained information indicator data about seizures, indicating that the majority of respondents had a good level of knowledge, namely 12 respondents (75.0%). This percentage illustrates that the majority of respondents had obtained and understood information about seizures adequately. A total of 3 respondents (8.3%) were in the sufficient category, indicating that a small number of respondents had limited knowledge. Furthermore, 6 respondents (16.7%) were in the poor category, representing that some respondents still did not understand basic information regarding seizures.

Level of Parental Knowledge About First Aid for Children Experiencing Febrile Seizures in Sei Mencirim Village, Sei Mencirim Community Health Center, Sunggal District, Deli Serdang Regency in 2025.

After conducting research on the level of parental knowledge about first aid for children experiencing febrile seizures in Sei Mencirim Village, Sei Mencirim Health Center, Sunggal District, Deli Serdang Regency in 2025, it was found that 29 respondents (80.5%) had a good level of knowledge, 6 respondents (16.7%) had a sufficient level of knowledge, and 1 respondent (2.8%) had a poor level of knowledge. The results of this study indicate that the majority of parents have good knowledge about first aid for children experiencing febrile seizures (Putri, Chairani, & Utama, 2024) .

From the results of the study, the level of parental knowledge regarding first aid for children experiencing febrile seizures was higher, with 29 respondents (80.5%) having good knowledge. Researchers assume that the better the level of knowledge parents have, the greater the possibility of their capacity to understand and receive information about health so that clinical signs and symptoms can be recognized early before making the right decision in providing first aid and can apply it according to nursing practice standards (Hapsari & Hartiani, 2019). In addition, good knowledge can influence thought patterns in shaping parental behavior for preparedness in dealing with emergency problems such as serious health problems in their family members, as well as being more responsive in seeking additional information about health, so that it can support the actions taken to be appropriate and correct (Maya Puspitasari et al., 2024).

The researcher's opinion is supported by Pisyanidar's (2024) study, which found that mothers' knowledge of first aid for children was categorized as good. Good knowledge of how to treat febrile seizures can help reduce the incidence of febrile seizures in children. Parents who have received knowledge about how to treat febrile seizures from health workers can prevent negative impacts on their children (Kiviranta et al., 2024). Appropriate initial treatment includes remaining calm, lowering the child's body temperature, and positioning the child correctly to maintain their breathing (Margina, 2022) .

Knowledge is the answer to various questions and problems that arise in life, encompassing all thoughts, conceptual ideas, concepts, and understanding (Yang et al., 2022). Parental knowledge about febrile seizures is crucial and can have a significant positive impact on determining readiness and ability to respond to certain situations, including emergency situations involving febrile seizures in children (Sari et al., 2023).

The better the knowledge acquired, the more potential it has to provide a basis for action. Therefore, mastery of knowledge can empower individuals to take action significantly more effectively than those without it. Therefore, first aid administered to a child experiencing a febrile seizure can prevent mortality and morbidity from febrile seizures now or in the future (Margina et al., 2022).

CONCLUSION

1. Based on the management of febrile seizures, it was concluded that parents had a good level of knowledge, namely 55.6%.
2. Based on the administration of medication during seizures, it was concluded that parental knowledge was in the sufficient category, namely 38.9%.
3. Based on the provision of medication from the hospital after the child was treated, parental knowledge was in the good category, namely 66.7%.
4. Based on information about seizures, parents' knowledge in receiving and processing information is in the good category, namely 75.0%.
5. The level of parental knowledge regarding first aid for children experiencing febrile seizures in Sei Mencirim Village, Sei Mencirim Community Health Center, Sunggal District, Deli Serdang Regency in 2025, obtained results in the good category of 80.5%. Thus, it can be concluded that parental knowledge regarding first aid for children experiencing febrile seizures in the Sei Mencirim Community Health Center area is good
6.

BIBLIOGRAPHY

Anggraini, D., & Hasni, D. (2022). Scientific Journal Kejang Demam. *Sciena: Scientific Journal*, 327–333. Http://Journal.Scientic.Id/Index.Php/Sciena/Issue/View/4

Beal, T., Tumilowicz, A., Sutrisna, A., Izwardy, D., & Neufeld, L. M. (2018). A Review Of Child Stunting Determinants In Indonesia. *Maternal And Child Nutrition*, *14*(4), 1–10. Https://Doi.Org/10.1111/Mcn.12617

Carroll, A. R., Schlundt, D., Bonnet, K., Mixon, A. S., & Williams, D. J. (2023). Caregiver And Clinician Perspectives On Discharge Medication Counseling: A Qualitative Study. *Hospital Pediatrics*.

Darsini, Fahrurrozi, & Cahyono, E. A. (2019). Pengetahuan; Artikel Review. *Jurnal Keperawatan*.

Dhewa, A. P., & Haryani, S. (2024). *Prosiding Seminar Nasional Dan Call For Paper Kebidanan Pengelolaan Hipertermi Pada Anak Dengan Kejang Demam Di Ruang Dadap Serep Rsud Pandanarang Boyolali*. Universitas Ngudi Waluyo.

Dolorosa, M., Rosida, N. A., & Utami, R. D. P. (2023). *Pengaruh Pendidikan Kesehatan Menggunakan Media Audiovisual Terhadap Tingkat Pengetahuan Dan Sikap Orang Tua Dalam Penanganan Kejang Demam Pada Anak Di Posyandu Rw 05 Keprabon*. Universitas Kusuma Husada Surakarta.

G C, P., & H M, S. (2021). Study Of Febrile Seizures Among Children Admitted In A Tertiary Care Hospital. *Ip Journal Of Paediatrics And Nursing Science*.

Gulo, M., Sinabariba, M., Sitepu, A. B., & Manik, R. M. (2023). Gambaran Pengetahuan Ibu Tentang Penanganan Awal Demam Pada Balita Di Pmb Katarina P Simajuntak Dusun Iv Sei Mencirim Tahun 2023. *Jurnal Sosial Dan Sains*.

Handayani, R. N. (2024). *Pertolongan Pertama Anak Kejang Demam*. *3*(1). Https://Doi.Org/10.35960/Pimas.V3i1.1343

Hapsari, C. K., & Hartiani, F. (2019). Penerapan Prinsip Modifikasi Perilaku Untuk Meningkatkan Kemampuan Menyikat Gigi Pada Anak Dengan Disabilitas Intelektual Berat. *Jurnal Psikologi*, *17*(2), 119. Https://Doi.Org/10.14710/Jp.17.2.119-130

Hastutiningtyas, W. R., Maemunah, N., & Susmini, S. (2022). Pengetahuan Dengan Sikap Ibu Tentang Kejadian Kejang Demam Pada Anak Di Rumah Sakit Panti Waluyo Sawahan Malang. *Care: Jurnal Ilmiah Ilmu Kesehatan*.

Husni, A., & Randi, M. (2024). Jurnal Inovasi Global. *Jurnal Inovasi Global*.

Ismael, S., Widodo, H. D. P., & Handryastuti, I. M. S. (2016). *Penatalaksanaan Kejang Demam Rekomendasi*.

Ikatan Dokter Anak Indonesia.

Kable, J. A., Potter, A. S., Akshoomoff, N., Blasco, P. M., Bodson, S., Ciciolla, L., Degray, S., Hulce, Z., Kuschner, E. S., Learnard, B., Luciana, M., Perez, A., Novack, M. A., Riggins, T., Shin, S. Y., Smith, S., Vannest, J., & Zimak, E. H. (2024). Measurement Of Emerging Neurocognitive And Language Skills In The Healthy Brain And Child Development (Hbcd) Study. *Developmental Cognitive Neuroscience*, *70*(September). Https://Doi.Org/10.1016/J.Dcn.2024.101461

Kiviranta, L., Lindfors, E., Rönkkö, M. L., & Luukka, E. (2024). Outdoor Learning In Early Childhood Education: Exploring Benefits And Challenges. *Educational Research*, *66*(1), 102–119. Https://Doi.Org/10.1080/00131881.2023.2285762

Maghfirah, M., & Namira, I. (2022). Kejang Demam Kompleks. *Averrous: Jurnal Kedokteran Dan Kesehatan Malikussaleh*.

Manchanayake, M. G. C. A., Bandara, G. R. W. S. K., & Samaranayake, N. R. (2020). Patients' Ability To Read And Understand Dosing Instructions Of Their Own Medicines - A Cross Sectional Study In A Hospital And Community Pharmacy Setting. *Bmc Health Services Research*.

Margina, L. (2022). Pengetahuan Ibu Tentang Pertolongan Pertama Kejang Demam Pada Balita. *Ilmiah Mahasiswa Fakultas Keperawatan*, *6*(2), 123.

Maya Puspitasari, F., Viprindrartin, S., & Zainuri, Z. (2024). Strategy Analysis For Reducing Stunting In Acceleration Of Achievement Of Sustainable Development Goals Case Study In Jember District, East Java. *International Journal Of Regional Innovation*, *4*(3). Https://Doi.Org/10.52000/Ijori.V4i3.119

Nabilah Siregar, D. W. D. (2022). Hubungan Pengetahuan Dan Sikap Orang Tua Tentang Penanganan Pertama Kejang Demam Pada Anak Di Kabupaten Simalungun. *Jurnal Kesehatan Tambusai*.

Nada Syifa, D. A. (2025). Kejang Demam Pada Anak. *Unram Medical Journal*.

Nasriati, R., & Verawati, M. (2020). Hubungan Pengetahuan Keluarga Tentang Kejang Demam Dengan Perilaku Penanganan Kejang Demam Sebelum Dibawa Ke Rumah Sakit. *Health Sciences Journal*.

Nelli, S., & Ernawati, F. (2023). Hubungan Tingkat Pengetahuan Orang Tua Tentang Kejang Demam Dengan Kejadian Kejang Demam Pada Anak Usia 1-5 Tahun Di Uptd Puskesmas Penerokan Kecamatan Bajubang Kabupaten Batang Hari Provinsi Jambi. *Edidi Health And Nursing Journal (Shnj)*.

Nursalam. (2020). *Metodologi Penelitian Ilmu Keperawatan* (P. Lestari, Puji (Ed.); Aklia Susl). Salemba Medika.

Oktavirela, P., Purwaningsih, H., & Zulfatunnisa, N. (2024). Hubungan Tingkat Pengetahuan Orang Tua Dengan Penanganan Kejang Demam Pada Anak (The Relationship Between Parental Knowledge Level And Handling Of Febrile Seizures In Children At General Hospital Of Pku Muhammadiyah Delanggu). *Profesi (Profesional Islam): Media Publikasi Penelitian*.

P, I. H., Gaol, R. L., & Tarigan, R. B. (2024). *Gambaran Pengetahuan Keluarga Melakukan Pertolongan Pertama Kegawatdaruratan Kejang Demam Pada Balita Di Ruangan Santa Theresia Rumah Sakit Santa Elisabeth Medan Tahun 2023*. *4*, 7140–7153.

Paizer, D., & Lindesi, Y. (2022). *Pengetahuan Dan Tindakan Ibu Tentang Penatalaksanaan Kejang Demam Pada Anak*. *4*(2), 2018–2023.

Pasaribu, O. N. S., & Siallagan, L. (2024). Gambaran Pengetahuan Orangtua Terhadap Penanganan Kejang Demam Pada Anak Di Rumah Sakit Santa Elisabeth Batam Kota Tahun 2022. *Jurnal Cakrawala Ilmiah*, *3*(6).

Perdana, S. W. (2022). Penanganan Kejang Demam Pada Anak. *Jurnal Penanganan Kejang Demam*.

Pokhrel, S. (2024). No Titleελενη. *Αγαη*, *15*(1), 37–48.

Polit, D., & Beck, C. (2018). *Essentials Of Nursing Research: Appraising Evidence For Nursing Practice*

(Vol. 16, Issue 2).

Pratikwo, S., & Hartono, M. (2021). Pengaruh Pemberian Edukasi Kesehatan Dengan Media Audiovisual. *Jurnal Lintas Keperawatan*.

Priono, A., & Nurhayati, S. (2024). Penerapan Pendidikan Kesehatan Terhadap Pengetahuan Orang Tua Dalam Penanganan Kegawatdaruratan Kejang Demam Pada Anak. *Jurnal Cendikia Muda*.

Purwaningtyas, R. A., Barik, A. L., & Astuti, D. (2019). Obesity And Stunting In Childhood. Do Grandparents Play A Role? A Systematic Review. *Jurnal Ners*, *14*(3 Special Issue), 71–75. Https://Doi.Org/10.20473/Jn.V14i3.16986

Putri, M. V., Chairani, L., & Utama, B. (2024). Hubungan Tingkat Pengetahuan Ibu Dengan Ketepatan Penanganan Awal Kejang Demam Pada Anak. *Mesina (Medical Scientific Journal)*, *5*(1), 7. Https://Doi.Org/10.32502/Msj.V5i1.7885

Rahmawati, L., Sriwahyuni, S., & Silvia Putri, E. (2022). Factors That Affect The Incidence Of Stunting In Tooddlers Aged 6-59 Months. *Morfai Journal*, *2*(1), 51–60. Https://Doi.Org/10.54443/Morfai.V2i1.199

Ramanda, R. (2023). Penatalaksanaan Epilepsi. *Alomedika*, *4*, 137–143.

Ratna, R., & Wijayaningsih, K. S. (2022). Simulasi Pertolongan Pertama Pada Kegawatdaruratan. *Jurnal Abmas Negeri (Jagri)*.

Rohanah, T. (2024). Hubungan Pengetahuan Ibu Tentang Demam Dengan Perilaku Penanganan Kejang Demam Pada Balita Di Ruang Anak Rsud R. Syamsudin S. H. Kota Sukabumi. *Jurnal Health Society*.

Rupang, E. R., Simanullang, M., & Tamba, J. E. (2024). Hubungan Pengetahuan Perawat Dengan Penanganan Kejang Demam Pada Pasien Anak Di Rumah Sakit Santa Elisabeth Batam Kota Tahun 2022. *Jurnal Cakrawala Ilmiah*.

Sari, M. K., Satria, C. D., & Arguni, E. (2021). Predictors Of Infection In Children With Systemic Lupus Erythematosus: A Single Center Study In Indonesia. *Global Pediatric Health*, *8*, 2333794x2110056. Https://Doi.Org/10.1177/2333794x211005609

Sari, R. P., Kurniawan, Y., Ruminem, R., & Widiastuti, I. A. K. S. (2023). Description Of Parents' Knowledge About First Aid For Febrile Seizures At Home For Toddlers In The Melati Room Of The Hospital Abdul Wahab Sjahranie Samarinda. *Jurnal Kesehatan Pasak Bumi Kalimantan*.

Simamora, A. R. (2024). *Gambaran Tingkat Pengetahuan Tentang Penanganan Kejang Demam Pada Balita Di Ruang Santa Theresia Rumah Sakit Santa Elisabeth Medan Tahun 2024*.

Siregar, R. I. (2024). Gambaran Pengetahuan Dalam Penanganan Kejang Demam. *Wira Sakti*, *8*(2), 416–421. Https://Jurnal.Akperkesdamsiantar.Ac.Id/Index.Php/Wirasakti/

Valle, C. La, Chenausky, K., & Tager-Flusberg, H. (2021). How Do Minimally Verbal Children And Adolescents With Autism Spectrum Disorder Use Communicative Gestures To Complement Their Spoken Language Abilities? *Autism & Developmental Language Impairments*, *6*, 239694152110350. Https://Doi.Org/10.1177/23969415211035065

Wahyuni, F., Yusriana, Y., Husna, A., Clarissa, E. P., & Dwiyanti, W. (2023). Pendidikan Kesehatan Tentang Penanganan Pertama Saat Anak Mengalami Kejang Demam Di Rawat Inap Anak Rsup Dr. M. Djamil Padang. *Jurnal Abdi Masyarakat Indonesia*.

Wicaksana, D. P., Hariastuti, F., & A., K. B. (2022). *Pertolongan Pertama Kondisi Kegawatdaruratan: Prehospital*.

Widyaningsih, Wulandari, S. T., Kanita, K. N., & M., W. (2024). Upaya Peningkatan Kemampuan Orangtua Dalam Pertolongan Pertama Kegawatdaruratan Kejang Demam Pada Balita. *Jpm: Jurnal Pengabdian Masyarakat Yudhistira*.

Widyasari, A. K., Falaq, F. A., Khazanah, S. N., Kurniasih, R., Akhiroh, N., Setiyaningsih, F., Melani, F. D.,

Nitasari, D. A., Utami, W., & Riyanto, E. (2023). Penatalaksanaan Kejang Demam Pada Anak. *Jurnal Empati (Edukasi Masyarakat, Pengabdian Dan Bakti)*.

Yang, J., Hashemi, S., Han, W., Song, Y., & Lim, Y. (2022). Exposure And Risk Assessment Of Second- And Third-Hand Tobacco Smoke Using Urinary Cotinine Levels In South Korea. *International Journal Of Environmental Research And Public Health*, *19*(6), 3746. Https://Doi.Org/10.3390/Ijerph19063746

Yesi Maifita, M. Z. (2023). Hubungan Pengetahuan Ibu Dengan Penanganan Pertama Pada Balita Kejang Demam. *Jurnal Ilmu Kebidanan (Journal Of Midwifery Sciences)*, *7*(2), 7–11.

Yunerta, O. (2021). Tatalaksana Kejang Demam. *Jurnal Kedokteran Nanggroe Medika*, *4*(938), 6–37.