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THE EFFECTIVENESS OF ALLIN ESSENTIAL OIL COMPRESSES ON REDUCING BODY TEMPERATURE FOR FEBRILE INFANTS AGED 6-12 MONTHS IN THE POSYANDU BAWAL AREA ENVIRONMENT XIX BELAWAN BAHAGIA IN 2023

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Abstract

Fever is a condition of increasing body temperature beyond normal limits. Fever can cause damage to the nervous system and cause febrile seizures when the body is above 40°C, so it is very important to take proper and immediate action. Reducing the degree of heat of children who have fever can be physically (nonpharmacological) through evaporation and conduction methods in the application of heat energy. Shallots (Allium cepa ascalonicium variety) is a traditional feverreducing medicine in infants and toddlers. The purpose of this study was to determine the effectiveness of onion compress (Allin essential oil) on reducing body temperature in the Posyandu Bawal Area of Environment XIX Belawan Bahagia in 2023. This study used an experimental quasy research design with a one-group prepost test design. The population in this study amounted to 30 respondents. The sampling method used is nonprobality sampling with a total sampling type of 30 respondents. The method of collecting research data is using observation sheets for respondents' body temperature. The respondent's body temperature was measured using a thermometer, according to the SOP sheet. Based on the results of statistical analysis tests with paired sample tests, the T Test showed p-value = 0.000 < 0.05 Ho was rejected and Ha was accepted where before giving onion compresses the majority of body temperature was at 37.5 ° C as many as 6 people (20%) and after giving onion compresses the majority of body temperature was at temperature 36.5°C as many as 8 people (24.7%), so it was concluded that there was an effectiveness of onion compresses on reducing body temperature in febrile infants aged 6-12 months Area of Posyandu Bawal Environment XIX Belawan Bahagia.

Keywords: ***Compress Shallots, body temperature, Baby Fever***

INTRODUCTION

Fever is a condition of increasing body temperature beyond normal limits. Each person's body temperature normally ranges from 36.5□C to 37.5 □ C and is categorized as fever when a person's body temperature is >37.5□C (Dzulfajiah, 2017). Fever is the body's normal reaction when it detects an infection. Infection is a condition of entry of foreign objects into the body, ranging from viruses, germs, bacteria, parasites and fungi. The cause of fever occurs due to excessive hot weather (*Overhating*), high and low temperatures, lack of fluids, reactions after immunization, allergies due to abnormal reactions of the immune system, as well as side effects of certain drugs (Carlson &; Kurnia, 2020). WHO or "World Health Organization" explained that in 2020 the number of fever sufferers was recorded at 11 to 20 million people and is predicted to claim between 128 to 161 thousand lives per year. It is estimated that in Indonesia between 80,000 to 100,000 people get fever every year, the number of fever sufferers in Indonesia than other countries is fairly high between 80 to 90%. However, all recorded were low-grade fevers. According to IDHS or "Indonesian Health Demographic Survey" (2017), infants under 5 years old 31% have fever and infants aged 6 to 23 months whose vulnerability is higher by 37% and as many as 74% are rushed to health facilities (Ministry of Health RI, 2020). Where in general, babies are very susceptible to disease, one of which is fever. In Indonesia, fever cases occur in various diseases. The number of incidents in 2018 there were 65,602 incidents, and there were 467 deaths

in Indonesia. There is a morbidity rate below 49/100,000, the number of people has shrunk from 30 to 26 provinces.

The number of fever morbidity in Central Kalimantan province is 84.39/100,000 people, while the highest quantity of fever morbidity is in East Kalimantan province, which is 87.81/100,000 people, and Bengkulu is 72.28/100,000 people. While in North Sumatra province in 2018 there were 7,584 cases. Fever in infants causes dehydration due to lack of fluid in the body. Fever can cause damage to the nervous system and cause *febrile seizures (febrile convulsion*) when the body is above 40□C, so babies who have fever are very important to take proper and immediate action (Tri & Retno, 2023). Reducing the degree of heat of children who have fever can be physically (non-pharmacological) through evaporation and conduction methods in the application of heat energy. Temperature transfer through two objects by direct touch is a conduction method. Heat transfer occurs when warm skin touches warm ones through evaporation, and heat energy exchanges into gases (Ethics, 2023). Residents with environmental and financial conditions are classified as not too high as in the village using shallots in the form of compresses with minimal side effects to reduce body temperature in children with fever without the presence of chemicals.

Heat dissipation is controlled by the anterior hypothalamus with changes in the size of veins and vasodilation or expansion of blood vessels and inhibited heat formation. The release of temperature from the skin will accelerate through sweat and enlarged pores where body temperature conditions become normal (Etika, 2023). Shallots (*Allium cepa ascalonicium variety*) is a traditional fever-reducing medicine in infants and toddlers. Red onions contain *Allylcysteine Sulfoxide* (Alliin) or organic sulfur compounds that can break blood clots so as to make blood circulation stable. Red onions also contain phlorogusin, essential oils, methylalin, quercetin, cycloaliin, and kaempferol to lower body temperature. Shallot clothesline on the body will accelerate the transfer of heat from the body to the skin (Pebriani, Hansayani, Kusvitasari, 2023). Based on the results of research conducted (Putri & wulan, 2022), the average heat degree of patients pre-treated compresses 37.8□C and post-applied onion compresses was 36.5□C. This indicates a difference before and after compresses with shallots. Similar research conducted by (Juniah &; Siahaan, 2020), the results showed that pre-treatment results of compresses body temperature 37.5 □ C and after compresses with shallots there was a lowest temperature of 36.0 □ C. The treatment of onion compresses reduced the body temperature of respondents to normal points.

Research conducted by (Ima &; Magdalena, 2023) found that the average body temperature in children after pre-treatment DPT HB immunization was 38.137□C and after compression treatment with shallots, the body temperature was 37.163□C. Similar research conducted by (Kailasari, Cahyaningrum, and Suryani, 2023), the results showed that the average pre-treatment result of onion compress was 37.98□C and post-treatment onion compress 37.47□C. Based on an initial survey collected by researchers in the Posyandu Bawal Area of Environment XIX Belawan Bahagia obtained data from interviews with 5 mothers, some mothers think that fever in infants is caused by several factors such as the dirty environment of the community on the sea coast. The dirty environment makes the spring water source unclean. Hot weather and people who do not support healthy living are the causes of babies often experiencing fever. Because of this, some mothers give onion compresses to reduce fever in babies. Based on the explanation above, the author's interest in conducting research "The Effectiveness of Shallot Compress (*Allin Essential Oil*) Against Reducing Body Temperature of Febrile Infants Aged 6-12 Months in the Posyandu Bawal Area of Environment XIX Belawan Bahagia in 2023".

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Problem Statement

Based on the problems described earlier, the problem formulation was formulated "how is the effectiveness of onion compresses (*Allin essential oil*) against reducing body temperature of fever babies aged 6-12 months in the Posyandu Bawal Environment XIX Belawan Bahagia Area in 2023".

Research Objectives

The following are the objectives of this research based on the formulation of the problem above:

General Purpose

The purpose of this study is to determine the effectiveness of onion compresses (*Allin essential oil*) against reducing body temperature of fever infants aged 6-12 months in the Posyandu Bawal Area of Environment XIX Belawan Bahagia in 2023.

Special Purpose

The specific objectives of this study are:

1. Knowing the body temperature of fever babies aged 6-12 months before giving onion compresses in the Bawal Posyandu Area of Environment XIX Belawan Bahagia.

2. Knowing the body temperature of fever babies aged 6-12 months after giving onion compresses in the Posyandu Bawal Area of Environment XIX Belawan Bahagia.

3. Knowing the effectiveness of *onion compress (Allin essential oil*) against reducing body temperature of fever babies aged 6-12 months in the Posyandu Bawal Area of Environment XIX Belawan Bahagia.

Research Benefits

It is expected that this research will be able to contribute in terms of:

1. Educational Institutions
   Used as teaching material in the learning process and adding references to the education for midwifery students regarding the effectiveness of onion compresses on reducing the body temperature of babies who have fever.
2. Research Place
   It is hoped that it can be used as an addition or guide as a basis for evaluating awareness of the use of onion compresses to reduce the body temperature of babies who have fever.
3. Next Researcher
   Provide increased and additional knowledge related to the level of effectiveness of onion compresses on reducing body temperature of babies who have fever.

LITERATURE REVIEW

Temperature is a quantity that expresses the heat or cold of an object. Heat is thermic energy thatflows from one- object to another due to t emperature differences. Naturally, heat flows from high-temperature objects to lower-temperature objects.- Body temperature is defined as one of the vital signs that describe the health status of a person(Yondry, et al, 2020). The normal temperature range will drop gradually until a person approaches old age. The baby's body temperature can respond drastically to changes in environmental temperature. Heat production will increase as the baby grows into children. Basically, the normal temperature in infants and children ranges from 36.6°C – 37°C, itis said to be fever when the body temperature rises to more than 38°C, if measured from the anus (rectal temperature), 37.5°C if measured from the mouth (oral temperature), or 37.2°C, if measured from the armpit (axillary temperature) (Cahyaningrum, et al,

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2023). Fever is the body's normal response to infection. Infection is the state of entry of microorganisms into the body, can be viruses, bacteria, parasites, or fungi. Fever in children is generally caused by viral infections. Fever can also be caused by excessive heat exposure (overhating), dehydration or lack of fluids, allergies or due to immune system disorders. Reducing or controlling and controlling fever in children can be done in various ways, including antipyretic (pharmacological) administration.

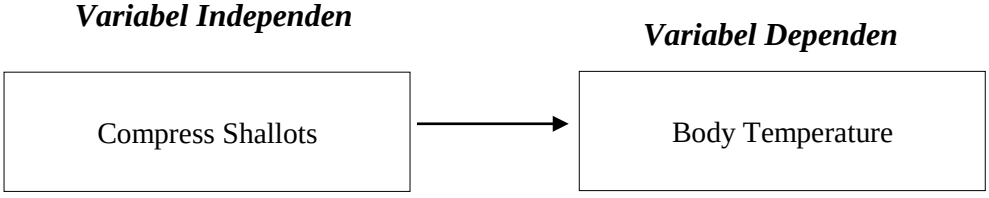
Antipyretics work centrally by lowering the temperature-regulating center in the hypothalamus, which follows physiological responses including decreased heat production, increased blood flow to the skin, as well as increased heat release through the skin by radiation, convection, and evaporation. However, the use of antipyretics has side effects if not given properly, which results in bronchial spasm, gastrointestinal circulation, decreased kidney function and can block the suppression of serum antibody responses. Antipyretics (paracetamol and ibuprofen) should not be routinely used with the sole purpose of reducing body temperature in children with fever. In addition to the use of antipyretic drugs, lowering body temperature can be done physically (non-pharmacologically), namely by using heat energy through conduction and evaporation methods. The conduction method is the transfer of heat from another object by direct contact. When warm skin touches the warm one, heat transfer will occur through evaporation, so that heat energy transfer turns into gas.

How to reduce or control fever in children with conduction and evaporation methods can also be done with traditional medicine. Traditional medicine is medicine that is processed traditionally and taught for generations based on ancestral recipes, customs, beliefs or local customs. From the results of various studies, traditional medicine is proven to have minimal side effects even without causing side effects, because the chemicals contained in traditional medicinal plants can mostly be digested by the body. In addition, the price is cheap and affordable for every circle of society and easy to get because the amount is abundant. One of the traditional remedies that can be used to control fever is onion (Allium Cepa var. ascalonicum). Red onions contain organic sulfur compounds, namely Allylcysteine sulfoxide (Alliin). Shallots that are crushed will release the enzyme alliinase which functions as a catalyst for alliin which will react with other compounds such as skin that functions to destroy blood clots (Rifaldi &; Wulandari, 2020). The mechanism of decreasing body temperature when given onion compresses that are applied throughout the child's body will make the veins change size which is regulated by the anterior hypothalamus to control heat expenditure, resulting in vasodilation (dilation) of blood vessels and inhibition of heat production (Nur &; Indri, 2020).

METHOD

Research Type and Design

This research applies quantitative research with *quasi-experimental* design through the technique of "one-group pre-test and post-test design" (Notoatmodjo, 2018). By involving one experimental group. The results of the study were obtained by looking at the differences before and after the treatment of the research sample.



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Place and Time of Research

Research Sites

This research place is held in the Posyandu Bawal Area of Environment XIX Belawan Bahagia in 2023. The reason for choosing a research place in the Posyandu Bawal Area of Environment XIX Belawan Bahagia is because this region has problems with babies often having fever from various factors.

Research Time

The study will be conducted in January-February 2024.

Population and Research Sample

Population

Population is the scope of groups that have their own qualities and characteristics applied by a researcher to be studied and concluded (Sugiyono, 2020). In this study, the population taken was 30 mothers who had babies in the Posyandu Bawal Area of Environment XIX Belawan Bahagia.

Sample

Samples are some of the numbers and traits possessed by the population (Sugiyono, 2020). The sampling technique of this study is a Nonprobability sampling technique with the type of Total Sampling. The study sample was 30 infants who had a fever aged 6-12 months in the Posyandu Bawal Area of Environment XIX Belawan Bahagia.

The following are the characteristics of inclusion and exclusion in the study:

a. Inclusion Characteristics

Inclusion characteristics are the general characteristics of research subjects from the population to be reached and observed.

1. Parents are willing for their children to be respondents.
2. Babies who have a fever with a body temperature of 37.5□C-38.5□C.
3. Infants aged 6-12 months.

b. Exclusion Characteristics

Exclusion characteristics are characteristics that do not meet the inclusion requirements and must be eliminated because they do not qualify.

1. Babies who do not follow the intervention to the end.
2. Parents do not want their children to be respondents.
3. Babies who do not have a fever.

Data Collection Methods

Primary Data

It is data obtained and processed by researchers without intermediaries which are obtained from sources. Data collection activities were carried out through assessment sheets containing interviews, and observation sheets by making direct observations before and after applying onion compresses.

Secondary Data

It is data obtained indirectly. Data collection begins with a letter of recommendation for permission to carry out research from an educational institution of the Bachelor of Midwifery study program, Faculty of Nursing and Midwifery, Universitas Prima Indonesia.

Measurement Aspect

Aspects of the effectiveness of onion compresses (*Allin essential oil*) on reducing body

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temperature of fever infants aged 6-12 months in the Posyandu Bawal Area of Environment XIX Belawan Bahagia. The measuring instrument used uses an observation sheet. SOP for giving onion compresses and digital thermometers.

Variable	Definition	Parameters	Measuring Instruments	Measurement Results	Scale
Independent Variable Onion compress	Methods of treatment of body temperature with non-pharmacological therapy to restore body temperature	Shallot compress is done 1 time a day for 3 consecutive days for 15 minutes on the baby's stomach	SOP for applying onion compresses	Implemented	Nominal
Dependent Variable Decrease in body temperature	Body temperature conditions that explain the heat and cold of the baby's body before and after onion compresses	Each respondent checked body temperature before and after the onion compress to determine the difference in body temperature	1.Digital thermometer 2. Observation Sheet	1. Decreased : if body temperature 36.5□C-37.5□C 2. Does not decrease : if the body temperature is 37.5□C-40□C	Interval

Data Processing and Data Analysis Techniques

Data Processing Techniques

The data that has been collected is processed manually, namely:

a. Editing

Editing is checking and correcting the contents of a form or study sheet, observation sheet.

b. Cooding

In this process the researcher performs the code, which is to modify the data of the alphabetical form or words into numerical data.

c. Entry

If the data is correct, enter the data to be processed into the computer after editing and cooding.

d. Data Cleaning

After the data is entered, it will be reviewed so that there are no code errors, incomplete, and so on.

Data Analysis

Univariate Analysis

Univariate analysis of research results is carried out on each variable to determine the frequency distribution and percentage of each research variable.

Bivariate Analysis

Bivariate analysis in the study showed a relationship between *the independent* variable and the *dependent* variable , with the *Shapiro-Wilk* test, due to the number of samples less than 50.

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According to the results of the normality test between groups, the value of p <0.05 so that the statistical test used is the *paired T Test.*

RESULTS AND DISCUSSION

Univariate Results

Table 1. Frequency Distribution of Characteristics of Respondents Mothers with Babies Aged 6-12 Posyandu Bawal Area Ward XIX Belawan Bahagia February 2024.

No	Characteristics of Respondents	Frequency *(f)*	Percentage (%)
1	**Mother's Age**		
	18-25 Years	8	26,7
	26-35 Years	16	53,3
	36-45 Years	6	20
	Total	30	100
2	**Mother's Last Education**		
	Primary School	17	56,7
	Junior High School	9	30
	Vocational High School	4	13,3
	Total	30	100
3	**Mother's Work**		
	Not Working	25	83.3
	Work	5	16,7
	Total	30	100

Based on Table 1, it is known that the majority of maternal age is at the age of 26-35 years as many as 16 people (53.3%), and the minority of maternal age is at the age of 18-25 years as many as 8 people (26.7%). The last level of education of the majority of mothers is elementary education as many as 17 people (56.7%), and the minority level of vocational education as many as 4 people (13.3%). The majority of mothers work for non-working mothers (83.3%), and the minority of working mothers are 5 (16.7%).

Table 2. Frequency Distribution of Characteristics of Infants Aged 6-12 Months in the Posyandu Bawal Area of Environment XIX Belawan Bahagia February 2024.

No	Characteristics of Respondents	Frequency *(f)*	Percentage (%)
1	**Gender**		
	Laki-Laki	14	46,7
	Perempuan	16	53,3
	Total	30	100
2	**Infant Age**		
	6	7	23,3
	7	5	16,7

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8	4	13,3
9	2	6,7
10	4	13,3
11	3	10
12	5	16,7
Total	30	100

Based on table 2, it is known that the majority of babies are female as many as 16 babies (53.3%) and the minority of male babies as many as 14 babies (46.7%). The majority of infants aged 6 months as many as 7 babies (23.3%) and the minority aged 9 months as many as 2 babies (6.7%).

Table 3. Frequency Distribution of Body Temperature Before Giving Shallot Compresses to Infants Aged 6-12 Months in the Posyandu Bawal Area XIX Belawan Bahagia Environment.

No	Body Temperature	Frequency *(f)*	Percentage (%)
1	37,5°C	6	20
2	37,6°C	3	10
3	37,7°C	2	6,7
4	37,8°C	4	13,3
5	38,0°C	4	13,3
6	38,2°C	2	6,7
7	38,4°C	3	10
8	38,6°C	2	6,7
9	38,8°C	4	13,3
	Total	30	100

Based on table 3, it is known that the majority of temperatures before applying onion compresses were at 37.5 ° C as many as 6 people (20%), and the minority temperatures before giving shallot compresses were at temperatures of 37.7 °C, 38.2 ° C and 38.6 ° C each amounting to 2 people (6.7%).

Table 4. Frequency Distribution of Body Temperature After Giving Shallot Compresses to Infants Aged 6-12 Months in the Posyandu Bawal Area of Environment XIX Belawan Bahagia.

No	Body Temperature	Frequency *(f)*	Percentage (%)
1	36,5°C	8	26,7
2	36,6°C	6	20
3	36,7°C	2	6,7
4	36,8°C	4	13,3
5	37,0°C	4	13,3
6	37,2°C	3	10
7	37,8°C	3	10

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Total	30	100

Based on table 4, it is known that the majority of temperatures after applying onion compresses are at 36.5 ° C as many as 8 people (26.7%). And the minority temperature after applying onion compresses was at a temperature of 36.7 ° C as many as 2 people (6.7%).

Bivariate Results

Table 5. The Effectiveness of Shallot Compress (*Allin Essential Oil*) on Reducing Body Temperature of Fever Infants Aged 6-12 Months Before (pretest) and After (posttest) in the Posyandu Bawal Area XIX Belawan Bahagia Environment.

Group	N	Shallot Group		*p-value*
		Mean	Std. Deviation	
Pretest	30	2,00	0,000	0,000
posttest	30	2,10	0,305	

Based on table 5 shows the effect of onion compress on reducing body temperature in feverish children. Based on the results of the T-test, *a p-value* of 0.000 was obtained, which means a p-value of <0.05 so that it can be concluded that Ho was rejected and Ha was accepted, which means there is an effectiveness of onion compresses against reducing body temperature in febrile infants aged 6-12 months.

Discussion

Body Temperature before giving Red Onion Compress to Baby

The results of research that has been carried out in the Posyandu Bawal Area of Environment XIX Belawan Bahagia before giving onion compresses there were 30 babies who had fever where the highest body temperature level was at a body temperature of 37.5° C as many as 6 people. Body temperature results in infants aged 0-12 months who experience fever are observed first using a thermometer in the axillary part. The results obtained from this study are in accordance with Hayuni's findings, 2019 showed that the temperature of toddlers with fever before applying the most onion compresses was at a temperature of 37.3 ° C and 38.0 ° C each of 4 respondents, the least temperature of respondents at 39.0 ° C and 38.9 ° C of 1 respondent each, temperatures of 39.4 °C and 37.8 °C of 3 respondents each and temperatures of 37.2 °C and 38.6 °C of 2 respondents each.

Fever is a condition where it is higher than normal, and is a symptom of an illness. Body temperature can be said to be normal if it is in the range of 36.5 ° C-37.5 ° C, if the temperature exceeds the normal range it can be said to be fever. Fever occurs due to the body's normal response to infection. Infections that occur due to microorganisms that enter the body are in the form of viruses, fungi, parasites, and bacteria. Fever is also caused by excessive heat exposure (overating), dehydration or lack of fluids in the body (Pratiwi, 2021). Based on the researchers' assumption that fever in infants is also caused by erratic weather. In addition, fever can also be caused by germ and bacterial infections that can be seen from the baby's hygiene and the surrounding environment, causing babies to easily experience increased body temperature so that babies are given antipyretic drugs to infants. There is a state of irregular increase in body temperature, because it is caused by an imbalance between the production and the heat limiter.

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Body Temperature after giving Onion Compress to Baby

The results of research that has been carried out in the Posyandu Bawal Area of Environment XIX Belawan Bahagia after giving onion compresses decreased body temperature to normal by 27 people with the majority being at a body temperature of 36.5 ° C as many as 8 people (24.7%) and the minority at a body temperature of 36.7 ° C as many as 2 people (6.7%). After giving onion compresses there were 3 people (10%) who did not experience a decrease in body temperature to a normal limit of being at a body temperature of 37.8 ° C, caused by mothers who did not give shallot compresses optimally, unclean community environments, mothers who did not support healthy living and other health factors. The results obtained from this study are in accordance with the findings of Amalia, 2019 showed that the temperature of toddlers with fever after being given the most onion compresses was at a temperature of 36.6 ° C and 37.0 ° C each of 4 respondents, temperatures of 36.8 ° C and 37.8 ° C of 3 respondents each, temperatures of 36.5 ° C and 37.2 ° C of 2 respondents each and temperatures at least at 37.5 ° C and 37.6 °C of 1 respondent each. Shallots mixed with telon oil are useful for preventing irritation of the baby's skin because red onions are rough. Shallot compresses also cause discomfort for babies who have fever due to their pungent smell, so the right time to give shallots is a maximum of 1 time a day and when the baby starts to fall asleep so that the baby is not fussy and easy to apply scouring shallots on the baby's body (Fitri Nurul, 2022). According to the assumption of researchers, the provision of onion compresses with grinding has been carried out by parents from ancient times to overcome fever in infants. The content owned by red onions is believed to be able to reduce the baby's body temperature. Usually parents grind red onions then mix with eating oil which is then applied to the baby's entire body.

Eeffectiveness of *onion compress (Allin Essential Oil*) against decreasing body temperature of infants aged 6-12 months

Based on the results of the statistical analysis test with paired sample test, the T Test showed a *p-value* = 0.000 < 0.05 so that it can be concluded that Ho was rejected and Ha was accepted, which means there is an effectiveness of onion compresses against reducing body temperature in febrile infants aged 6-12 months Posyandu Bawal Area Ward XIX Belawan Bahagia. Logaya, Magdalena, (2023) in her research showed the results obtained *p-value* = 0.000 < 0.05 so that it was concluded that giving onion compresses was effective in overcoming body temperature in infants after DPT HB immunization. The use of shallots as compresses in lowering the body temperature of children who have fever can be done by taking and washing shallots as needed, then sliced or coarsely chopped and mixed with VCO until evenly distributed.

Onion compresses are performed on the skin, responded by peripheral thermoreceptors then peripheral tells the hypothalamus to respond to stimuli present and can reduce skin temperature through the output of the sympathetic nervous system. Increased sympathetic activity to skin vessels results in vasoconstriction as a cold exposure response while decreased sympathetic activity causes vasodilation of skin vessels in response to heat exposure so that body temperature can be reduced and normal (Vedjia, Rizky 2020). Compresses can be done in the area of the forehead, armpits, and thigh folds. However, many studies state that in the axila area it is more effective to reduce body temperature in children with fever because in that area is an area that has large blood vessels. Blood vessels at the edge of the skin dilate until the pores become open which further facilitates the removal of heat from the body, so that the body can experience a decrease in body temperature (Nurma, 2020)

Based on the researchers' assumption that giving onion compresses is very effective in reducing body temperature in feverish babies, because after giving onion compresses for 15 minutes there appears to be a change in body temperature decrease, eyes do not redden, children are not fussy and already look relaxed. The onion sprinkling on the body will cause an acceleration

of heat transfer from the body to the skin. If shallots are used according to the right needs, then shallots are very effective in the body so that they can reduce body temperature in feverish babies, especially in children aged 6-12 months. Parents can use this onion to lower the baby's body temperature when feverish so as not to rely on the use of antipyretics. The use of onion compress is very easy to get in everyday life because the tools used are easy to find and very simple.

CLOSING

Conclusion

Basedon the results of the research conducted, it was concluded that:

1. Before applying onion compresses, the majority of body temperature was at 37.5 ° C as many as 6 people (20%).
2. After applying onion compresses, the majority of body temperature was at 36.5 ° C as many as 8 people (24.7%).
3. Based on the results of the T-test, a *p-value* of 0.000 is obtained which means a p-value< 0.05 so that it can be concluded that Ho is rejected and Ha is accepted, which means there is an effectiveness of onion compress against reducing body temperature in febrile infants aged 6-12 months.

Suggestion

1. For educational institutions, it is expected that educational institutions disseminate the results of this research to future students so that in the preparation of papers it is easier to use research on herbal medicine and provide opportunities for further students.

2. For research sites, it is hoped that it can be a study material in improving health promotion of herbal and complementary medicine to overcome fever in infants.

3. For further researchers, it is hoped that the results of this study can be used as basic data for future researchers, as well as continuing research on the side effects of onion compresses on infants and the comparison of the effect of onion compresses with other methods, which therapy is more effective for lowering body temperature in infants with fever.

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