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APPLICATION OF WATER TEPID SPONGE THERAPY PROCEDURES IN CHILD PATIENTS WITH FEVER FOR LOWERING BODY TEMPERATURE: LITERATURE REVIEW

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Keywords
Fever, Tepid Sponge, Son

ABSTRACT

Introduction
Fever is one of the most common signs when the body is fighting an invading infection. The fever that happens to a child needs a quick and proper hand. One of the independent and secure action of children is nonpharmacological action of water tepid sponge. Water tepid sponge USES a warm compression technique that combines block compresses in supervisor blood vessels with seka to increase body heat loss control to bypass evaporation and conduction.

Method(s)
The method used is the literature review method which aims to identify, evaluate and synthesize previous research journals with appropriate topics and titles.

Result(s)
The results of this literature review analysis from ten journals said that the water tepid sponge had a significant effect in reducing the body temperature of children with fever.

Conclusion(s)
Based on the results of ten journals that have been reviewed, it is said that the water tepid sponge is the right action because it has a large enough effect on reducing the temperature of children with fever. This study recommends water tepid sponge therapy as an action in handling children with fever.

INTRODUCTION

The human body is always unknowingly surrounded by pathogens and various things that lead to dangerous diseases. However, the human body has an immune system that is designed to fight various threats that cause these dangerous infections or diseases.

According to Harvard Medical School, fever is one of the most common symptoms when the body is fighting an infection. Fever is the body's natural process to fight infections that enter the body when the body temperature rises above normal body temperature (> 37.5°C). Fever usually occurs at a temperature > 37.2°C, due to infection (bacteria, viruses, fungi, or parasites), autoimmune disease, malignancy, or medication (Hartini, 2015).

According to the World Health Organization (WHO), the number of fever cases worldwide is estimated at 16-33 million cases and 500-600 thousand deaths per year (Wardiyah, 2016). However, fever can occur at any age in people and in infants to the elderly. Fever in infants and young children cannot be ignored. Fever in infants requires separate treatment that is very different from adults. Inappropriate, slow and inappropriate care and use causes disruption of the growth and development of the child's body and can even endanger the safety of the child's life. Fever carries the risk of serious illnesses such as febrile seizures in infants and is affected by age. Fever is usually harmless, but if the fever is very high and persists, it can be

dangerous for the child. Fever can have a negative impact on children, such as dehydration, lack of oxygen, nerve damage and seizures. Fever can harm children. Fever needs to be handled appropriately and correctly to minimize adverse effects on children (Cahyaningrum & Siwi, 2018).

Most parents, when they know their child has a high fever, prescribe

own fever-reducing medication without a prescription and a doctor's dose. Errors in giving the dose of a drug can cause other health problems in children. Another safer way to lower a child's body temperature, apart from prescribing fever-reducing medication and the right dose from the doctor, is to use a water tepid sponge.

Water tepid sponge is a procedure to improve the control of body heat loss through evaporation and conduction, which is usually done in patients with high fever. The purpose of giving a water tepid sponge is to reduce body temperature in patients with fever or hyperthermia (Hidayati, 2014). Based on the above context, the authors are interested in discussing the application of water tepid sponge therapy procedures in pediatric patients with fever to reduce body temperature.

METHODS

This study is a literature review research which means analyzing, criticizing, comparing, several studies that have been done previously related to the topic of applying water tepid sponge therapy procedures in pediatric patients to decrease body temperature. The framework used is using the PICOS formula. The strategy used to search for articles uses the PICOS framework formula, which consists of:

Population/problem is a population or problem that will be analyzed according to the theme that has been determined in the literature review. The population/problem in this study were pediatric patients with fever (> 37.5 °C). The description above is sufficient to explain the population/problem that will be analyzed according to the research theme by taking the population/problem in pediatric patients with fever.

Intervention is the action of implementing individual or community cases as well as presentation of study management in accordance with the themes that have been determined in the literature review. The intervention in this study was water tepid sponge therapy in reducing body temperature in pediatric patients with fever. The description above is sufficient to explain about the intervention that will be carried out according to the research theme with the following: taking a water edged sponge therapy intervention to reduce body temperature.

Comparation is an intervention or other implementation that is used as a comparison. If none could use the control group in the selected study. There is a comparison factor in this research. The description above is sufficient to explain the existence of a comparison factor that is used as a comparison in conducting interventions according to the research theme.

Outcomes are results or outcomes obtained in previous studies in accordance with the themes that have been determined in the literature review. The outcome of this study is the effect of the intervention of water Tepidjsponge therapy in reducing body temperature in pediatric patients with fever by obtaining a statistical test value of $p = 0.05$. The description above is sufficient to explain the outcome obtained in accordance with the theme if there is an effect of intervention on water tepid sponge therapy in pediatric patients with fever to reduce body temperature.

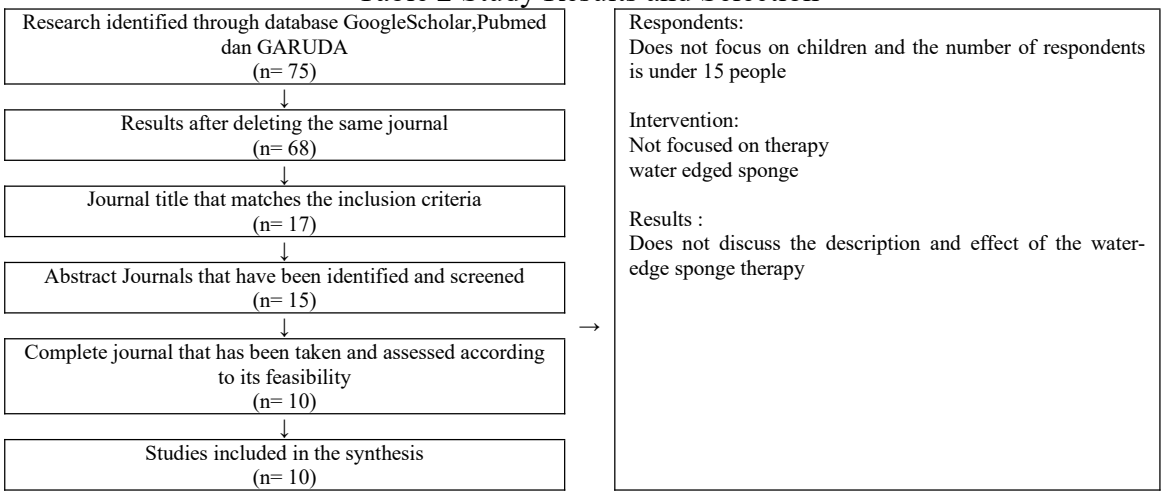
Study design is the research design used in the article to be reviewed. The study design in this research is quasi-experimental, pre-experimental and experimental. The description above is sufficient to explain the study design used with quasi-experimental, pre-experimental and experimental.

Table 1 Inclusion and Evclusion Criteria

Criteria	Inclusion	Exclusion
Population	Sample: Child (0-18 years) with fever (>37, 5 °C)	Sample: Besides child (0-18 years) with fever (>37,5°C)
Intervention	Water edged sponge therapy for reduce body temperature in pediatric patients with fever	Besides to water tepid sponge therapy, such as warm compresses, cold compresses and plaster compresses
Comparation	There is a comparison factor	No comparison factor
Outcome	Application of the water edged sponge therapy procedure in pediatric patients with fever to lower body temperature	Does not explain the application of the Water Edged Sponge therapy procedure to the patient with fever to lower body temperature
Study Design	Quasi experiment, pre experiment and experiment	Besides Quasi experiment, pre experiment and experiment

Publication Years	After 2012 to 2020	After 2021
Language	Indonesia and English	Besides Indonesia and English

Table 2 Study Results and Selection



RESULTS

Table 3 General Characteristic in Study Completion (n=10)

Category	N	%
Publication Year		
2012	1	10
2015	1	10
2017	4	40
2018	1	10
2019	1	10
2020	1	10
2022	1	10
Total	10	100
Water tepid sponge intervention	10	100
Total	10	100
Study Design		
Quasi Experimental Pre Test Post Test	3	30
Quasi Experiment Two Group Pre Test Post Test	1	10
Quasi Experiment One Group Pre Test Post Test	2	20
Descriptive with cross sectional	1	10
Quasi Experimental Pre-Post Test Non Equivalent Control Group	3	30
Total	10	100

The contributing factors in this study were quasi-experimental two group pre-test post-test, quasi-experimental one group pre-test post-test, quasi-experimental pre-test post-test, quasi-experimental pre-test post-test non-equivalent control group and descriptive cross-sectional. Overall, the research journal discusses the application and the effect of water tepidjsponge therapy on reducing body temperature in children with fever with the publication year 2012-2021.

Table 4 Implementation of The Water Tepid Sponge Procedure

No	Author and Year of Publishing Journal	Journal Title	Implementation of the water edged sponge
1.	Rana Ashshafa Nur Afrah, Faisal Kholid Fahdi, Suhaimi Fauzan (2017)	Pengaruh Tepid Sponge Terhadap Perubahan Suhu Tubuh Anak Usia Pra Sekolah dan Sekolah yang Mengalami Demam di RSUD Sultan Syarif Mohamad Alkadrie Kota Pontianak	The author does not describe the implementation of the water tepid sponge action, but the author explains that the duration of the intervention in providing water tepid sponge therapy carried out by the author was 15 minutes and the research was conducted at Sultan SyarifjMohamad Alkadrie Hospital, Pontianak City.
2.	Tia Setiawati, Yeni Rustina, Kurntarti (2015)	Pengaruh Tepid Sponge Terhadap Penurunan Suhu Tubuh dan Kenyamanan pada Anak yang Mengalami	Techniques for giving water tepid sponge action by applying warm water compresses all over child's body. The water temperature for compresses is between 30-35°C. and the action

No	Author and Year of Publishing Journal	Journal Title	Implementation of the water edged sponge
		Demam	was carried out for 20 minutes on each person and re-measured the temperature after 10 minutes after giving the water tepidjsponge action and the second temperature measurement 30 minutes after the first temperature measurement.
3.	Andi Akifa Sudirman, Dewi Modjo (2017)	Pemberian Tepid sponge Terhadap Penurunan Suhu Tubuh Pada Anak di Ruangan SP2KP Anak RSUD Prof. Dr. H. Aloei Saboe Kota Gorontalo	The author does not describe how the tepid sponge is implemented, but the author explains about the intervention of giving the Tepid Sponge for 15 minutes.
4.	Bartolomeus Maling, Ns.Sri Hayani S, S.Kep., Ns. Syamsul Arif, S.Kep.,M.Kes (2012)	Pengaruh Kompres Tepid Sponge Hangat Terhadap Penurunan Suhu TubuhjPada Anak Umur 1-10 Tahun Dengan Hipertermia (Studi Kasus di RSUD Tugurejo Semarang)	Giving waterjtepid sponge compress is done with a relatively short time to compress, which is 20 minutes. The water used by the author in carrying out the action of compressing the water Tepid Sponge is warm water with a temperature of 35°C. after giving the water tepid sponge the first temperature measurement was carried out 10 minutes after the completion of the action and the measurement was again after 30 minutes from the first measurement.
5.	Hera Hijria ni (2019)	Pengaruh Pemberian Tepid Sponge Terhadap Penurunan Suhu Tubuh Pada Anak Demam Usia Toddler (1-3 Tahun)	The application of the tepid sponge compress was carried out for 15 minutes, then the compression was stopped, a washcloth was taken and the body left open. This process will facilitate evaporation through the dilated skin of the surrounding environment to a maximum. The Tepid Sponge can be given after 90 minutes later, Here It's the right time because 90 minutes of the therapeutic effect of the Tepid Sponge begins to disappear which is marked by an increase in the child's temperature. Giving the next Tepid Sponge will prevent further temperature rise.
6.	Siti Hayani, Eka Adimayanti, Ana Puji Astuti (2018)	Pengaruh Tepid Sponge Terhadap Penurunan Suhu TubuhjPada Anak Pra Sekolah yang Mengalami Demam di RSUD Ungaran	The action is given with a duration of 15 minutes. The stages of the tepid sponge implementation procedure are washing hands, closing the sampiran or windows, wearing gloves, installing a mat under the child's body, remove the child's clothes, put a bath blanket, dip the washcloth into the basin and rub it all over the body, perform the action several times (after the skin is dry), Assess temperature changes every 15-20 minutes, stop the procedure when the body temperature is close to normal, dry the body with a towel, reorganize tools, remove gloves, tidy up the patient, ask patient comfort and hand washing.
7.	Kasiati, Harun Ain, Nurul Hidayah, Faiqotul (2022)	Efektifitas Tepid Sponge Bath Terhadap Penurunan Suhu Tubuh Pada Anak Kejang Demam di RSUD Lawang Malang	The tepid sponge compress is an action using block techniques and wiping techniques that have an evaporative effect that changes fluids such as sweat or water on the body surface. to gas. This therapy is carried out for 10 minutes.
8.	Witri Hastuti, Novi Murdiana Sari, Indah Wulaningsih (2020)	Tepid Sponge an d Sponge Bath to ChangejBody Temperature Children with Dengue Fever	The author does not describe the implementation of the Tepid Sponge. However, the author only explained that the research was carried out in the children's room at Ken Saras Hospital, Semarang
9.	Ketut Labir, Nyoman Ribek, Desita Diah Lestari (2017)	Suhu Tubuh Pada PasienjDemam dengan Menggunakan Metode Tepid Sponge	The author does not describe the implementation of the Tepid Sponge. However, the author explained that the time used to perform the tepid sponge procedure was 10-15 minutes for pediatric patients in the Kaswari room of the Wangaya General Hospital. Measurement of body temperature again after 30 minutes after the method is given in order to review the body's adjustment to this method, because the body takes about 30 minutes to adjust to this method.
10.	Fitri Yanti Bangun (2017)	Pengaruh Tepid Sponge terhadap Penurunan Demam pada Anak Usia 1-5 Tahun di Rumah Sakit Dr. Pirngadi Medan	Water Tepid Sponge is done by compressing the block using a warm damp washcloth then placed in the frontal, axillary and deep inguinal areas time 20 minutes. Warm moist washcloth placed on the skin area can vasodilate blood vessels so that blood flow becomes smooth. The skin has many blood vessels.

No	Author and Year of Publishing Journal	Journal Title	Implementation of the water edged sponge
			When a fever is then given a tepid sponge, the heat of the blood moves through the walls of the blood vessels to the surface of the skin and is lost to the environment through a heat loss mechanism. The duration of the tepidjsponge treatment was 20 minutes.

Based on the table above, it can be concluded that overall there are similarities in the implementation of the water tepid sponge action, namely by wiping the entire body using a warm moist washcloth that uses a combination technique between wiping techniques that cause evaporation of environmental heat and the block technique makes heat conduction to the washlap with an execution time of 10- 20 minutes. After doing the water Tepid sponge action, then measure the child's body temperature again and if you want to do the Tepid Sponge action again, give a pause of about 90 minutes. On average, the journals that have been selected by researchers are 4 journals whose authors do not explain in detail the process of implementing the tepid sponge action and the implementation time used by the authors in carrying out these actions to patients who have fever. However, there are 6 journals that have explained in sufficient detail about the implementation process and implementation time in carrying out the tepid sponge action.

Table 5 Results and Effects of Application of Water Tepid Sponge

No	Author and Year of Publishing Journal	Journal Title	Results and Effects if Water Tepid Sponge
1.	Rana Ashshafa Nur Afrah, Faisal Kholid Fahdi, Suhaimi Fauzan (2017)	Pengaruh Tepid Sponge Terhadap Perubahan Suhu Tubuh Anak Usia Pra Sekolah dan Sekolah yang Mengalami Demam di RSUD Sultan Syarif Mohamad Alkadrie Kota Pontianak	The mean (mean) body temperature before being treated with a tepid sponge was 38.28°C. Meanwhile, the average (mean) body temperature after being treated with a tepid sponge was 37.70°C with an average decrease of temperature of 0.58°C. Test results statistics obtained p value = 0.001 (<0.005)
2.	Tia Setiawati, Yeni Rustina, Kurntarti (2015)	Pengaruh Tepid Sponge Terhadap Penurunan Suhu Tubuh dan Kenyamanan pada Anak yang Mengalami Demam	The mean body temperature before being given a sponge bath was 38.15°C, the median was 38.00°C. Meanwhile, the mean body temperature after being given the tepid sponge bath was 37.23°C, the median was 37.00°C, there was a decrease in temperature of 0.9-1°C and the p value <α (0.05).
3.	Andi Akifa Sudirman, Dewi Modjo (2017)	Pemberian Tepid sponge Terhadap Penurunan Suhu Tubuh Pada Anak di Ruangan SP2KP Anak RSUD Prof. Dr. H. Aloei Saboe Kota Gorontalo	The results of the pre-test measurement before giving the tepid sponge action, the average body temperature of the children in the intervention group was 2.00. The lowest body temperature was 37.2°C and 39.8°C and the results of post-test measurements after the administration of the tepid sponge action, the average body temperature of children in the intervention group was 1.23. The lowest body temperature was 37°C and 38.9°C with a decrease in body temperature of 0.2-0.9°C. After giving the tepid sponge for 30 minutes, the p value <0.005 (p=0.00 at 0.005) was obtained.
4.	Bartolomeus Maling, Ns.Sri Hayani S, S.Kep., Ns. Syamsul Arif, S.Kep.,M.Kes (2012)	Pengaruh Kompres Tepid Sponge Hangat Terhadap Penurunan Suhu TubuhjPada Anak Umur 1-10 Tahun Dengan Hipertermia (Studi Kasus di RSUD Tugurejo Semarang)	The frequency of body temperature before being given a tepid sponge, the average body temperature was 38.5ºC with a standard deviation of 0.4C. Body temperature frequency after being given a tepid sponge, the average body temperature value is 37.1ºC with a standard deviation of 0.5 C with a decrease in temperature of about 1.4°C. Test results statistics with p value = 0.001 (0.05)
5.	Hera Hijria ni (2019)	Pengaruh Pemberian Tepid Sponge Terhadap Penurunan Suhu Tubuh Pada Anak	Average body temperature in children aged

No	Author and Year of Publishing Journal	Journal Title	Results and Effects if Water Tepid Sponge
		Demam Usia Toddler (1-3 Tahun)	toddler (1-3 years) at the Majalengka Hospital before being given the Tepid Sponge technique was 38.3°C while the average body temperature in children with fever toddler after being given the tepid sponge technique was 37.6°C with a decrease in temperature of 0.7°C. There is an effect of giving Tepid Sponge on decreasing body temperature in toddlers (1-3 years old) with fever at Majalengka Hospital Significant difference before and after done Edged sponge obtained p value =0.000 (<0.005)
6.	Siti Hayani, Eka Adimayanti, Ana Puji Astuti (2018)	Pengaruh Tepid Sponge Terhadap Penurunan Suhu TubuhjPada Anak Pra Sekolah yang Mengalami Demam di RSUD Ungaran	The temperature before the tepid sponge was mostly (73.34%) was at 38-39°C. While the body temperature after the tepid sponge was mostly (63%) was at a temperature of 37-38°C, the temperature decreased by 1°C. Differences in body temperature of children in paired t-test for the intervention group obtained a significant value (p<0.005)
7.	Kasiati, Harun Ain, Nurul Hidayah, Faiqotul (2022)	Efektifitas Tepid Sponge Bath Terhadap Penurunan Suhu Tubuh Pada Anak Kejang Demam di RSUD Lawang Malang	The average body temperature before being treated with a tepid sponge, the lowest body temperature was 38.9°C and the average body temperature after being treated with a tepid sponge at the lowest temperature of 37°C, there was a decrease in temperature of 1.9°C. From the results of giving the tepid sponge action, there was a significant difference between before and after the treatment with the result value (p value = 0.000 <0.005).
8.	Witri Hastuti, Novi Murdiana Sari, Indah Wulaningsih (2020)	Tepid Sponge an d Sponge Bath to ChangejBody Temperature Children with Dengue Fever	The average body temperature before being given the tepid sponge action, the lowest body temperature was 37.8°C and 39°C, and the average body temperature After the administration of the tepid sponge, the lowest temperatures were 37.5°C and 38.7°C, there was a decrease in body temperature of 0.3°C. The results of giving the tepid sponge action showed a significant difference between before and after the treatment with the result value (p<0.005).
9.	Ketut Labir, Nyoman Ribek, Desita Diah Lestari (2017)	Suhu Tubuh Pada PasienjDemam dengan Menggunakan Metode Tepid Sponge	The results of research conducted on 60 respondents found that before the action the highest body temperature was at 38.9°C (moderate fever) in two respondents having the highest body temperature reaching 40°C. The results of research conducted on 60 respondents found that immediately after the action was carried out as many as 42 respondents (70%) had a body temperature that was classified as low fever with an average temperature of 0.7°C. The results of research conducted on 60 respondents found that after 30 minutes of action as many as 57 respondents (95%) had a body temperature that was classified as low fever with an average body temperature that was able to drop to 1°C and in one respondent the temperature was able to drop to 1°C. 1.2°C.
10.	Fitri Yanti Bangun (2017)	Pengaruh Tepid Sponge terhadap Penurunan Demam pada Anak Usia 1-5 Tahun di Rumah Sakit Dr. Pirngadi Medan	The mean (mean) body temperature before being treated with the tepid sponge was 38.7°C while the mean (mean) body temperature after being treated with the tepid sponge was 37.8°C. So there was a decrease of 1.5°C from the results of the independent t statistical test. test obtained p value = 0.000 <α=0.05)

Based on the table above, it can be concluded that the overall average of the author's journals shows that the water tepid sponge is very influential in reducing the body temperature of children who have fever with a significant and relatively varied decrease, namely the lowest temperature drop of 0.3°C and the highest temperature drop of 1.9 °C.

DISCUSSIONS

Implementation Of The Implementation Of The Water Tepid Sponge Procedure

From the 10 journals that have reviewed the author's review of the implementation of the water tepid sponge procedure, there are only 9 journals, namely (Ashshafa, 2017; Setiawati, 2015; Sudirman, 2017; Maling, 2017;

Hijriani, 2019; Haryani, 2018; Kasiati, 2022; Labyrinth, 2017; Wake up, 2017). While the other 1 journal (Hastuti, 2020) only describes how the working mechanism of the implementation of the water tepid sponge works. 9 journals that discuss the implementation of the water tepid sponge procedure are divided into 2 durations, the first with a duration of 10-15 minutes is applied in 6 journals, namely (Ashshafa, 2017; Sudirman, 2017; Hijriani, 2019; Haryani, 2018; Kasiati, 2022; Labir, 2017) and 3 other journals (Setiawati, 2015; Thief, 2012; Wake up, 2017) took 20 minutes to do the implementation.

According to Hijriani (2019), the water Tepidjsponge technique is a combination of block and wiping techniques. The water tepid sponge technique uses block compresses not only in one place but in many places with large blood vessels such as in the neck, armpits, and groin. In addition, there are additional measures, namely by providing swabs in several areas of the body so that the actions applied to patients with this technique become more complicated and complex than other techniques. However, with the direct block technique at a different place, this greatly facilitates the transmission of signals to the hypothalamus. In addition, the administration of swabs will accelerate the dilation of peripheral blood vessels and cause heat transfer from the body to the environment, which will accelerate the decrease in the patient's body temperature. Provision of a Water Tepid Sponge compress can be done according to the SOP of action, which is for 10-15 minutes. Then the compress is stopped, the washcloth is removed and the body is left exposed. This action will make evaporation through the skin that has been dilated into the surrounding environment to be maximal. Water Tepid Sponge can be given back after 90 minutes later. This period is the right time, because after 90 minutes the therapeutic effect of the water Tepid Sponge begins to disappear with a marked increase in the child's body temperature. Provision of a water-edge sponge action which will further prevent further temperature rises.

According to Haryani, (2018) the implementation phase of the Tepid Sponge is washing hands, closing the sampiran/window, wearing gloves, putting a mat under the child's body, removing the child's clothes, putting on a bath blanket, dipping the washcloth into the basin and wiping it all over the body, doing several actions. times (after the skin is dry), assessing changes in temperature every 15-20 minutes, stopping the procedure when the body temperature approaches normal, drying the body with a towel, rearranging tools, removing gloves, grooming the patient, asking for patient comfort and washing hands. According to Kasiati (2022), a tepid sponge compress is an action using block techniques and wiping techniques that have an evaporation effect that changes liquids such as sweat or water on the body's surface into gas. This therapy is carried out for 10 minutes. Meanwhile, 3 journals from 6 journals which have the same duration of 10-15 minutes in the implementation of the water tepid sponge, only explain the duration of the implementation without explaining the procedure for the implementation of the water tepid sponge given to the client. 3 Journals in question (Ashshafa, 2017; Sudirman, 2017; Labir, 2017).

In addition to the 6 journals discussed above, there are still 3 journals from 9 journals that discuss the implementation of the application of the water tepid sponge. The three journals in question are the journal Ashshafa (2017), Sudirman (2017) and Labir (2017). The three journals have in common explaining the duration or length of the implementation of the water tepid sponge procedure which is given for 20 minutes in one intervention, but the journal does not include an explanation regarding the implementation of the procedure for giving water tepid sponge. While 1 other journal (Hastuti, 2020) only describes the working mechanism of the water tepid sponge. The journal explains that when a client is

performed with a water-edge sponge, there will be an increased signal distribution to the hypothalamus and peripheral vasodilation. Vasodilation is what causes increased heat dissipation from the skin, causing a decrease in body temperature.

Water edged sponge is one of the physical techniques to reduce fever that is non-pharmacological (Wang et al, 2009 in Surdiman, 2017). The water tepid sponge compress is a warm compress technique that combines the block compress technique on the superficial blood vessels with the swab technique. The working mechanism in the process of giving this water tepid sponge compress gives the effect of signal distribution to the hypothalamus through sweat and peripheral vasodilation so that the heat transfer process obtained from this water tepid sponge compress takes place through two processes, namely conduction and evaporation, where the heat transfer process is through the conduction process. This starts from the act of compressing the child with a washcloth and this evaporation process is obtained from the presence of wiping on the body when rubbing is carried out so that the process of evaporation of heat becomes sweat. So far, compresses of plain water or cold water have become a habit for mothers when their children have a fever. However, compresses using plain water or cold water are not recommended because in reality it is found that the fever does not go down even the fever rises again and often causes children to cry, shiver and turn blue.

According to research conducted by Dewi, A.K (2016) based on the results of research differences in the effect of decreasing body temperature, it can be concluded that giving a water tepid sponge is more effective in reducing the body temperature of children with fever compared to warm water compresses, because it is caused by the presence of body swabs in this technique. will accelerate the vasodilation of peripheral blood vessels throughout the body so that the evaporation of heat from the skin to the surrounding environment will be faster than the results provided by warm water compresses that only rely on reactions from hypothalamic stimulation (Haryani, 2018). Heat reduction with the water edged sponge method has been widely studied internationally and in Indonesia. According to research conducted by Thomas and Riegel on the management of handling children with fever in emergency units in the United States, it was found that as many as 79.8% of nurses chose to provide intervention in the form of giving a sponge with water to reduce fever, prevent seizures and provide comfort for children. It is known that the nurses chose this method for prevention of seizures by 58%, faster temperature reduction by 56.8% and treatment of fever unresponsive to antipyretics by 45.6% (Thomas, 1994 in Labir, 2017)

Based on the presentation of the results of 10 articles and theories that have been reviewed by the author, it can be concluded that the water tepid sponge is an independent nursing action or non-pharmacological action whose implementation uses a combination technique of block technique and wiping technique using a warm moist washcloth placed in the folds of the body such as armpits, groin, neck, and forehead that make the process of conduction heat transfer to the washcloth. Then there is a washcloth that is used to wipe all parts of the body, the wiping technique used causes the evaporation of heat transfer from the body to the surrounding environment. In the implementation of this procedure, there are stages that need to be carried out, such as the preparation stage for the tool: 6 washcloths, a basin filled with warm water, washcloths and bath blankets, the working stage is to dip the washcloth into warm water and then place it on the folds of the body (2 armpits, 2 groin). , and neck) and do the wiping technique all over the body. if the washcloth has started to feel a little dry, dip the washcloth back into the basin of warm water. This action is carried out with a duration of 15 minutes then dry the child's body and then check his body temperature again using a thermometer. If the child's body temperature has not decreased, the water Tepidjsponge action can be given again. Reducing body temperature by administering the water tepid sponge is an independent action that is safe to apply to children who have a fever both in the hospital and at home, even though this water tepid sponge procedure has a higher level of discomfort.

Results and Effects of Application of Water Tepid Sponge

In 10 Journals (Ashshafa, 2017; Setiawati, 2015; Sudirman, 2017; Thief, 2012; Hijriani, 2019; Haryani, 2018; Kasiati, 2022; Hastuti, 2020; Labyrinth, 2017; Bangun, 2017) which has been reviewed by the author shows that there is an influence in giving the water tepid sponge procedure to pediatric patients with the average statistical test analysis results in the ten

journals showing p = value <0.05.

Based on the journal (Ashshafa, 2017) explained that the mean (mean) body temperature before being treated with a tepid sponge was 38.28°C. Meanwhile, the mean (mean) body temperature after being treated with a tepid sponge was 37.70°C with an average temperature decrease of 0.58°C. Statistical test results obtained p value = 0.001 (<0.005). Based on the journal (Setiawati, 2015) it shows the mean body temperature before being given a tepid sponge bath is 38.15°C, median is 38.00°C. While the mean body temperature after being given the tepid sponge bath was 37.23°C, the median was 37.00°C, there was a decrease in temperature of 0.9-1°C and the p value <α (0.05). Based on the journal (Sudirman, 2017) the results of the pre-test measurement before giving the water tepid sponge action the average body temperature of children in the intervention group was 2.00. The lowest body temperature was 37.2°C and 39.8°C and the results of post-test measurements after the administration of the water tepid sponge action, the average body temperature of children in the intervention group was 1.23. The lowest body temperature was 37°C and 38.9°C, the average temperature decreased was 0.2°C and 0.9°C. After giving the water tepid sponge for 30 minutes, the results of the statistical test value were p<0.005 (p=0.00 at 0.005).

In line with the journal (Hijriani, 2019) the average body temperature of toddlers (1-3 years) at the Majalengka General Hospital before being given the Tepidjsponge Water Technique was 38.3°C. While the average body temperature in toddler age fever children after being given the Tepid Sponge technique is 37.6°C, the average temperature decrease is 0.7°C. The statistical test value obtained p value = 0.000. Based on the journal (Haryani, 2018) the temperature before the water tepid sponge was mostly (73.34%) was at a temperature of 38-39°C. While the body temperature after the water tepid sponge was mostly (63%) was at a temperature of 37-38°C with an average temperature drop of 1°C. obtained the value of the statistical test p value = 0.000. Based on the journal (Kasiati, 2022) the average body temperature before being treated with a tepid sponge, the lowest body temperature was 38.9°C and the average body temperature after being treated with a tepid sponge, the lowest temperature was 37°C, there was a decrease in temperature of 1.9°C. , from the results of giving the tepid sponge action, there was a significant difference between before and after the treatment with the result value (p value = 0.000 <0.005). Based on the journal (Hastuti, 2020) the average body temperature before being given water tepid sponge action was the lowest body temperature of 37.8°C and 39°C. and the average body temperature after the administration of the tepid sponge action, the lowest temperature was 37.5°C and 38.7°C the average temperature decreased was 0.2°C. from the results of the action of the water tepid sponge there was a significant difference between before and after the action was given with the result of the statistical test value (p<0.001).

According to journal research (Labir, 2017) The results of research conducted on 60 respondents found that before the action the highest body temperature was at 38.9°C (moderate fever) in two respondents having the highest body temperature reaching 40°C. The results of research conducted on 60 respondents found that immediately after the action was carried out as many as 42 respondents (70%) had a body temperature that was classified as low fever with an average temperature of 0.7°C. The results of research conducted on 60 respondents found that after 30 minutes of action as many as 57 respondents (95%) had a body temperature that was classified as low fever with an average body temperature that was able to drop to 1°C and in one respondent the temperature was able to drop to 1°C. 1.2°C. Based on the journal (Bangun, 2017) the mean (mean) body temperature before being treated with a tepid sponge was 38.7°C, while the mean (mean) body temperature after being treated with a tepid sponge was 37.8°C. So there was a decrease of 1.5° C from the results of the independent t test statistical test obtained p value = 0.000 <α=0.05).

Water edged sponge is one of the non-pharmacological actions or independent actions of nurses. Nurses as nursing care providers need to increase independent action, so that cases of fever that are often experienced by children can be handled. Water edged sponge is done when the client has a high fever. This procedure uses a block technique and a wiping technique which aims to improve the control of heat loss through evaporation and conduction. The principle in giving tepid sponge can lower body temperature through the evaporation process and can accelerate blood circulation, so that blood will flow from internal organs to the body surface carrying heat. The skin has many blood vessels, especially the hands, feet and

ears. Blood flow through the skin can account for up to 30% of the blood pumped by the heart. Then heat moves from the blood through the walls of the blood vessels to the surface of the skin and is lost to the environment, resulting in a decrease in body temperature (Ashshafa, 2017).

Based on the explanations of the 10 journals and theories above, it can be concluded that the implementation of the application of the water Tepid Sponge has had a significant impact significant in children with fever in reducing the child's body temperature. The lowest temperature drop is 0.3°C and the highest temperature drop is 1.9°C. This water tepid sponge therapy is quite influential in reducing fever in children with fever due to a block technique that makes heat transfer to a washcloth (conduction) placed on the folds of the body (2 armpits, 2 groin and neck) and a wiping technique that accelerates vasodilation or widening of blood vessels. periphery throughout the body resulting in evaporation of heat from the skin to the surrounding environment.

CONCLUSIONS

Based on the results of the analysis and discussion of the ten journals in this literature review, it can be concluded that the water tepid sponge is a non-pharmacological action that can be done independently and is proven safe for children in lowering body temperature. The implementation of the application of water tepid sponge uses a combination of block techniques so that heat conduction from the skin to the washlap and wiping techniques causes heat evaporation from the skin to the environment with a duration of 15 minutes. The description of giving the water tepid sponge procedure begins with the preparation of equipment, then compresses the child using a washcloth that has been dipped in warm water with a block technique or puts a washcloth on the neck, 2 armpits and 2 groin. Prepare 1 washlap to wipe all parts of the child's body, wet the cloth again when the cloth feels dry. Giving a water tepid sponge to a child with fever has also been shown to have a significant effect on reducing the child's body temperature, which is 0.3°C to 1.9°C.

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