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Implementation Compress Warm To Patients Dengue Hemorrhagic Fever With Problems Nursing Hyperthermia In The Kemuning Room Of Dustira Class II Hospital

Hikmat Rudyana[1], Syintang Rasi Maliki[2], Gunawan Irianto[3], Dedi Supriadi[4]
[1,2,3,4]FITKes Universitas Jenderal Achmad Yani

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ABSTRACT
DHF cases in Indonesia continue to increase, in 2021 there were 73,518 cases with a death rate of 705 people. In 2022, there were 131,265 cases with 1,183 deaths. In the period January - July 2023, 42,690 people were infected with DHF and 317 people died. One of the symptoms of Dengue Haemorrhagic Fever (DHF) is a sudden high fever (more than 38.0 C) that lasts continuously for 2 to 7 days. Fever if not handled properly can cause other effects, if the temperature is above 38 then it can increase sweating, pale, clammy, and cold skin, general weakness, tachycardia with a weak pulse, nausea or vomiting, dizziness, mild headache, or fainting. Temperatures above 40 degrees can cause hot, red, dry skin, tachycardia with a strong pulse, delirium, seizures, or coma. The purpose of this study was to analyze and describe the application of warm compresses in overcoming hyperthermia problems in Dengue Haemorragic Fever patients. The method used in the preparation of this scientific work is descriptive with a Case report approach to nursing care by applying Evidence based practice nursing Warm compresses on 1 patient with a body temperature of 38.0°C. Data collection methods used in this case study are interviews, observation and physical examination. The results of the case study obtained the application of warm compresses was able to reduce body temperature in Dengue Haemorrhagic Fever patients with hyperthermia nursing problems. It is recommended that nurses can combine pharmacological therapy with nonpharmacology, namely warm compresses to help reduce body temperature in patients.

Corresponding Author:
Hikmat Rudyana
FITKes Universitas Jenderal Achmad Yani
hikmatrudyanamkep@gmail.com

INTRODUCTION

Throughout ninth century twelve and at the beginning twentieth century disease fever Dengue hemorrhagic fever (DHF) in the world has been reported as an incident epidemic. Every year it is estimated there are around 50-100 million dengue fever cases worldwide, and as many as 500,000 of them need hospital care. Disease fever dengue hemorrhagic disease is problem health in Indonesia and in Southeast Asia. The World Health Organization regional office in Southeast Asia (SEARO) stated that fever dengue fever (DF) as a cause main morbidityand mortality of children in Southeast Asia (Hidayani, 2020) By using analysis

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strategies and data from Global Burden of Disease 2019, depicts Disability adjusted life years lost (DALYs) from dengue in endemic areas main from 1990 to 2019.

Among the 21 geographical regions in 1990, the South Asian region had the highest number of incident highest per 100,000 population, followed by the Southeast Asia region, and then the Oceania region. In 2019, the Oceania region had the highest rate of incident standard age highest per 100,000 population, followed by the South Asia region, and then the Southeast Asia region. At the level nationally in the Southeast Asia region in 1990, the DALYs rate by age per 100,000 population for Dengue Hemorrhagic Fever (DHF) was highest in Indonesia, followed by Myanmar, the Philippines, and Thailand. In 2019, the DALYs rate by age per 100,000 population for Dengue Hemorrhagic Fever (DHF) was highest in Indonesia, followed by Myanmar, the Philippines, and Thailand. age per 100,000 population for DHF is still highest in Indonesia, followed by the Philippines, Myanmar, and Malaysia (Tian et al., 2022) .

Based on the data case fever The blood loss in Indonesia is still the highest in Southeast Asia in the period time 1990-2019. Currently, DHF cases in Indonesia continue to increase increased, in 2021 there were 73,518 cases with a figure 705 deaths. In 2022, there were 131,265 cases with a figure 1,183 deaths. In the period January – July 2023, 42,690 people were infected with dengue fever and 317 people died (PMK, 2023) .

The total number of DHF cases in West Java in 2022 for the period January-July was 24,192, totaling 224 deaths. Cities with cases highest namely Bandung City with 3936 cases, Bandung District 2777 cases, Bekasi City 1910 cases, Kab. Sumedang 1425 cases. Whereas District with death the highest in 2022, namely Bandung Regency with 37 deaths, Tasikmalaya City with 22 deaths, Sumedang and Sukabumi City with 13 deaths (West Java Provincial Health Office, 2022) . Based on data from the Cimahi City Health Office, in the period from January to September 2023, it was recorded There are 270 residents affected by dengue fever. Two of them passed away (Cimahi City Government, 2023) .

hemorrhagic fever (DHF) or Dengue Hemorrhagic Fever (DHF) is disease Infection acute disease caused by dengue virus and transmitted through mosquito vector aedes aegypti and aedes albopictus. DHF can attack adults and also children under 15 years (Widyanto & Triwobowo, 2013) . Dengue fever disease has journey a very fast and frequent disease become fatal because Lots deceased patient consequence late handling. Manifestation clinic from Dengue Hemorrhagic Fever (DHF) is a disease Sudden fever high (more than 38.0 C) that lasts in a way Keep going continuously for 2 to 7 days, Yes spots redness of the skin, feeling nauseous, vomiting and dizzy, heartburn, platelets continuing to drop Continuous and Diarrhea (Chandra, 2019) .

Some untreated DHF patients can experience Dengue Shock Syndrome (DSS) which can cause death. This is because patients experience hypovolemia or fluid volume deficit due to increased capillary permeability of blood vessels so that blood flows outside the vessels. Currently, the incidence of DHF in hospitals is increasing, not only in cases of children, but also in adolescents and adults (Pare et al., 2020)

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According to the PPNI DPP SDKI Working Group Team (2017) Temperature body increased above the body's normal range called hyperthermia. Another definition of fever, or pyrexia, is improvement core body temperature someone above the ' point set ' set by the center thermoregulation body in the hypothalamus. Increased This body's 'set-point' temperature is often caused by physiological processes caused by environmental causes. infection or non- infectious causes such as inflammation, malignancy, or autoimmune processes. This process involves release of immunological mediators, which triggers center thermoregulation hypothalamus, which causes improvement core body temperature. Normal body temperature man is about 37 degrees Celsius (C), or 98.6 degrees Fahrenheit (F), and varies by about 0.5 C. The variation This core body temperature is results from normal physiological processes throughout body humans, including changes in metabolism, cycles sleep / wake, variability hormones, and levels changing activities. However, in the case of fever, increase temperature the core body is often larger than 0.5 C and is caused by substances trigger fever or pyrogen (Balli, Shumway, & Sharan, 2023) .

Fever if not treated properly then it can cause impact else, if temperature above 38 then it can increase sweat, pale, clammy, cold skin, weakness general, Tachycardia with pulse pulse Weakness, Nausea or vomiting, Dizziness, lightheadedness, or fainting. If the temperature is above 40 degrees it can cause, Hot, red, dry skin, Tachycardia with a rapid pulse. strong pulse, delirium, seizures, or coma (Balli et al., 2023) .

To reduce impact incident fever above, as energy nursing needs to do management fever to reduce discomfort in patients. Efforts that can be made to reduce fever in that is in a way pharmacology and non- pharmacology. One of non- pharmacological efforts is by using compress. There are several type compress that can given to lower temperature body that is tepid sponge compress and warm water compress (Anggreni, Immawati, & Kusumadewi, 2022) .

Compress warm is to coat surface skin with a towel that has been moistened with warm water with a maximum temperature of 43oC. Compress Warmth on the skin can inhibit shivering and the effects metabolic effects it causes. In addition, compresses warm also induces vasodilation peripheral, so that increase expenditure hot body. besides that it also reduces discomfort consequence symptom fever that is felt (Ministry of Health, 2022) . Firda Nofitasari and Wahyuningsih (2019) stated that that There is influence and benefits from implementation warm water compress to reduce hyperthermia. This is in accordance with Rahayu's research (2022) on compresses warm to lower fever in DHF patients, obtained results existence decline temperature body after done compress warm in the area axillary and second folds thighs. On the subject, day first assessment obtained results temperature body 38.4°C (fever). after done action compress warm until the 3rd day, temperature body reduce to 37.0°C (Normal).

METHOD

The method that used in compiling this scientific work is descriptive approach *Case report* of foster care nursing by applying *Evidence based practice nursing,* namely Compress warm.

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The subject in this case study was 1 client with Dengue Hemorrhagic Fever who experienced problem nursing Hyperthermia with temperature beginning before giving implementation is 38.0ºC for the next will made into Respondent implementation compress warm. Giving implementation done for 3 days in sequence in the morning day, compress warm done once a day in the area forehead and axilla during approximately 15 minutes. The cloth used guarded warmth by dipping it back into the warm water available after it feels cold. Giving Implementation will be held on November 03, 2023 – November 05, 2023. In addition to patients, families patients will also made into subject research support aims to facilitate researchers in collecting data about patients. The data collection method used in this case study is interviews, observations and examinations physique

RESULTS

Assessment

Mr. W, 58 years old, came to the hospital on November 2, 2023 with complaints feel his body fever has been more than 1 week. During the assessment client sigh his body hot accompanied by headache scale pain 3 (10), and the legs feel aches and pains in the upper abdomen. Fever increases when morning and night day. Previously the Client had never experienced the same pain. The Client said have a history of illness blood high. Examination Results physique The patient appeared to have weak compos mentis consciousness. Vital Signs Examination Blood Pressure 130/80 mmhg, Pulse 88 x/minute, Temperature 38.0 c, Respiratory rate 20 x/minute, TB 158 cm, weight 54 kg. conjunctiva looks pale. Nose is absent bleeding, Mouth is missing Lesions, none bleeding. On examination extremity test dam (+) acral palpable warm.

Inspection diagnostic

Date 11/02/2023			
Inspection	Results	Unit	Reference value
HEMATOLOGY			
Hemoglobin	14.6	g/dl	13.0 – 18.0
Hematocrit	40.5	%	38.0 – 51.0
Platelets	85	10^3/ul	150 – 450
SERO-IMUNOLOGY			
Tubex	2		
Date 11/03/2023			
Inspection	Results	Unit	Reference value
HEMATOLOGY			
Hemoglobin	12.6	g/dl	13.0 – 18.0
Hematocrit	36.2	%	38.0 – 51.0
Platelets	86	10^3/ul	150 – 450
Date 11/04/2023			

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Inspection	Results	Unit	Reference value
HEMATOLOGY			
Hemoglobin	12.9	g/dl	13.0 – 18.0
Hematocrit	36.2	%	38.0 – 51.0
Platelets	109	10^3/ul	150,000 – 450
LIVER FUNCTION			
SGOT	47	%	<38
SGPT	45	%	<41
SERO-IMUNOLOGY			
Tubex	2		
ANTI DENGUE			
Anti dengue IGG	Non- reactive		Non- reactive
Anti dengue IGM	Reactive		Non- reactive
Date 11/05/2023			
Inspection	Results	Unit	Reference value
HEMATOLOGY			
Hemoglobin	12.1	g/dl	13.0 – 18.0
Erythrocytes	4.1	10^6/ ul	4.0 – 5.5
Leukocytes	11.57	10^3/ ul	4.00 – 10.00
Hematocrit	34.5	%	38.0 – 51.0
Platelets	169	10^3/ ul	150 – 450

Diagnosis

The study on November 2, 2023 was obtained diagnosis nursing that appears is Hyperthermia bd Disease Process dd Temperature 38.0°C, Acute pain bd agent injury Physiological dd scale pain 3 and risk bleeding bd disturbance coagulation. In this discussion the diagnosis that will be raised and discussed that is Hyperthermia bd Disease Process dd Temperature 38.0, this can be lifted because of subjective data obtained patient complaining of heat, objective data temperature body 38.0°C, skin palpable warm.

Intervention Nursing

Objectives of the intervention nursing : After done care nursing for 3 days expected temperature body The patient returned to normal. The interventions carried out namely by giving compress warm.

Implementation Nursing

Actions That Have Been done is give compress warm on the part forehead and axilla, performed for 15 minutes in 3 days and carried out only once a day

Evaluation

After done actions are also evaluated during three day consecutively with the following results : First Day Evaluation Takes Place Decrease in Client Temperature After done Compress warm :

S: The client said he had a fever for the past week.

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O: Temperature 37.2 C, Blood pressure 130/80 mmHg, Pulse 88 x/minute

A: Hyperthermia has not been resolved

P: Intervention Continue hyperthermia management

Then to be continued return compress warm on the day secondly, and it also happens decline temperature that means on the client

S : The client said Still feel warm

O: S 37.2 C, Blood pressure 110/80 mmhg, Pulse 95 x/minute.

A : Hyperthermia partially resolved

Q: Intervention to be continued

On the day third done compress warm and condition patient looks better than day previously

S: The client said he didn't feel it. hot

O : S 36.5 C, pressure blood 140/80 mmhg, Pulse 72 x/ minute

A : Hyperthermia resolved

Q: Intervention stopped

Inspection Temperature Body Before and After compress warm

From the results of the case study obtained results existence decline temperature body in patients. following results implementation compress warm to the patient :

Day	Data	Results		Note
		Before	After	
Day 1	Temperature body	38.0	37.2	Normal
Day 2	Temperature body	37.8	36.8	Normal
Day 3	Temperature body	37.2	36.5	Normal

Discussion

Based on the table above, it is known that that results assessment beginning the first day of DHF there is temperature body 38.0° C, with category level temperature body fever. After do assessment initial (observation) related temperature body in DHF patients, carried out intervention nursing using compress warm in the area axilla and forehead. Compression technique warm done to reduce fever expected The patient no longer has a fever. This action is carried out every day for 3 days in succession with time approximately 15 minutes. After completing the intervention nursing use technique compress warm, done daily evaluation for 3 days to find out decline fever in patients. Based on study results, it is known that after done intervention nursing using compress warm in the area axilla and forehead, then temperature body patient experience the decline that at the beginning assessment on day 1 temperature body patient was 38.0° C and reduced on day 3 to 36.5 ° C. Another relevant study was conducted by Lismayanti, et al (2021) on Warm Compress on Lowering Body Temperature Among Hyperthermia Patients: A Literature Review, The review results show that method compress warm give effect positive in reducing temperature body in the nursing process in patients hyperthermia. Based on literature from The reviewed article can be concluded that intervention compress Warmth needs to be given to the patient hyperthermia to reduce temperature body patient both those who are undergoing maintenance or not.

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Compress warm is to coat surface skin with a towel that has been moistened with warm water with a maximum temperature of 43oC. Compress Warmth on the skin can inhibit shivering and the effects metabolic effects it causes. In addition, compresses warm also induces vasodilation peripheral, so that increase expenditure hot body. besides that it also reduces discomfort consequence symptom fever felt (Ministry of Health, 2022) . Giving compress warm in the area vessels blood big is effort give stimulation of the preoptic area hypothalamus to reduce temperature body. Signal warmth carried by blood going to hypothalamus will stimulates the preoptic area so result in expenditure signals by the effector system. These signals will cause the occurrence expenditure hot more body through two mechanisms that is dilation vessels blood peripheral and sweating (Hapsari, Martyastuti, & Lestyaningsih, 2023) . This theory is also supported by research conducted by Rahayu (2022) on the implementation of compress warm to lower fever in children with Dengue Hemorrhagic Fever at Martapura Hospital obtained after given compress warm can reduce temperature body in patients who experience fever. On the subject, day first assessment obtained results temperature body 38.4°C (fever). after done action compress warm until the 3rd day, temperature body reduce to 37.0°C (Normal).

In this case study, the provision of compress warm done in the section forehead and axilla, different parts from research conducted by Rahayu (2022) which was placed in the axilla and folds thighs. But there are still decline temperature body patient after giving compress warm on the part forehead and axilla. This is in accordance with research conducted Marlina et al (2023) on giving Compress warm on forehead and axilla to decline temperature body child age preschool that experiences fever in the Metro Health Center work area was found results that compress warm in the forehead and axillary areas Can lower temperature body.

Giving compress warm in the axilla as an area with a location vessels blood big is effort give stimulation of the preoptic area hypothalamus to reduce temperature body. Giving compress Warmth in the axillary area can reduce temperature body this is happening because in the axilla area there is Lots vessels the blood that will experience vasodilation. Strong vasodilation of the skin allows for accelerated movement hot from body to the skin eight times (Corwin, 2009 in Wulandari & Nuriman, 2022) . In addition, in this case study, compresses were also given to the forehead area Because forehead is quite a large area he did compress so that evaporation temperature heat in the body occurs more quickly. The decrease temperature body on the surface this body happens Because hot body used to evaporate water on fabric compress (Sudirman & Modjo, 2021) .

Decrease temperature body in patients this is not completely just because giving compress warm, that is There is administration of antipyretic drugs as well. How antipyretics work by increasing elimination heat, in patients with high body temperature, by means of cause dilation vessels blood peripheral and water mobilization so that happen dilution blood and discharge sweat. Decrease temperature body the is the effects of drugs on the nervous system center involving center control temperature in the hypothalamus (Siswandono, 2016 in Nofitasari & Wahyuningsih, 2019) . Case study results from Wowor (2017, in Nofitasari &

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Wahyuningsih, 2019) . The decline temperature body is done more effectively If given antipyretic drugs If given paracetamol which is capable down to 0.2C After giving antipyretic If given along with the compress warm in lowering temperature body sufferer fever.

This is reinforced by research conducted by Pangseti, Atmojo, & A Kiki (2020) Implementation Compress Warm In Lowering Hyperthermia in children who experience Seizures fever Simple, that is results comparison implementation between Participant I who did compress warm with participant II which was not done compress warm is that temperature body goes down quickly if done giving compress warm plus antipyretic drugs than not given compress warm. Got it results on participant I temperature body initial 38.2°C after done compress warm plus antipyretic drugs during three day to 36.3°C, has happen decrease of ±1.9°C. whereas in participant II who did not undergo compress warm but only with antipyretic drugs temperature initial 38.5°C during three day to 37.0°C, has there was a decrease of ±1.5°C.

CONCLUSION

Implementation Compress warm can reduce temperature body in Dengue Hemorrhagic Fever patients with problems nursing Hyperthermia with temperature body 38.0°C. Dengue Haemorrhagic Fever Patients: The results of this study can provide knowledge patients in the implementation compress warm to overcome Hyperthermia with temperature 38.0° C on Dengue Haemorrhagic Fever patients. For the Development of Science and Technology Nursing: The results of this research can provide breadth of science and technology application of nursing in overcoming problem Hyperthermia in Dengue Haemorrhagic Fever patients. Writer: This research can add experience in implementing procedures compress warm to overcome problem Hyperthermia in Dengue Haemorrhagic Fever patients. Institutions : Nurses can combine between therapy pharmacology with non-pharmacology, namely compress warm to help to decrease temperature body in patients.

REFERENCES

Anggreni, T., Immawati, & Kusumadewi, T. (2022). Penerapan Pendidikan Kesehatan Pada Ibu Tentang Penatalaksanaan Demam Balita Demam (Usia 1 – 5 Tahun) Di Wilayah Kerja UPTD Puskesmas Rawat Inap Banjarsari Kecamatan Metro Utara. *Jurnal Cendikia Muda*, *2*, 595–600.

Balli, S., Shumway, K. R., & Sharan, S. (2023, September 4). Physiology, Fever. Retrieved January 22, 2024, from https://ww w.ncbi.nlm.nih.gov/books/NBK562334/

Candra, A. (2019). Asupan Gizi Dan Penyakit Demam Berdarah/ Dengue Hemoragic Fever (Dhf). *Journal of Nutrition and Health*, *7*(2), 23–31.

Dinas Kesehatan Provinsi Jawa Barat. (2022). Upayakan PSN 3M dan G1R1J untuk Tanggulangi DBD. Retrieved January 22, 2024, from https://diskes.jabarprov.go.id/informasipublik/detail_berita/eTN5UW9LTWJrakdQRHRMRU1OcERTUT09

Hapsari, L. I., Martyastuti, N. E., & Lestyaningsih, E. (2023). Implementasi Kompres Hangat pada Pasien Anak DHF (Dengue Haemorhagic Fever) dengan Hipertermi di Ruang

Flamboyan RSUD Batang. *Pena Medika Jurnal Kesehatan*, *12*(2), 259. https://doi.org/10.31941/p mjk.v12i2.2585

Hidayani, W. R. (2020). *Demam Berdarah Dengue : Perilaku Rumah Tangga dalam Pemberantasan Sarang Nyamuk dan Program Penanggulangan Demam Berdarah Dengue*. *Pena Persada*. Banyumas.

Kemenkes. (2022). Efektif Kompres Hangat atau Kompres Dingin Saat Demam Menyerang. Retrieved January 14, 2024, from https://yankes.kemkes.go.id/view_artikel/1051/efektif-kompres-hangat-atau-kompres-dingin-saat-demam-menyerang

Lismayanti, L., Abdul Malik, A., Siti Padilah, N., Anisa Firdaus, F., & Setiawan, H. (2021). Warm Compress on Lowering Body Temperature Among Hyperthermia Patients: A Literature Review. *International Journal of Nursing and Health Services (IJNHS)*, *4*(3), 344–355. https://doi.or g/10.35654/ijnhs.v4i3.465

Marlina, L., Immawati, & Nurhayati, S. (2023). Penerapan Pemberian Kompres Hangat Pada Dahi Dan Axilla Terhadap Penurunan Suhu Tubuh Anak Usia Prasekolah (3-6 Tahun) Yang Mengalami Demam Di Wilayah Kerja Puskesmas Metro. *Jurnal Cendekia Muda*, *3*(September), 402–406.

Nofitasari, F., & Wahyuningsih, W. (2019). Penerapan Kompres Hangat Untuk Menurunkan Hipertermia Pada Anak Dengan Demam Typoid. *Jurnal Manaje men Asuhan Keperawatan*, *3*(2), 44–50. https://doi.org/10.33655/mak.v3i2.74

Pangseti, N. A., Atmojo, B. S. R., & A, K. (2020). Penerapan Kompres Hangat Dalam Menurunkan Hipertermia pada anak yang mengalami Kejang demam Sederhana. *Nursing Science Journal*, *1*(1), 29–35.

Pare, G., Neupane, B., Eskandarian, S., Harris, E., Halstead, S., Gresh, L., … Loeb, M. (2020). Genetic risk for dengue hemorrhagic fever and dengue fever in multiple ancestries. *EBioMedicine*, *51*, 102584. https://doi.or g/10.1016/j.ebiom.2019.11.045

Pemerintah Kota Cimahi. (2023). Kota Cimahi Waspada Demam Berdarah Dimusim Pancaroba. Retrieved January 22, 2024, from https://cimahikota.go.id/ber ita/de tail/82349-kota-cima hi-waspada-demam-berdarah-dimusim-pancaroba

PMK, K. (2023). Pemerintah Soroti Penularan Penyakit Demam Berdarah Dengue | Kementerian Koordinator Bidang Pembangunan Manusia dan Kebudayaan. Retrieved January 22, 2024, from https://www.kemenkopmk.go.id/pemerintah-soroti-penularan-penyakit-demam-berdarah-dengue

Rahayu, S. F. (2022). Penerapan Kompres Hangat Untuk Menurunkan Demam Pada Anak Dengan Dengue Haemoragic Fever Di Rumah Sakit Martapura. *Journal Nursing Army*, *3*(1), 47–53.

Sudirman, A. A., & Modjo, D. (2021). Efektivitas Antara Kompres Hangat Dan Plester Kompres Demam Dengan Penurunan Suhu Tubuh Bayi Terhadap Imunisasi Campak Di Wilayah Kerja Puskesmas Telaga. *Zaitun (Jurnal Ilmu Kesehatan)*, *8*(1). https://doi.org/10.31314/zijk.v8i1.1162

Tian, N., Zheng, J. X., Guo, Z. Y., Li, L. H., Xia, S., Lv, S., & Zhou, X. N. (2022). Dengue Incidence

Trends and Its Burden in Major Endemic Regions from 1990 to 2019. *Tropical Medicine and Infectious Disease*, *7*(8). https://doi.org/10.3390/tropicalmed 7080180

Tim Pokja SDKI DPP PPNI. (2017). *Standar Diagnosis Keperawatan Indonesia* (1st ed.). Jakarta: Persatuan Perawat Nasional Indonesia. https://doi.org/https://doi.org /10.730/STA

Widyanto, C. F., & Triwobowo, C. (2013). *Trend Disease Trend Penyakit Saat Ini*. Jakarta: Trans Info Media.

Wulandari, Y., & Nuriman, A. (2022). Efektifitas Kompres Hangat Terhadap Penurunan Suhu Tubuh Pada Anak Dengan Typhoid. *Jurnal Keperawatan Bunda Delima*, *4*(2), 44–54. https://doi.org/10.59030/jkbd.v4i2.58