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# THE EFFECT OF GIVING WARM WATER COMPRESSES ON DYMENORROREA PAIN IN ADOLESCENTS IN THE AREA OF THE SIMALANGALAM PUBLIC HEALTH CENTER, LABUHANBATU UTARA REGENCY IN 2020

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**ABSTRACT**

The importance of supporting successful breastfeeding is the first time during pregnancy where a prospective mother must seek information about the advantages of breastfeeding, the benefits of breastfeeding for babies and good and correct breastfeeding techniques. This is inseparable from the importance of health education, especially health education in breastfeeding techniques. This study aims to determine the Effect of Breastfeeding Technical Health Education on the Behavior of Post Partum Mothers at the Sisumut Health Center Kotapinang Labusel in 2021. This research is a quasi-experimental research with one group pre-post test design. This research has been carried out from July 2021 to August 2021. The population is 40 people. Sampling using accidental sampling with a total sample of 28 people. The results showed that the behavior of postpartum mothers before the breastfeeding technique health education was mostly in the bad category as many as 19 people (67.9%) while the behavior of postpartum mothers after the breastfeeding technique health education was mostly well behaved as many as 26 people (92.9%). Based on the results of the Wilcoxon test, it was found that the average value before treatment was 3.39 with a standard deviation of 1.618 and after being given treatment there was an average increase to 6.54 with a standard deviation of 1.202. So it can be concluded that there is an influence of Breastfeeding Technical Health Education on the Behavior of Post Partum Mothers at the Sisumut Health Center Kotapinang Labusel in 2021. Suggestions in this study Sisumut Kotapinang Labusel improve postpartum maternal health education, especially breastfeeding techniques by providing counseling to postpartum mothers so that postpartum mothers can know properly and correctly how to breastfeed their babies.

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## 1. Introduction

Adolescence is a transitional period from puberty which is marked by the maturity of sexual organs and the achievement of the ability to reproduce, where one of the characteristics of a woman's puberty is the occurrence of menstruation. Menstruation is the shedding of the endometrial tissue layer along with blood, occurs periodically and is influenced by reproductive hormones. The average length of menstrual bleeding lasts for 5-7 days with an average cycle of 28 days (Janiwarti and Pieter, 2013).

Menstruation can cause significant disturbances for women. Menstrual disorders that often occur in most women are dysmenorrhea. Dysmenorrhea is a feeling of discomfort in the lower ab-

domen before and during menstruation. Dysmenorrhea occurs due to excessive release of prostaglandins resulting in an increase in uterine contractions resulting in pain during menstruation (Yunianingrum, 2017).

According to the World Health Organization (WHO) cited in Silviani et al (2019), the incidence of dysmenorrhea is quite high throughout the world. The average incidence of dysmenorrhea in young women is between 16.8 -81%. On average in European countries, dysmenorrhea occurs in 45-97% of women. With the lowest prevalence in Bulgaria (8.8%) and the highest reaching 94% in Finland. The highest prevalence of dysmenorrhea is often found in adolescent girls, which is estimated to be between 20-90%. Approximately 15% of adolescents reported experiencing severe dysmenorrhea. In the United States, dysmenorrhea is recognized as the most common cause of absenteeism from school in adolescent girls. In addition, a survey was also conducted on 113 United States women and stated that the prevalence was 29-44%, mostly at the age of 18-45 years (Silviani et al, 2019).

In Indonesia, the incidence of primary type dysmenorrhea is around 54.89%, while the rest sufferers with secondary dysmenorrhea. Dysmenorrhea occurs in adolescents with a prevalence ranging from 43% to 93%, where about 74-80% of adolescents experience mild dysmenorrhea, while the incidence of endometriosis in adolescents with pelvic pain is estimated at 25-38%, while in adolescents who do not respond positively to treatment for menstrual pain, endometriosis was found in 67% of cases. The disorder occurs in 60-70% of women in Indonesia with 15% of them complaining that their activities are limited due to dysmenorrhea (Nurwana et al, 2017).

Dysmenorrhea is divided into two, namely primary dysmenorrhea and secondary dysmenorrhea. Primary dysmenorrhea is menstruation that is very painful, without an identifiable pelvic pathology and can occur at the time of menarche or immediately after. Dysmenorrhea is characterized by crampy pain that begins before or immediately after the onset of menstrual flow and continues for 48 to 72 hours (Dahlan and Syahminan, 2017).

The impact of dysmenorrhea in addition to disrupting daily activities and decreased performance is experiencing nausea, vomiting, and diarrhea. There are still many women who consider menstrual pain as a normal thing, they think 1-2 days the pain will disappear. Even though menstrual pain can be a sign and symptom of a disease such as endometritis which can make it difficult to get offspring (Wiknjosastro et al, 2014).

Dysmenorrhea is experienced by many women who menstruate, but many of them often ignore dysmenorrhea without taking proper treatment efforts. Conditions like this can endanger women's health if left untreated. Dysmenorrhea can be a symptom of endometriosis or other secondary dysmenorrheal diseases, therefore appropriate and correct treatment is needed in women who experience dysmenorrhea, especially in their teens (Janiwarty and Pieter, 2013).

Handling dysmenorrhea is very important to do, especially at the age of teenagers, because if it is not treated it will affect the activities of adolescents themselves. Many young women do not know how to treat dysmenorrhea. So that it causes problems for the teenager every time he comes to menstruation (Mahua et al, 2018).

Handling to reduce or eliminate menstrual pain (dysmenorrhea) is usually done by two methods, namely pharmacological and non-pharmacological. Pharmacological treatment of dysmenorrhea by using analgesic drugs at regular doses has side effects including nausea, vomiting, constipation, restlessness and drowsiness (Dahlan and Syahminan, 2017). While non-pharmacological treatment can be done with complementary therapies, one of which is the use of warm compresses (Yunianingrum, 2017).

A warm compress is a compress that is carried out using a hot jar or hot water bottle wrapped in a cloth, namely by conduction where there is a transfer of heat from the bladder into the body, causing dilation of blood vessels and a decrease in muscle tension so that menstrual pain is felt. will decrease or disappear. Warm compresses as a very effective method to reduce pain (Yunianingrum, 2017). The physiological impact of warm compresses is softening fibrous tissue, making the body muscles more relaxed, reducing or eliminating pain, and facilitating blood flow (Nida and Sari, 2016).

The warm effect of the compress can cause vasodilation in the blood vessels which will increase blood flow to the tissues. The distribution of acids and food to the cells is enlarged and the disposal of substances is improved which can reduce the pain of primary menstruation caused by insufficient blood supply to the endometrium. Nida, 2016). Giving warm compresses uses the prin-

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ciple of heat delivery through conduction, namely heat transfer from the hot bladder into the abdomen, so that it will reduce pain in women with primary dysmenorrhea, because women with dysmenorrhea experience uterine contractions and smooth muscle contractions (Anugraheni and Wahyuningsih, 2010). 2013).

According to research conducted by Nida (2016), it was stated that warm compresses had an effect on reducing dysmenorrhea pain in class XI respondents at SMK Muhammadiyah Watukelir, with a p value of 0.000 ($p < 0.05$). This is in line with research conducted by Dahlan and Syahminan (2017) which states that warm compresses can reduce the level of dysmenorrhea pain in respondents at the Simpang Haru Padang Banking Vocational School.

Based on the initial survey conducted in the Simangalam Health Center area, North Labuhanbatu Regency, the number of adolescents was 2412 people with a distribution of 257 adolescents who experienced menstrual pain (dysmenorrhea). Based on the results of interviews conducted with 10 respondents, it was found that 5 respondents experienced pain during menstruation, 2 respondents said to reduce the pain by taking anti-pain medication and 1 said lying in the room and smeared with eucalyptus oil, 2 respondents did not make any efforts to handle it, only detained and leave it alone.

They say this situation is very disturbing and makes them lazy to do activities. According to the results of observations conducted in the Simalangalam Health Center area, it was stated that respondents who experienced dysmenorrhea complained of abdominal pain accompanied by dizziness, weakness and even some respondents fainted when they really could not stand the pain.

Based on the above, the authors want to examine whether there is an effect of giving warm compresses to dysmenorrhea pain in adolescents in the Simangalam Community Health Center area, Labuhanbatu Utara Regency in 2020. The purpose of this study was to find out about "The Effect of Giving Warm Compresses to Dysmenorrhea Pain in Adolescents in The area of the Simangalam Health Center, North Labuhanbatu Regency in 2020". (1) To find out Dysmenorrhea Pain in Adolescents before being given Hot Compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020. (2) To find out Dysmenorrhea Pain in Adolescents after being given Hot Compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020.

Benefits of research

This research is expected to be useful for: (1) Researchers This research is very useful for authors because this research will certainly add insight, knowledge and experience to researchers and is expected to provide information to adolescents that warm water compresses can reduce dysmenorrhoea (menstrual) pain. (2) Research Place, This research is only informational where this research obtains information on how to reduce menstrual pain so that it can provide basic assistance to adolescents who are brought to the School Health Unit (UKS) by giving warm water compresses. (3) Institutions. It is hoped that educational institutions will encourage and motivate other students to develop and strengthen theories, models and methods of implementation that are more detailed from this research and other research.

## 2. Research Methods

### 2.1 Data Collection Techniques and Research Instruments

#### 2.1.1 Data collection technique

Data collection was compiled and modified by researchers with reference to the conceptual framework and literature review (Nursalam, 2013). Data collection is done by using primary data (guidelines/procedures). This technique is done by applying the guidelines/procedures that have been made and then identifying pain before and after being given a warm compress.

Researchers submit an application letter to conduct research in . After receiving a letter of application from the Chancellor, the researcher met and asked the principal for permission to conduct research by explaining the aims, objectives, procedures and benefits of the research to be carried out as well as making a research schedule planned for the place.

Researchers make the Simangalam Health Center that researchers will make respondents who experience menstrual pain (dysmenorrhea) as samples in the study. Before conducting the research, the researcher asked the respondent's willingness to be a research subject through a consent form

to become a respondent. The respondent has the right to accept or reject the agreement. Respondents who received the consent were asked to sign the consent form and were considered valid as samples in the study. When conducting research, researchers provide information related to the aims, objectives, procedures and benefits of carrying out this research.

Researchers began to conduct research on the Effect of Giving Warm Compresses to Dysmenorrhea Pain in Adolescents in the Simangalam Health Center Area, North Labuhanbatu Regency in 2020. The instrument used to give warm water compresses used guidelines/procedures for giving warm water compresses. While the instrument used to see pain pain observation sheet with Visual Analog Scale (VAS). with the following conditions: (1) Mild pain, if the mother shows between numbers 1-3 on the VAS. (2) Moderate pain, if the mother shows a score between 4-6 on the VAS. (3) Severe pain, if the mother shows a score between 7-10 on the VAS.

## 2.2 Research Instrument Test

### 2.2.1 Validity test

Validity is a measure that shows the level of validity or validity of an instrument. An instrument that is valid or valid has high quality, whereas an instrument that is less valid has low validity (Arikunto, 2010).

Validity test using Pearson product moment correlation. An instrument is said to be valid or not if the correlation of each item has a positive nature and the rcount > r table or the t count (Hidayat, 2015). The instrument used for giving warm water compresses was made based on guidelines from Yunianingrum's research (2018) with the title The Effect of Warm Compresses and Lavender Aromatherapy on Primary Dysmenorrhea Pain Reduction in Young Women at As-Salafiyyah Islamic Boarding School and Ash-Sholihah Islamic Boarding School, Sleman. As for the pain of dysmenorrhea, the reverse visual analog scale (VAS) worksheet was used.

### 2.2.2 Reliability Test

Reliability is an index that shows the extent to which a measuring instrument can be trusted or reliable. This means the extent to which the measurement results remain consistent when two or more measurements are made of the same symptom, using the same measuring instrument. Reliability test was conducted using Alpha Crobach's method. The value of Crobach's alpha (Reliability) obtained is then compared with the r product moment in the table with the provision that if r count > r table then the test is reliable.

The instrument used for giving warm water compresses was made based on guidelines from Yunianingrum's research (2018) with the title The Effect of Warm Compresses and Lavender Aromatherapy on Primary Dysmenorrhea Pain Reduction in Young Women at As-Salafiyyah Islamic Boarding School and Ash-Sholihah Islamic Boarding School, Sleman. As for the pain of dysmenorrhea, the reverse visual analog scale (VAS) worksheet was used.

## 2.3 Method of collecting data

### 2.3.1 Data type

#### 2.3.1.1 Primary data

Primary data is data created by researchers for a special purpose to see the effect of giving warm compresses to dysmenorrhea pain in adolescents in the Simangalam Health Center area, North Labuhanbatu Regency in 2020. The data were collected by the researchers directly from the first source (adolescents who experienced menstrual pain) . Primary data collection was done by observation and interviews.

#### 2.3.1.2 Secondary Data

Secondary data is data obtained and found from the research place. In this study, the secondary data source was looking at the data in the School Health Unit (UKS) for adolescents who experienced menstrual pain and reported it to the UKS.

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### 2.4 Data processing

#### 2.4.1 Data processing

The data obtained through the questionnaire is raw data, data processing can be done with statistical techniques. According to Hidayat (2015) in the data processing process there are steps that must be taken, including: (1) Editing (Data Checking). Editing is an effort to re-check the correctness of the data obtained or collected by checking the number of questionnaires and the length of the data. (2) Coding (Coding on data). Is the activity of coding the data from a variable. (3) Tabulation (Data Grouping) The data are grouped according to the research objectives and then included in the prepared table. By manual method and computer aids with SPSS (Statistical Package For Social Science) program . (4) Entry (Data Entry) Data Entry is an activity to enter data that has been collected into a master table or computer database. (5) Data Processing All data that has been input into a computer application will be processed according to the needs of the research.

### 2.5 Data analysis method

#### 2.5.1 Univariate Analysis

Univariate data analysis was conducted to obtain an overview of the frequency distribution of respondents including age, class, address of the start of menstruation as well as a description of the independent variable (warm water compresses) and the dependent variable (menstrual pain). After that, it is described in tabular form and narrated.

#### 2.5.2 Bivariate Analysis

Bivariate analysis is used to see the effect between the independent variable and the dependent variable (Notoadmodjo, 2014). Bivariate analysis was carried out to test whether there was a difference before and after being given warm water compresses on dysmenorrhea pain in adolescents in the Simangalam Health Center area, North Labuhanbatu Regency in 2020 using paired sample t-test statistics, the procedure used to test the average difference for two paired sample (paired sample t-test). In principle, the paired sample t-test serves to analyze the pre-post research model or before and after. Different tests are used to evaluate certain treatments on the same sample at two different observation periods.

## 3. Result And Discussion

### 3.1 Research result

#### 3.1.1 Characteristics of Respondents

The characteristics of the respondents studied in this study include: Age and first menstruation can be seen in table 4.1:

TABLE 1
CHARACTERISTICS OF RESPONDENTS IN THE AREA OF THE SIMANGALAM PUBLIC HEALTH CENTER, LABUHANBATU UTARA REGENCY IN 2020

| No | Characteristics | Frequency (f) | Percentage (%) |
|---|---|---|---|
| 1 | Respondent's Age | | |
| | 15 years | 3 | 20.0 |
| | 16 years | 8 | 53.3 |
| | 17 years | 4 | 26.7 |
| | Amount | 15 | 100.0 |
| 2 | First Time Menstruation | | |
| | SD | 1 | 6.7 |
| | JUNIOR HIGH SCHOOL | 13 | 86.6 |
| | SENIOR HIGH SCHOOL | 1 | 6.7 |
| | Amount | 15 | 100.0 |

Based on table 4.1, it can be seen from 15 respondents in the Simangalam Health Center area, North Labuhanbatu Regency in 2020, it can be seen that the age of most of the respondents was 16 years

old as many as 8 people (53.3%), and respondents said that the first time they had their period was mostly when they were in junior high school. as many as 13 people (86.6%).

### 3.1.2 Distribution of the Frequency of Dysmenorrhea Pain in Adolescents before being given Hot Compresses in the Simangalam Health Center Area, North Labuhanbatu Regency in 2020

To see the results of the frequency of dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020, it can be described in Table 4.2:

TABLE 2
DISTRIBUTION OF THE FREQUENCY OF DYMENOROREA PAIN IN ADOLESCENTS BEFORE WARM WATER COMPRESSION IS GIVEN IN THE AREA OF THE SIMANGALAM PUBLIC HEALTH CENTER, LABUHANBATU UTARA REGENCY, 2020

| NO | Dysmenorrhea Pain in Adolescents Before Warm Compresses Are Given | FREQUENCY (F) | % |
|---|---|---|---|
| 1 | CURRENTLY | 8 | 53.3 |
| 2 | HEAVY | 7 | 46.7 |
| | AMOUNT | 15 | 100 |

From table 4.2 it can be seen that dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020 was mostly moderate pain as many as 8 people (53.3%).

### 3.1.3 Distribution of the Frequency of Dysmenorrhea Pain in Adolescents after being given Hot Compresses in the Simangalam Health Center Area, North Labuhanbatu Regency in 2020

To see the results of the frequency of dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020, it can be described in Table 4.3

TABLE 3
DISTRIBUTION OF THE FREQUENCY OF DYMENOROREA PAIN IN ADOLESCENTS BEFORE WARM WATER COMPRESSION IS GIVEN IN THE AREA OF THE SIMANGALAM PUBLIC HEALTH CENTER, LABUHANBATU UTARA REGENCY, 2020

| No | Dysmenorrhea pain in adolescents before being given a warm compress | Frequency (f) | % |
|---|---|---|---|
| 1 | Light | 11 | 73.3 |
| 2 | Currently | 4 | 26.7 |
| | Amount | 15 | 100 |

From table 4.3, it can be seen that the category of Dysmenorrhea Pain in Adolescents before being given Hot Compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020 was mostly mild pain as many as 11 people (73.3%).

### 3.1.4 The Effect of Giving Warm Compresses on Dysmenorrhea Pain in Adolescents in the Simangalam Health Center Area, North Labuhanbatu Regency in 2020

To find out the effect of giving warm compresses to dysmenorrhea pain in adolescents in the Simangalam Health Center area, North Labuhanbatu Regency in 2020, it can be described in table 4.4:

TABLE 4
THE EFFECT OF GIVING WARM WATER COMPRESSES ON DYMENOROREA PAIN IN ADOLESCENTS IN THE AREA OF THE SIMANGALAM PUBLIC HEALTH CENTER, LABUHANBATU UTARA REGENCY IN 2020

| No | Treatment | mean | N | *Sig.* |
|---|---|---|---|---|
| 1 | Dysmenorrhea Pain Pre Test | 2.47 | 15 | 0.0001 |
| 3 | Post Test Dysmenorrhea Pain | 1.27 | 15 | |

Based on Table 4.4 above, it can be seen that there is a difference in the average value of Dysmenorrhea Pain in Adolescents before and after being given a warm compress. Where the pain of dysmenorrhea in adolescents before being given an average value of 2.47 which indicates that

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between moderate and severe pain (index = 1 = mild pain, 2 = moderate pain and 3 = severe pain). After being given a warm compress, there was a reduction in dysmenorrhea pain with an average of 1.27 which indicated the pain was between mild to moderate.

Then based on the results of the Paired Sample-Test test, the p-value is 0.0001 < =0, then H0 is rejected, meaning that simultaneously there is the effect of giving warm compresses to dysmenorrhea pain in adolescents in the Simangalam Health Center area, North Labuhanbatu Regency in 2020.

## 3.2 Discussion

### 3.2.1 Dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020

Dysmenorrhea is a feeling of discomfort in the lower abdomen before and during menstruation. Dysmenorrhea occurs due to excessive release of prostaglandins resulting in an increase in uterine contractions resulting in pain during menstruation (Yunianingrum, 2017). Dysmenorrhea is divided into two, namely primary dysmenorrhea and secondary dysmenorrhea. Primary dysmenorrhea is menstruation that is very painful, without an identifiable pelvic pathology and can occur at the time of menarche or immediately after. Dysmenorrhea is characterized by crampy pain that begins before or immediately after the onset of menstrual flow and continues for 48 to 72 hours (Dahlan and Syahminan, 2017).

From the results of the study, it was found that dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020 was mostly moderate pain. Based on the results of interviews in the field, there was one child who felt severe pain stating that he felt pain that radiated from the stomach to the waist, nausea, dizziness and abdominal pain such as diarrhea.

This pain is caused by excessive contraction of the myometrium muscle, which reduces blood flow, resulting in a lack of oxygen in the myometrial cells which causes pain during spasmodic menstruation, this pain causes the stomach to feel heartburn. This occurs in all menstruating women (Lowdermilk, et al: 2013).

According to Nida and Sari (2016), dysmenorrhea pain is caused by hormonal factors, namely increased progesterone and stress can cause menstrual pain. Unconsciously stress can put pressure on the hips and lower back muscles. Seeing the impact of menstrual pain, it can be said that menstrual pain is one of the problems in the lives of teenagers, which forces them to use various ways to prevent menstrual pain.

Several factors that influence one of them is age. Where most of the respondents are 16 years old. According to Dahlan and Syahminan (2017), age is a variable that affects pain, especially in children and adults. Age is also a factor that affects pain, the older a person is, the more they can control pain.

### 3.2.2 Dysmenorrhea pain in adolescents after being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020

Handling to reduce or eliminate menstrual pain (dysmenorrhea) is usually done by two methods, namely pharmacological and non-pharmacological. Pharmacological treatment of dysmenorrhea by using analgesic drugs at regular doses has side effects including nausea, vomiting, constipation, restlessness and drowsiness (Dahlan and Syahminan, 2017). While non-pharmacological treatment can be done with complementary therapies, one of which is the use of warm compresses (Yunianingrum, 2017).

Based on the results of the study, it was found that dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020 was mostly mild pain. This is in line with Lowdermilk, et al (2013) where the pain of dysmenorrhea can be reduced by non-pharmacological therapy in the form of warm compresses. Supported by research In accordance with research by Bonde, et al (2014) on the effect of hot compresses on decreasing the degree of menstrual pain in respondents in SMA and SMK Yadika Kopandakan II, it was found that the average menstrual pain after being given a warm compress was 1.27, the lowest value was a scale pain is 1 (mild) and the highest is pain scale 2 (moderate)

from a scale of 0-4.

Warm compresses provide a warm feeling to the respondent by using fluids or tools that cause warmth to the body parts that need it (Natali, 2013). Warm compresses are effective for reducing dysmenorrhea pain felt by young women on the first day of menstruation and on the second day of menstruation. Giving warm applications to the body is an effort to reduce acute and chronic pain symptoms (Mahua et al, 2018). This therapy is effective for reducing pain associated with muscle tension although it can also be used to reduce various other types of pain (Mahua et al, 2018).

The purpose of this warm compress is to reduce pain intensity with the benefit of giving warm compresses biologically which causes dilation of blood vessels resulting in increased blood circulation. Giving warm compresses uses the principle of heat delivery through conduction where heat is applied to the affected area to improve blood circulation and reduce muscle tension so that it will reduce pain in women with primary dysmenorrhea, because women with dysmenorrhea experience uterine contractions and smooth muscle contractions. and Wahyuningsih, 2013).

The physiological impact of warm compresses is softening fibrous tissue, making body muscles more relaxed, reducing or eliminating pain, and improving blood flow (Mahua et al, 2018). Warm compresses are useful for increasing local skin temperature, promoting blood circulation and stimulating blood vessels, reducing muscle spasm and increasing the pain threshold, relieving pain sensations, and providing calm and comfort (Mahua et al, 2018).

### 3.2.3 The Effect of Giving Warm Compresses on Dysmenorrhea Pain in Adolescents in the Simangalam Health Center Area, North Labuhanbatu Regency in 2020

Based on the results of the study, it can be seen that there is a difference in the average value of dysmenorrhea pain in adolescents before and after being given a warm compress. Where the pain of dysmenorrhea in adolescents before being given an average value of 2.47 which indicates that between moderate and severe pain (index = 1 = mild pain, 2 = moderate pain and 3 = severe pain). After being given a warm compress, there was a reduction in dysmenorrhea pain with an average of 1.27 which indicated the pain was between mild to moderate.

Then based on the results of the Paired Sample-Test test, the p-value is 0.0001 < =0, then H0 is rejected, meaning that simultaneously there is the effect of giving warm compresses to dysmenorrhea pain in adolescents in the Simangalam Health Center area, North Labuhanbatu Regency in 2020.

In line with the research of Nida and Sari (2017) who conducted a study entitled The Effect of Warm Compresses on Reducing Dysmenorrhea Pain in Class XI Respondents at SMK Muhammadiyah Watukelir Sukoharjo, the results showed that this study showed the effect of warm compresses on reducing dysmenorrhea pain in class XI respondents in SMK Muhammadiyah Watukelir, with a p value of 0.000 (p < 0.05).

Supported by research by Dahlan and Syahminan (2017) who conducted a study entitled The Effect of Warm Compress Therapy on Menstrual Pain (Dysmenorrhea) in Simpang Haru Padang Banking Vocational School Respondents stated that warm compresses can reduce dysmenorrhoea pain levels in Simpang Haru Padang Banking Vocational School Respondents.

Supported by research by Ramadhayanti et al. (2017) entitled The Effect of Warm Compresses on Reducing Menstrual Pain Degrees in Young Women at SMA Karya Ibu Palembang which stated that there was an effect of giving warm compresses on decreasing the degree of menstrual pain (p = 0.0001).

Supported by Syahria's research (2016) with the title of the effect of warm compresses on reducing dysmenorrhea pain in final year students IV Midwife Educators at the University of 'Aisyiyah Yogyakarta states that there is an effect of giving warm compresses on reducing dysmenorrhea pain in final year students of D IV Educator Midwives at the University' Aisyiyah Yogyakarta Before being given a warm compress, the majority of respondents experienced moderate pain, namely 14 respondents (93.3%). Meanwhile, the intensity of dysmenorrhea pain after being given a warm compress was the most in the mild pain category, namely 11 respondents (73.3%). The results of the analysis test with Wilcoxon significancy p of 0.001 (p <0.05).

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## 4. Conclusion

Based on research conducted in the Simangalam Health Center area, North Labuhanbatu Regency in 2020, the conclusions were: (1) Dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area of North Labuhanbatu Regency in 2020 was mostly moderate pain. (2) Dysmenorrhea pain in adolescents before being given warm compresses in the Simangalam Health Center area, North Labuhanbatu Regency in 2020 was mostly mild pain. (3) There is an effect of giving warm compresses to dysmenorrhea pain in adolescents in the Simangalam Health Center area, North Labuhanbatu Regency in 2020 with a p-0.0001 <a= 0.05. Suggestions: (1) Research Place, It is hoped that with this research, health cadres in the Simangalam Community Health Center, Labuhanbatu Utara Regency, will participate in providing education about the importance of giving warm compresses in reducing pain. (2) Research Institutions, it is hoped that this research will add information in the development of science, especially regarding warm compresses and menstrual pain. (3) Further researchers, it is hoped that future researchers can be an initial reference in continuing the same research and adding research variables so that the research can be more accurate It is hoped that this research will add information in the development of science, especially regarding warm compresses and menstrual pain. (3) Further researchers, it is hoped that future researchers can be an initial reference in continuing the same research and adding research variables so that the research can be more accurate It is hoped that this research will add information in the development of science, especially regarding warm compresses and menstrual pain. (3) Further researchers, it is hoped that future researchers can be an initial reference in continuing the same research and adding research variables so that the research can be more accurate

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