

Comparison Of The Level Of Decreasing Scale Of Dysmenorea Pain Using Warm Compress And Massage Counterpressure Methods To Junior High School Students In Cimahi City

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Abstract: In Indonesia, the incidence of menstrual pain or dysmenorrhea is 64.25%, consisting of 54.89% of primary dysmenorrhoea and 9.36% of secondary dysmenorrhoea. Dysmenorrhea pain occurs due to contractions of the uterine muscles due to the release of prostaglandins. This pain can spread from the stomach to the waist, lower back, and inner thighs, and can carry out daily activities. Dysmenorrhea can be released non-pharmacologically can be given through warm compresses, cold compresses, counterpressure massage, exercise, rest, deep breathing relaxation techniques, chocolate administration, yoga, and hypnotherapy. This study was conducted to look at a better scale of dysmenorrhea after using counterpressure massage methods and warm compresses on female students in junior high school in the city of Cimahi. The design used in this study was quantitative by observational method using two groups of posttest pretest designs without control. The subjects of the study were 240 female students from 3 junior high schools in Cimahi City who were visited by primary dysmenorrhea, using total sampling. Respondents were divided into 2 groups, namely massage suppressing groups and warm compress groups. The study was carried out for 4 cycles of dysmenorrhea. Data analysis which is different from the independent mean with the t test. The results showed that there was a large scale before and after warm compresses, with a value of $p = 0,000$ ($p < 0,05$) and there was a decrease in the scale of pain before and after massage with a value of $p = 0,000$ ($p > 0, 05$). The results of the study can be duplicated and are very efficient and massage can reduce the scale of dysmenorrhoea pain. Non-pharmacological treatments for hot compresses and counterpressure massages can be used by middle school students to reduce the scale of dysmenorrhoea pain.

Index Terms: dysmenorrhoea pain, Warm Compresses, Massage Counterpressure.

1 INTRODUCTION

Dysmenorrhea is a great pain state and can interfere with daily activities, which are characterized by abdominal pain, cramps, back pain, nausea and diarrhea (Kusmiran, 2011). In Indonesia the numbers of prevalence menstrual pain or dysmenorrhea by 64.25% were of 54.89% and 9.36% of primary dysmenorrhoea a secondary dysmenorrhoea (Suratman, 2008). A dysmenorrhea pain occurs due to excessive contraction of the muscles of the uterus due to the release of prostaglandins. The level of pain that is felt depends on the amount of prostaglandin released. This pain can run from the stomach to the waist, lower back, and inner thighs. Therefore this pain can interfere with daily activities. dysmenorrhoea can be handled in two ways, namely pharmacological and non-pharmacological therapy. (Kumalasari & Andyanto ro, 2012). Pharmacological therapy, namely therapy using medical. Whereas non-pharmacological treatment of dysmenorrhea can be given through warm compresses and cold compresses (Oktasari; Misrawati; Utami, 2012), massage counterpressure (Gumangsari, 2014), exercise, rest, deep breathing relaxation techniques (Azizah, 2013), giving chocolate (Hapsari; Anasari, 2012), yoga, and hypnotherapy Giving warm compress is one of the non-pharmacologi dismenor handling which aims to provide a sense of comfort and warm on a particular area by using a liquid or tools that generate warm the body part that requires (Istichomah, 2007).

This compress action is useful for smoothing the circulation of the blood, relieving pain, stimulating intestinal erectalsis, expediting inflammation of the sap, and providing calm and pleasure to the client (Istichomah, 2007). In addition, by providing a warm compress to relieve ischemia with decrease my uterus and the counter launched of blood pressure so that it can relieve pain, reduce tension, increase menstrual flow and relieve pelvic vasocongestion (Bonde et al, 2014). The other way in the treatment of dysmenorrhea pain is to massage counterpressure. Massage is an act of suppression by the hands of the soft tissues, muscles of the tendons or ligaments, without causing shifts or changes in joint position to reduce pain, produce relaxation, and increase circulation. The basic movements in massage can be circular movements carried out by the palms, pressing movements and pushing forward and to behind using energy, patting, chopping, wringing, and curving movements . Each of these movements produces different pressure, direction, speed, hand position and movement to produce the desired effect on the tissue underneath (Johariah, 2012). Counterpressure is a strong pressure massage with how to put the heel of the hand or flat from the hand, or also use a tennis ball. Pressure on the Counterpressure can be given in a straight motion or a small circle (Maryu nani, 2010).

State of the problem

1) State of the problem

The state of the problem in this study is how is the difference in the level of reduction in the scale of dysmenorrhea pain using the warm compress method and counterpressure massage on junior high school students in Cimahi City

2) Approaches and concepts to answer problems

The approach used in this study is to use the pre-experimental design through the design of two group pretest posttest

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without control . Where there are two experimental groups, each of which will be assessed for the level of pain before giving intervention and after the intervention process has been completed. Group X intervention using warm compresses, while group Y using counterpressure massage.

2 RESEARCH METHOD

The stages of the research

The stages of research in this study are 1) Preparation phase, including problem determination, library study, proposal preparation, 2) Stage of implementing warm compresses and counterpressure massage and data analysis, 3) The final stage is in the form of unanimous reporting.

Research sites

This research will be conducted in 3 (three) junior high schools in Cimahi City.

Observed of Change

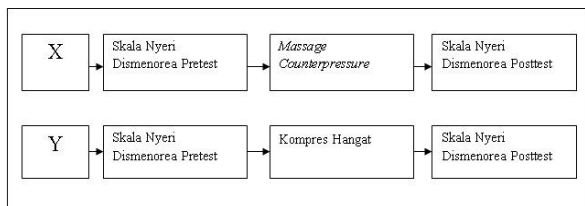
The pain scale of the respondent dysmenorrhea before and after the intervention was given to the warm compress group and the E- massage group for 4 cycles.

Research Model

This study uses a warm compress method and counterpressure massage based on procedural operational standards.

Research design

The approach used in this study is to use the pre-experimental design through the design of the two group pretest posttest without control. Where there are two experimental groups, each of which will be assessed when the pain level before and after the intervention was giving. Intervention group Y using warm compress, while the group X using counterpressure massage. With the research flow as follows:



Implementation of the research is done by first implementing the pre-test to measure the blood pressure of the respondents in the intervention group and the control group before the aromatherapy done. Then the intervention group was given rose aromatherapy by way of inhalation of tissue that has been dropped aromatherapy by 2 drops with 3 days in a row. While in the control group was not given any treatment. After intervening for three consecutive days, then conducted post test that is done to measure blood pressure at respondents both intervention groups and control groups.

3 RESULT AND DISCUSSION

After processing / analyzing data using software in computer, the results of this study are presented in the form of univariate and bivariate analysis. Univariate analysis is to see the identification of menstrual pain level before and after being given a warm compress, and a period of menstrual pain before

and after being given Massage Counter Pressure on female students Junior High School in Cimahi City. Furthermore, the analysis will be analyzed bivariate comparison of the level of dysmenore a pain scale by using warm compresses and massage Counter Pressure to student Junior High School in Cimahi City. by using the Dependent test sample T Test and Independent sample T Test, as follows:

Univariate Analysis Results

The scale level of menstrual pain before and after was given a warm compress, on female students Junior High School in Cimahi City.

Table 5.1 Distribution of the scale level of menstrual pain before and after being given a warm compress, on female students Junior High School in Cimahi City.

Pain Scale Dismenore	Before		Pain Scale Dismenore	After	
	Frekuensi	Persentase (%)		Frekuensi	Persentase (%)
2	6	5.0	0	6	5.0
3	68	56.7	1	41	34.2
4	43	35.8	2	51	42.5
5	3	2.5	3	22	18.3
Total	120	100.0	Total	120	100.0

Source : Data Primer 2018

Based on ta buzzer 5.1 above obtained data from menstrual pain scale level before being given a warm compress, the female students Junior High School in Cimahi City, most of which were 68 female students (56.7%) experienced a level of pain scale 3, almost half of which were 43 female students (35.8%) experiencing a level of pain scale 4, and a small portion of 6 students i (5%) had pain scale level 2, and 3 female students (2.5%) me n gala mi pain scale level 5. While the level of menstrual pain scale after being given a warm compress is obtained on female students SMP in Cimahi City, that almost half of them were 51 female students (42.5%) experienced a level of pain scale 2, and 41 female students (34.2%) experienced a level of pain scale 1, and a minority of 22 students (18, 3%) experienced a level of pain scale 3, and 6 female students (5.0%) experienced a level of pain scale 0.

Table 5.2 Differences in Scale of Dysmenorrhea Pain a Before with After Given a Warm Compress

DYSMENO PAIN	0	1	2	3	4	5	TOTAL
BEFORE COMPRESS	0	0	6	68	43	3	120
AFTER COMPRESS	6	41	51	22	0	0	120

Source : Data Primer 2018

Based on tabel 5.2 above the data obtained from the difference in the level of pain of a dysmenorrhea before and after being given a warm compress, that is before being given a warm compress which experienced a scale of pain 3, there were 68 people and had been compressed to 22 people. Before being given a warm compress which experienced a scaling of pain 4 there were 43 people and after being compressed it became none. Before being given a warm compress which experienced a pain scale of 5 there were 3 people and after being compressed it became none . The rest after being compressed, only female students experienced a decrease in pain scale, namely the scale of pain 1 there were 4 1 and the scale of pain 0 there were 6 female students.

Results of Bivariate Analysis

Data Normality Test Results

Before bivariate analysis, a normal data distribution test was conducted to determine the type of statistical test used. The results of the normality scale data of respondents' scale before and after being given a warm compress on Cimahi City Middle School students used a skewness ratio with the following results:

Table 5.4 Distribution Table of the Effect of Warm Compress Therapy on Pain in Dysmenorrhea Pain in Junior High School Cimahi City.

Pain Level	Mean	Std. Deviasi	Std. Error Mean	P Value	N
Before Therapy	3,36	0.619	0,057	0,000	120
After Therapy	1,74	0.815	0,074		120

Source : Hasil Penelitian 2018

Statistical test results using the Parametric Statistical Test (Dependent Sample T Test), two groups of pairs obtained the value of $P = 0,000$. The value of $P (0,000) < \alpha (0.05)$, then H_0 is rejected, thus it can be concluded that there is an effect of warm compress therapy on the pain of a dysmenorrhea in female students of junior high school in the city of Cimahi.

Table 5.5 Distribution of levels of menstrual pain scale before and after being given a Massage Counter Pressure on female students Junior high School in Cimahi City.

Pain Scale Dismenore	Before		Pain Scale Dismenore	After	
	Frekuensi	Persentase (%)		Frekuensi	Persentase (%)
2	3	2.5	0	2	1.7
3	74	61.7	1	27	22.5
4	40	33.3	2	51	42.5
5	3	2.5	3	31	25.8
			4	8	6.7
			5	1	0.8
Total	120	100.0	Total	120	100.0

Source : Hasil Penelitian 2018

Based on tabel 5.5 above obtained data from menstrual pain scale levels before and after a given Massage Counter Pressure on students SMP in Cimahi City, that most of the 74 female students (61, 7%) experienced a level of pain scale 3, almost half of which were 40 female students (33.3%) experienced a level of pain scale of 4, and a small percentage of 3 female students (2.5,%) experienced a level of pain scale 2 and 5. While the scale of menstrual pain after being given a Counter Pressure Massage, on female students In Cimahi City Junior high School, there were 51 female students (42.5%) experiencing pain level 2, there were 31 female students (25.8%) experiencing pain level 3, there were 27 female students (22.5,%) experiencing scale levels pain 1, there are two female students (1.7%) was pain scale level 0, and there is one female students (0.8%) me n is suffering pain scale level 5.

Table 5.6 Scale Differences in Dysmenorrhea Pain Before and After Having a Massage Counter Pressure

DYSMENORE PAIN	0	1	2	3	4	5	TOTAL
BEFORE MCP	0	0	3	74	40	3	120
AFTER MCP	2	27	51	31	8	1	120

Based on table 5.6, the differences in the level of pain of a dysmenorrhea before the Counter Pressure Massage were obtained before being given a Counter Pressure Massage which experienced a scale pain of 3 there were 74 students and after the Massage Counter Pressure became 31 female students. Before being given a Massage Counter Pressure which experienced a scale of pain 4 there were 40 female students and after Massage Counter Pressure there were 8 female students. Before being given a Massage Counter Pressure that experienced a scale of pain 5 there were 3 female students and after Massage Counter Pressure they were 1 female student. The rest after the Counter Pressure Massage, only students experienced a decrease in the scale of pain, namely the scale of pain 1 was 27 and the scale of pain was 0 there were 2 female students.

Results of Bivariate Analysis

Data Normality Test Results

Before bivariate analysis, a normal data distribution test was conducted to determine the type of statistical test used. The results of the normality of the pain scale data of respondents before and after being given a Massage Counter Pressure on Cimahi City Junior high School students used a skewness ratio with the following results :

Table 5.8 Table of Distribution of Effects of Counter Pressure Massage Therapy on Pain in a Dysmenorrhea in Cimahi City Junior high School.

Pain Level	Mean Rank	Sum of Rank	P Value	N
Before MCP	51,70	5222	0,000	120
After MCP	31,00	31		120

Source : Hasil Penelitian 2018

Statistical Test Results using the Non Parametric Statistical Test (Dependent Sample T Test) two pairs of groups were obtained as a result of $P = 0,000$. The value of $P (0,000) < \alpha (0.05)$, then H_0 is rejected, thus it is concluded that there is an effect of Counter Pressure Massage therapy on the pain of a dysmenorrhea on female junior high school students in Cimahi City. Comparison Rate Decrease Pain Scale Dysmenorrhea a metode Using Warm Compress And Massage Counter Pressure on SMP in Cimahi.

Data Normality Test Results

Before analyzed the difference between the level of pain by dysmenore a warm compress with massage therapy counters Pressure first tested the normality of distribution of the data to determine the type of statistical test used. The results of the normality test data on the scale of warm compressed respondents with massage counter pressure on Cimahi City junior high School students used a skewness ratio with results as follows:

Table 5.10 Distribution Table Comparison of the Rate of Decreasing Scale of a Dysmenorrhea Pain Using the Method of Warm Compress and Massage Counter Pressure on Junior high School Students in Cimahi City.

Method	Mean	Std. Deviasi	Std. Error Mean	P Value	N
Warm Compress	1,74	0.815	0,074	0,000	120
Massage Counter Pressure	2,16	0.935	0,085		120

Source : Hasil Penelitian 2018

The Statistical Test Results using the Parametric Statistical Test (Independent Sample T Test), the two unpaired groups obtained the value of $P = 0,000$. The value of $P (0,000) < \alpha (0,05)$, then H_0 is rejected, thus it is concluded that there is a difference in the rate of decrease in the scale of pain in a dysmenorrhea by using the method of warm compresses and massage counter pressure in Junior high school students in Cimahi City.

5 CONCLUSION AND SUGGESTION

Conclusion

1. Frequency of scale of menstrual pain before being given a warm compress, on female students Most of the SMP in Cimahi City were 68 female students (56.7%) experiencing pain scale levels 3.
2. The frequency of the scale of menstrual pain after being given a warm compress is obtained from female students Junior high School In Cimahi City, almost half of them were 51 female students (42.5%) experienced pain scale level 2.
3. The value of $P (0,000) < \alpha (0,05)$, then H_0 is rejected, thus it is concluded that there is an effect of warm compress therapy on the pain of a dysmenorrhea on female junior high school students in Cimahi City.
4. Frequency of scale of menstrual pain before and after being given a Massage Counter Pressure on female students Most of the SMP in Cimahi City were 74 female students (61.7%) experienced a level of pain scale 3.
5. Frequency of scale of menstrual pain after being given a Counter Pressure Massage, on female students Junior high School in Cimahi City, namely 51 female students (42.5%) experienced a level of scale 2.
6. Value of $P (0,000) < \alpha (0,05)$, then H_0 is rejected, thus it is concluded that there is an effect of Counter Pressure Massage therapy on the pain of a dysmenorrhea on female junior high school students in Cimahi City.
7. Value of $P (0,000) < \alpha (0,05)$, then H_0 is rejected, thus it is concluded that there are differences in the rate of decrease in the scale of pain in a dysmenorrhea by using the method of warm compresses and massage counter pressure in junior high school students in Cimahi City.

Suggestions

The results of this study may be one of the reference method in lowering incidence of pain scale for junior high school students in Cimahi who experience dysmenorrhea, but this research is still far from perfect so the need for further research to provide an alternative method of replacement techniques medications in lowering scale of pain for junior high school students in Cimahi City who experience dysmenorrhea.

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