

Analysis Of Effleurage Massage And Mozart Classic Music Therapy On Primary Dysmenorrhea In Adolescent Girls At Islamic Boarding School Kararan Trenggalek District

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ABSTRACT

Dysmenorrhea is lower abdominal pain that occurs before menstruation or during menstruation. Dysmenorrhea can make women unable to carry out daily activities such as studying, working and other daily activities and requires them to sleep. The aim of this research was to determine the analysis of effleurage massage therapy and Mozart classical music on primary dysmenorrhea in young women at the Trenggalek Islamic boarding school. The design of this research is quantitative with a pre-experimental design approach pretest-posttest one group. The independent variables of this research are effleurage massage therapy and Mozart classical music therapy, while the dependent variable is Primary Dysmenorrhea. The instrument used was the Numerical Rating Scale (NRS) for 35 respondents taken using a purposive sampling technique. The results of the pain level of respondents before being given therapy were that the majority experienced primary dysmenorrhea in the moderate pain category, namely on a scale of 4-6, 19 respondents (54%). After being given therapy, the majority of respondents experienced primary dysmenorrhea in the mild pain category on a scale of 1-3, 27 respondents (77%). The results of the study using the Wilcoxon test with a value of $\alpha = 0.05$, it was found significantly 0,000, because the significance value was <0.05 which meant there was an effect of giving effleurage massage therapy and classical music Mozart on the decline in primary dysmenorrhea in the women's teenager in Islamic boarding schools by Trenggalek. Effleurage massage therapy can warm muscles and improve blood circulation, while Mozart classical music therapy can stimulate endorphin hormones which, if both therapies are carried out, can reduce pain.

Keywords : Effleurage Massage, Mozart Classical Music, Primary Dysmenorrhea

PENDAHULUAN

Time teenager is Wrong one stage in human life often called puberty or time transition from children to time mature. Time This marked with existence change form physical, emotional, psychological and social as characteristics of puberty. Adolescence, namely between the ages of 10-19 years, is a period of period time organ maturation human reproduction often called puberty, During puberty, adolescent girls often experience several problems during menstruation, such as dysmenorrhea, vaginal discharge, and itching (Puspita, Hasanah, and Ifayanti 2020). One of the most common menstrual disorders is dysmenorrhea. Dysmenorrhea remains a common problem among adolescent girls, and many still rely on traditional medicine to treat it. pharmacological therapy that Finally will cause effect dependence. Dysmenorrhea namely pain that is felt in the lower abdomen and occurs before, during, or after menstruation (Hikmah, Amelia, And Ariani 2018). Dysmenorrhea primary is

painful period without abnormalities tools Primary dysmenorrhea occurs some time after menarche. Secondary dysmenorrhea is characterized by abnormalities in the genital organs within the pelvic cavity. This type of dysmenorrhea is also known as organic dysmenorrhea (Fidiarti, Widyoningsih, Engkartini 2019).

World Health Organization (WHO) state number dysmenorrhea in world very big average More than 50% of women in every country experience dysmenorrhea (Apriyanti, 2018). Based on data from the World Health Organization (WHO) in 2017, the incidence of dysmenorrhea was 1,769,425 people (90%) of women who experienced dysmenorrhea with 10-16% experiencing severe dysmenorrhea. The incidence of dysmenorrhea in the world is very large, on average almost more than 50% of women experience it. The incidence of dysmenorrhea in the United States is 30% - 50% of women of reproductive age. Around 10% - 15% of them are forced lost chance Work, school, And life family. Sweden found number The incidence of dysmenorrhea in women aged 19 years was 72.42% (Nursangadah and Hidayah 2021).

The prevalence of dysmenorrhea in Indonesia is 107,673 people (64.25%), consisting of 59,671 people (54.89%) experience dysmenorrhea primary And 9,496 soul (9.36%) experience dysmenorrhea secondary. Primary dysmenorrhea is experienced by 60%-75% of adolescents. It is reported that 30%-60% of female adolescents experience dysmenorrhea. 7 % - 15% No go to school And as much as 67.08% teenager interesting self from activity social, academic, and sports (Oktorika, et al. 2020). In East Java, the incidence of dysmenorrhea was 64.25%, consisting of 54.89% primary dysmenorrhea and 9.36% secondary dysmenorrhea (Syaiful & Naftalin, 2018).

Results survey data beginning with technique interview And distribution questionnaire obtained that Karangan Islamic Boarding School, Trenggalek Regency has 42 junior high school aged female students. person. After done survey beginning obtained data teenager daughter Which experience dysmenorrhea as many as 38 female students That means more from 50% teenager daughter experience dysmenorrhea moment period And Lots between Those who use eucalyptus oil, drink warm water as a treatment for dysmenorrhea and some are given painkillers and none have used the *effleurage massage method* and Mozart's classical music to reduce their dysmenorrhea pain.

Painful menstruation happen especially in stomach part lower, but can spread until to lower back, waist, pelvis, upper thighs, and calves. The pain may also be accompanied by severe abdominal cramps. the originate from contraction muscle uterus Which very intense moment emit blood menstruation from within the uterus. These very intense muscle contractions then cause the muscles to tense and cause cramps or pain (Agustin, 2018). Dysmenorrhea has a significant impact on adolescent girls because can cause disturbance daily activities in particular learning activities at school. Dysmenorrhea can cause a number of problems for female students, including missing school, limiting activities, decline performance academic And problem psychological (not enough concentration, difficult Sleep, sensitive, and irritable) (Bustamam, et al. 2021).

Treatment for dysmenorrhea is generally divided into two, namely pharmacological and non-pharmacological. Therapy pharmacological done with method giving drug analgesic, Which used to block transmission stimulus so that occurrence change perception with method reduce cortical against pain (Ituga, Taqiyah, Agustin 2020). Meanwhile, non-pharmacological therapy involves reducing factors that can increase pain. One of the therapies use non-pharmacological methods to reduce the intensity painful namely *effleurage massage* according to research that done by (Wati And Ardini 2021).

Effleurage massage is effective for reducing the pain of dysmenorrhea. *Effleurage* is a form of *massage* that uses palm hand Which give pressure gentle to on surface body with direction circular motion repeatedly. This technique aims to increase blood circulation, apply

pressure and warm the muscles. muscle abdomen as well as increase relaxation physique And mental. *Effleurage* is massage techniques Which safe, easy For done, No need Lots tool, No need cost, has no side effects and can be done alone or with the help of others (Sitorus and Harianja 2020).

Pain can also be reduced by using distraction techniques. The most effective distraction technique for reducing pain is listening to music. Listening to music, such as classical music, can produce endorphins (a morphine-like substance produced by the body that can reduce pain). flavor pain Which can hinder transmission impulse painful in the system nerve center, so that the sensation of menstrual pain can be reduced, music also works on the limbic system which will be transmitted to the nervous system that regulates muscle contractions in the body, so that it can reduce muscle contractions (Ituga, Taqiyah, Agustin 2020).

Based on the description above, I am interested in conducting research on "Analysis of Elffleurage Massage Therapy and Mozart's Classical Music on Primary Dysmenorrhea in Adolescent Girls at the Karangan Islamic Boarding School, Trenggalek Regency".

METHOD

Study This is study quantitative with design study *pre experimental pretest-posttest one group design* . With purposive sampling technique, a sample of 38 respondents was obtained, the independent variables were *effleurage massage therapy* and Mozart classical music and the dependent variable was primary dysmenorrhea with tool *Numerical measurement Rating Scale (NRS)* . Used test Wilcoxon statistic For to determine the effect of the intervention. Analysis using the Wilcoxon statistical test yielded $p = 0.000 < 0.05$, so H_0 rejected And H_1 accepted Which means There is influence giving therapy *effleurage massage* And Mozart's classical music on reducing primary dysmenorrhea in female adolescents at the Karangan Islamic Boarding School, Trenggalek Regency.

RESULTS

Table 1 Distribution Characteristics Respondents And Variables

Results Study	Frequency (f)	Percent (%)
Age		
13 years old	6	17.2
14 years	18	51.6
15 years	11	31.2
Age Menarche		
9 years	1	2.9
10 years	16	45.8
11 years old	8	22.9
12 years old	5	14.2
13 years old	5	14.2
Level Painful Before Intervention		
Painful light (1- 3)	11	32
Painful currently (4- 6)	19	54
Painful heavy (7- 10)	5	14
Level Painful After Intervention		
Painful light (1- 3)	27	77 %
Painful currently (4- 6)	8	23 %
Painful heavy (7- 10)	0	0 %

Source : Questionnaire Study, date 3 January 2024

Table 2 Tabulation Cross Between Before And After Given Intervention

		Level Painful After Intervention		Total
		Painful light (1-3)	Painful medium (4-6)	
Pain Level Before Intervention	Painful light (1- 3)	11	0	11
		31.4%	.0%	31.4%
	Painful currently (4- 6)	15	4	19
		42.9%	11.4%	54.3%
	Painful heavy (7- 10)	1	4	5
		2.9%	11.4%	14.3%
Total		27	8	35
		77.1%	22.9%	100.0%

Source : Questionnaire Study, date 3 January 2024

Based on Table 2 above, it is known that the majority of respondents experienced before being given the intervention painful currently as much as 19 respondents (54%) And decrease after given intervention become painful light a number of 27 respondents (77.1%) after given *effleurage* therapy *massage* And music Mozart classics .

Analysis Results Test Statistics Study

	Post test - Pre- Test
Z	-4.379 ^a
Asymp. Sig. (2- tailed)	.000

The results of the research analysis on the provision of *effleurage massage therapy* and Mozart classical music on primary dysmenorrhea in female adolescents based on statistical tests using the Wilcoxon test with a value of $\alpha = 0.05$ obtained a significance value of 0.000, because the significance value <0.05 which means there is an effect of providing *effleurage massage therapy* and Mozart classical music on reducing primary dysmenorrhea in female adolescents at the Karangan Trenggalek Islamic Boarding School.

DISCUSSION

Identification Incident Dysmenorrhea Primary Before Given Intervention

Based on Table 1 known that before given therapy *Effleurage Massage* And Music The majority of respondents experienced moderate pain in Mozart's classic, 19 (54%), 11 (32%) experiencing mild pain, and 5 (14%) experiencing severe pain.

Dysmenorrhea is pain in the lower abdomen that occurs before menstruation or during menstruation. That happen (Misaroh, 2019). Dysmenorrhea is painful period approaching or during time Menstruation lasts until it prevents a woman from carrying out daily activities such as work and school, and requires her to sleep. Menstrual pain is often accompanied by nausea, headaches, feelings of fainting, and irritability (Putri, 2019).

Women who have a history of dysmenorrhea during menstruation have higher intrauterine pressure and have twice the level of prostaglandins in the blood (menstruation) compared to with woman Which No experience painful. Uterus more often contract and uncoordinated or irregular. As a result of this abnormal increase in uterine activity, blood flow become reduce so that happen ischemia or hypoxia uterus Which cause emergence pain. Other pain mechanisms are caused by prostaglandins (PGE2) and other hormones that make sensory nerves painful in the uterus become hypersensitive to Work bradykinin as well as stimulus painful physique And other chemicals (Reeder, 2020).

According to researchers, primary dysmenorrhea usually begins when a woman

experiences her first period and often... feel nauseous vomit And diarrhea. Teenager daughter Which Still in school medium can with easy to experience painful period primary. Where *Dysmenorrhea primary* Because flavor painful arise without existence because definite or unrecognizable. Several factors are suspected become a trigger for the occurrence Primary dysmenorrhea includes factors such as age and history of menarche, so that research has found that the level of menstrual pain varies between one adolescent girl and another because the causes are also different.

Identification Incident Dysmenorrhea Primary After Given Intervention

Table 1 shows that after receiving *Effleurage Massage* and Mozart Classical Music therapy, the majority of respondents (27 people) experienced mild pain. Eight people (23%) experienced moderate pain, and none experienced severe pain.

According to results study happen decline Which significant on level painful dysmenorrhea primary in adolescent girls at the Karangan Islamic boarding school. The reduction in pain levels of primary dysmenorrhea is due to effleurage massage, which improves blood circulation and stimulates the skin (tactile fibers), which can inhibit pain signals from other areas of the body. The effleurage technique works as a pain inhibitor by influencing the hypothalamus and the pain gateway, which stimulates the anterior pituitary gland. For produce endorphin Which can cause feeling comfortable And nice so that can reduce pain (Danu Atmaja, 2019). Meanwhile, Mozart's classical music is one of the distraction techniques. Which can reduce tension muscle Because own repetition melody And rhythm every twenty to thirty seconds which is in harmony with the alpha wave structure of the human brain, so that when alpha waves are active it will create a calm atmosphere, improve short-term memory and increase concentration (Limyati, 2019).

Effleurage therapy massage And classical music Mozart is given twice a day during 20 minute in the lower abdomen of the respondent, then after 3 hours an observation was carried out on the level of primary dysmenorrhea pain and it was found results Where happen decline Which significant, before given *effleurage* therapy massage and Music Classic Mozart majority respondents experience category painful currently as much as 19 respondents (54%) and after being given *effleurage massage therapy* and Mozart classical music, the pain level decreased to the mild pain category for the majority of 27 respondents (77%).

Analysis Influence Giving Therapy *Effleurage Massage* And Music Classic Mozart

The results of the study showed that after conducting a statistical test using *Wilcoxon* with a value of $\alpha < 0.05$, a significant value of 0.000 ($\alpha < 0.05$) was obtained because the significant value < 0.05 means that there is an effect of providing *effleurage massage therapy* and classical music. Mozart on the reduction of primary dysmenorrhea in female adolescents at the Karangan Trenggalek Islamic Boarding School.

The study found that the level of primary dysmenorrhea pain experienced by respondents tended to decrease from before receiving *effleurage massage* and Mozart classical music therapy to after, where the decrease was significant. The decrease in primary dysmenorrhea pain was due to effleurage massage. can launch circulation blood And stimulate skin (fiber tactile) Which can Inhibits pain signals from areas of the body. Effleurage works as a pain blocker by influencing the hypothalamus and the pain gateway, which stimulates the anterior pituitary gland to produce endorphins, which can create feelings of comfort and well-being, thereby reducing pain. painful (Danu atmaja, 2019). Whereas music classic Mozart is Wrong One technique distraction Which

can reduce tension muscle Because own repetition melody And rhythm every two tens up to three tens second Which in harmony with structure wave alpha brain man, so that when wave Active alpha will create a calm atmosphere, improve short-term memory and increase concentration (Limyati, 2019). When music classic Mozart heard And accepted by leaf ear then distributed to the brain nerves can produce endorphins (a morphine-like substance supplied by

the body that can reduce pain) which can inhibit the transmission of pain impulses in the central nervous system.

The intensity of pain experienced by respondents before therapy tended to be high, making them feel very uncomfortable. Therefore, researchers provided *effleurage massage therapy* and Mozart classical music to respondents experiencing primary dysmenorrhea. during 20 minute as much as 2 time a day And after therapy finished awaited during 3 O'clock after that just done pain level observation. The results showed that almost all respondents Pain reduction. Pain reduction varies due to different ages and pain tolerance limits. Before being given *effleurage massage therapy* and Mozart Classical Music, the majority of respondents experienced moderate pain, as many as 19 respondents (54%), and after being given *effleurage massage therapy* and Mozart classical music, the pain level decreased to the mild pain category, as many as 27 respondents (77%). Therefore, it can be concluded that providing *effleurage massage therapy* and Mozart classical music is effective in reducing the level of pain in primary dysmenorrhea.

The results of this study are in line with research by Zuraida (2020) which analyzes *massage effleurage* on reducing primary dysmenorrhea pain, the research results explain that there is an effect of *effleurage massage* to decline painful period on teenager daughter, Where happen decline average level Pre-test menstrual pain was 4.33 and the average decrease in the post-test pain scale was 1.60 with statistical test results obtaining p Value = 0.0005 ($p < 0.05$).

Research conducted by Alhamida Salnaf Ituga (2020) is also in accordance with this research, regarding the effect of classical music therapy on reducing primary dysmenorrhea, the results of the study showed a value of $p = 0.000$ which means there is a difference in the results before and after the administration of classical music therapy, the average pre-test was 3.23 and the average post-test was 1.96, so there is an effective influence of classical music therapy on primary dysmenorrhea.

A person experiencing a massage will experience comfort and relaxation, as will listening to music, which is a distraction technique. Both techniques help a person focus less on the pain. This was also experienced by respondents in this study. When given *an effleurage massage* and listened to Mozart's classical music therapy, they reported significantly reduced pain and almost no pain was felt. In this case, the researchers concluded that *effleurage massage* and Mozart's classical music are effective. in reducing dysmenorrhea because this massage provides pressure that warms the abdominal muscles and increases physical and mental relaxation. *Effleurage massage* and Mozart's classical music when performed simultaneously will make body stimulate For release compound Endorphin Which is a pain reliever and can create a feeling of comfort.

CONCLUSION

1. Data shows that before receiving *Effleurage Massage* and Mozart Classical Music therapy, the majority of respondents (19 people) experienced moderate pain. Eleven (32%) experienced mild pain, and five (14%) experienced severe pain.
2. Data shows that after receiving *Effleurage Massage* and Mozart Classical Music therapy, the majority of respondents (27 people) experienced mild pain. Eight (23%) experienced moderate pain, and none experienced severe pain.
3. *effleurage massage* therapy and Mozart classical music on reducing primary dysmenorrhea pain in female adolescents at the Karangan Islamic Boarding School, Trenggalek Regency with a significant value of 0.000 ($\alpha = 0.05$).

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