

USE OF LAVENDER AROMATHERAPY FABRIC MASK ON THE INTENSITY OF MENSTRUATORY PAIN IN WOMEN

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ABSTRAK : PENGGUNAAN MASKER KAIN AROMATERAPI LAVENDER PADA INTENSITAS NYERI MENSTRUATORY PADA WANITA

Latar Belakang : Nyeri haid (*dismenore*) merupakan keluhan yang sering dialami oleh wanita, nyeri ini dapat disebabkan oleh kontraksi otot perut yang terjadi terus menerus dan berdarah. Banyak wanita merasa terganggu saat dismenore, biasanya rasa tidak nyaman di perut bagian bawah, mual, dan juga disertai pusing. Tidak sedikit wanita pingsan karena memaksakan diri untuk melakukan aktivitas sehingga diharuskan beristirahat saat *dismenore*. Terapi relaksasi cukup banyak digunakan untuk menghilangkan rasa sakit, karena tidak memiliki efek samping, mudah diterapkan dan harganya relatif murah. Misalnya, aroma lavender dipercaya dapat mengurangi stres dan mengurangi kesulitan tidur atau insomnia. Keuntungan dari lavender esensial adalah toksisitasnya relatif rendah, dan jarang menyebabkan alergi. Bahkan aroma lavender ini memiliki keunggulan lain yaitu ekonomis, mudah didapat, aman digunakan, tidak memerlukan peralatan yang rumit. Penggunaan masker di masa pandemi Covid-19 serta terapi nyeri bagi remaja putri saat menstruasi sangat diperlukan. Penggunaan masker sebagai pelindung dari virus serta terapi nyeri pada remaja putri yang sedang mengalami nyeri haid.

Tujuan: Penelitian ini bertujuan untuk mengetahui penggunaan masker aromaterapi lavender terhadap intensitas nyeri haid pada remaja putri

Metode: Penelitian ini merupakan penelitian eksperimen dengan desain penelitian pra-eksperimen (*pre-eksperimental*) dengan *One Group Pretest t – Posttest Design*. Yaitu desain penelitian ini dilakukan pada satu kelompok tanpa kelompok kontrol.

Hasil: Jumlah responden dalam penelitian ini adalah 33 orang. Hasil *paired t-test* menunjukkan bahwa terjadi perubahan intensitas nyeri dismenore sebelum dan sesudah menggunakan masker aromaterapi lavender. Pemanfaatan Pre-Test Masker Aromaterapi Lavender dengan Nilai Simpangan Baku 0,73983 dan Post Test dengan Simpangan Baku 0,69222. Dari hasil uji statistik dengan uji Sample T-Test, data terdistribusi normal dengan nilai P-Value sebesar 0,000, artinya menunjukkan bahwa terdapat manfaat penggunaan Masker Aromaterapi Lavender terhadap Intensitas Nyeri Haid.

Kesimpulan: ada pengaruh yang signifikan dari penggunaan masker aromaterapi lavender terhadap intensitas nyeri haid pada remaja putri.

Saran: Diharapkan profesi kebidanan dapat menerapkan ilmu pengetahuan selama pendidikan dan sebagai pengalaman dalam melakukan penelitian, terutama yang berkaitan dengan pengaruh penggunaan masker aromaterapi lavender terhadap intensitas nyeri haid pada remaja putri. Serta informasi tambahan terutama di sekolah dan bagi remaja putri yang mengalami nyeri haid (*dismenore*) sebagai alternatif pengobatan nyeri haid (*dismenore*) serta memberikan manfaat penggunaan masker secara intensif sebagai perlindungan dan kenyamanan bagi pengguna.

Kata kunci: Lavender Aromaterapi, Nyeri Haid, Remaja Putri

ABSTRACT

Background : Menstrual pain (*dysmenorrhea*) is a complaint that is often experienced by women, this pain can be caused by abdominal muscle contractions that occur continuously and bleed. Many women feel disturbed during dysmenorrhea, usually discomfort in the lower abdomen, nausea, and also accompanied by dizziness. Not a few women fainted because they forced themselves to do activities so they were required to rest during *dysmenorrhea*. Relaxation therapy is quite widely used to relieve pain, because it has no side effects, is easy to implement and the price is relatively cheap. For example, the scent of lavender is believed to reduce stress and reduce difficulty sleeping or insomnia. The advantage of essential lavender is that it is relatively low in toxicity, and rarely causes allergies. Even this lavender scent has other advantages, namely economical, easy to obtain, safe to use, does not require complicated equipment. The use of masks during the Covid-19 pandemic as well as pain

therapy for adolescent girls during menstruation is very necessary. The use of masks as a protector from the virus as well as pain therapy in adolescent girls who are experiencing menstrual pain.

Objective: This study aims to determine the use of Lavender aromatherapy masks on the intensity of menstrual pain in adolescent girls

Methods: This research is an experimental research with a pre-experimental research design (*pre-experimental*) with a *One Group Pretest t - Posttest Design*. namely the design of this study was carried out on one group without a control group.

Results: The number of respondents in this study were 33 people. The results of the *paired t-test showed that there was a change in the intensity of dysmenorrhea pain* before and after using a lavender aromatherapy mask. Utilization of Lavender Aromatherapy Mask Pre-Test with Standard Deviation Value of 0.73983 and Post Test with Standard Deviation of 0.69222. From the results of statistical tests with the Sample T-Test test, the data is normally distributed with a P-Value value of 0.000, meaning that it shows that there are benefits of using Lavender Aromatherapy Mask on Menstrual Pain Intensity.

Conclusion: there is a significant effect of using lavender aromatherapy mask on the intensity of menstrual pain in adolescent girls.

Suggestion: It is hoped that the midwifery profession can apply science during education and as experience in carrying out research, especially relating to the effect of using lavender aromatherapy masks on the intensity of menstrual pain in adolescent girls. As well as additional information, especially at schools and for young women who experience menstrual pain (*dysmenorrhea*) as an alternative treatment for menstrual pain (*dysmenorrhea*) as well as providing benefits in intensive use of masks as protection and comfort for users.

Keywords: Lavender Aromatherapy , Menstrual Pain, Young Women

INTRODUCTION

Adolescence is the transition from puberty to adulthood. Adolescent girls who have entered puberty will experience a menstrual cycle. The occurrence of menstruation is very important for women's reproductive health. The first menstruation is usually experienced by women aged 10 years , but can also be more. one of the developments that is marked by organ maturity. Menstruation is marked by cramps in the lower abdomen, this *dysmenorrhea* generally occurs 2-3 days. (Najmi , 2011) .

Some women who feel unbearable pain during menstruation can affect 50% of daily activities in women of reproductive age and 85% in teenage girls. According to WHO (*World Health Organization*) (2015) the number of *dysmenorrhea* in the world is very large, on average more than 50% of women in each country experience *dysmenorrhea*.

Menstrual pain or in Latin is also called *dysmenorrhea* is a complaint that is often experienced by women, this pain can be caused by abdominal muscle contractions that occur continuously and bleed. These contractions often cause the muscles to tense up , this tension not only occurs in the abdominal muscles, but also in the supporting muscles of the abdominal muscles such as the lower back abdominal muscles, waist muscles, pelvic muscles, and also the thighs to the calves. *dysmenorrhea*, usually unpleasant in the lower abdomen, nausea, and also accompanied by dizziness. Not a few women fainted because they

forced themselves to do activities so they were required to rest *during dysmenorrhea* . Experts divide *dysmenorrhea* into two, namely primary and secondary *dysmenorrhea*. Primary *dysmenorrhea* is menstrual pain that is felt without any abnormalities in the reproductive organs , the pain that is felt starting from the first menstruation. While secondary *dysmenorrhea* is where menstrual pain is caused by gynecological or obstetric disorders . (Najmi ,2011)

Some people think that *dysmenorrhea* will go away on its own. In fact, there are many aspects that can cause menstrual pain and must be handled quickly and wisely so as not to interfere with the health of other organs . There are some women who deal with *dysmenorrhea* using drugs that are taken regularly , but because these drugs often eliminate *dysmenorrhea*, the woman will experience drug dependence (Anugoro & Wulandari, 2011) .

There are several non-pharmacological ways to reduce pain levels in women, one of which is using relaxation. Relaxation therapy is quite widely used to relieve pain , because it has no side effects, is easy to implement and the price is relatively cheap. We can know that there are many types of relaxation that are used as non-pharmacological therapy such as music relaxation therapy, modified relaxation, and relaxation using aromatherapy (Solehati & Kosasih, 2015)

Aromatherapy is a method that uses essential oils to improve physical and emotional health. An Indian medical expert named Ayurveda has tried to

use various kinds of essential oils in his medical practice. This is also recognized by a medical figure from Greece named Hippokrates, he stated that bathing, massage and inhaling essential oils can make the body fresh. The content of aromatic substances found in plants turns out to have a good response to the state of mind, feeling, and also body health (Jaelani, 2009).

There are various advantages of essential oils, for example antiseptic, antimicrobial, antiviral, and also antifungal. Essential oils are very analgesic (pain relieving) including lavender. Each essence has different positive advantages. For example, the scent of lavender is believed to reduce stress and reduce difficulty sleeping or insomnia. The advantage of essential lavender is that it is relatively low in toxicity and rarely causes allergies. This lavender scent also has other advantages, namely economical, easy to obtain, safe to use, does not require complicated equipment. This essential lavender is also claimed to be one of the essentials that is often used to treat lung, sinus, vaginal, and skin infections, as well as relieve headache muscle pain and others. (Yunita, 2010)

The use of masks during the Covid-19 pandemic as well as pain therapy for adolescent girls during menstruation is very necessary. The use of masks as a protector from the virus as well as pain therapy in adolescent girls who are experiencing menstrual pain. In this day and age, we must innovate for self-development while providing health for the body naturally.

RESEARCH METHODS

This research is an experimental research with a pre-experimental (*pre-experimental*) research design with a *One Group Pretest - Posttest Design*, namely the design of this study was conducted on one group without a control group. This study was adapted to the objectives to be achieved, namely testing the use of lavender aromatherapy mask cloth, to see the effects of a treatment. The results of the treatment can be known to be more accurate, because it can compare with the situation before being treated (Sugiyono, 2013).

This research was conducted by the Health Polytechnic of the Ministry of Health in Palangka Raya City, Central Kalimantan Province and was carried out in January - December 2021. The target population in this study were students at the Health Polytechnic of the Ministry of Health in Palangka Raya City, Central Kalimantan Province in 2021.

The sample is part or representative of the population under study. The sample is part of the number and characteristics possessed by the

population. With this research, the sampling method used is the census method, which is a sampling technique when all members of the population are used as a sample (Sugiyono, 2015). The research was conducted using Cohen's table to determine the sample, so that the minimum number of samples obtained corresponds to the maximum results. According to Sofar Silaen and Widiyono (2013) the appropriate sample size for research is at least 30 samples. Based on this, the researcher increased the number of samples to 30 with an estimated 10% dropout from the total sample, so that it was added to 33 samples.

Sampling in this study uses (*Simple Random Sampling*) a simple random sample, namely sampling in which each element that makes up the population is given the same opportunity to be selected as a sample. The sampling technique in this study uses simple random sampling (*Probability Sampling*) which is done by lottery. This type of data uses primary data and secondary data. Primary data were obtained through interviews using the Filling Format for young women. While the secondary data is measuring the intensity of pain with a *numeric rating scale*.

Research procedure with the subject's willingness to take part in the study by filling out *Informed Consent* and filling out a screening questionnaire covering the subject's identity, history of disease, and consumption habits of analgesic drugs. The results of anthropometric measurements in the form of weight and height as well as the results of examination of the intensity of menstrual pain before being given therapy.

After the data is collected, *editing, coding, data entry, cleaning*, and *tabulation of data* are carried out and then data analysis is carried out. Data analysis in this study will be carried out in 2 stages, namely, univariate analysis aims to explain or describe the characteristics of each research variable. Univariate analysis in this study will be presented in a frequency distribution table (percentage) for numerical data such as cholesterol levels and blood pressure. Data that has been analyzed univariately, then analyzed by bivariate performed on two variables to determine the relationship or correlation, differences. The test used is the *paired t test* if the data is normally distributed, or using the *Wilcoxon test* if the data is not normally distributed. In this study, two data sets were lavender aromatherapy mask cloth and menstrual pain intensity before and after using lavender aromatherapy mask cloth.

RESEARCH RESULT

Univariate Analysis

This research was conducted at Poltekkes Kemenkes Palangka Raya. The data for this research is the data of the Regular XIX class of the Department of Midwifery, totaling 38 people. Based on the criteria achieved in the study, there were 33 research respondents in the Poltekkes Campus Area of the Ministry of Health, Palangka Raya. The data is processed using an application, where the researcher performs *editing, coding, entry, cleaning*, and *tabulating* using the SPSS26 program, then the data is analyzed, and then the data is presented in the form of a frequency distribution table. The results of this study are presented in a frequency distribution table that can be seen as follows:

Age

Table 1
Frequency Distribution of Age Data

Age	N	%
20-35 Years	33	100
>35 Years	0	0

Based on Table 1. It can be seen that most of the respondents aged 20-35 years (100%) experienced dysmenorrhea.

Social and Family Support Data

Table 2
Frequency Distribution of Social and Family Support Data

Social and Family Support	N	%
Yes	33	100
Not	0	0

Based on Table 2. It can be seen that the most respondents who have the highest Social and Family support are 33 respondents (100%).

Life Experience Data

Based on Table 3. It can be seen that the most respondents who have past experience are 27 respondents (81.8%), and the lowest respondents are 6 respondents (18.2%).

Table 3
Frequency Distribution of Past Experience Data

Past Experience	N	%
Yes	27	81.8
Not	6	18.2

Action Data during Dysmenorrhea

Table 4
Frequency Distribution of Action Data during Dysmenorrhea

Actions during Dysmenorrhea	N	%
Yes	27	81.8
Not	6	18.2

Based on Table 4. It can be seen that the most respondents who had action during dysmenorrhea were 27 respondents (81.8%), and the lowest was no action during dysmenorrhea as many as 6 respondents (18.2%).

Pain Scale Data Before Treatment of Lavender Aromatherapy Mask

Table 5
Frequency Distribution of Pain Intensity Scale Before Treatment Lavender Aromatherapy Mask

Pain Scale	Frequency	%
No Pain	0	0
Mild Pain	4	12
Moderate Pain	18	55
Severe Pain	10	30
Very Great Pain	1	3

Based on Table 5. Frequency Distribution of Pain Intensity Scale before being given treatment, it can be seen that the most respondents who experienced the highest pain on the moderate pain scale were 18 respondents (55%) and the lowest respondent who experienced pain on the very severe pain scale was 1 respondent (3%).

Pain Scale Data After Treatment of Lavender Aromatherapy Mask

Based on Table 6. Frequency Distribution of Pain Intensity Scale after being given treatment, it can be seen that the most respondents who experienced the highest pain on the mild pain scale were 22 respondents (67%) and the lowest respondents who experienced pain on the severe pain scale were 2 respondents (6%).

Table 6
Frequency Distribution of Pain Intensity Scale
After Treatment Lavender Aromatherapy Mask

Pain Scale	Frequency	%
No Pain	0	0
Mild Pain	22	67
Moderate Pain	9	27
Severe Pain	2	6
Very Great Pain	0	0

Bivariate Analysis

Based on Table 7. It can be seen that the analysis of the Utilization of Lavender Aromatherapy Mask Pre-Test with a Standard Deviation Value of 0.73983 and Post Test with a Standard Deviation value of 0.69222. From the results of statistical tests with the Sample T-Test test, the data is normally distributed with a P-Value value of 0.000, meaning that it shows that there are benefits of using Lavender Aromatherapy Mask on Menstrual Pain Intensity.

Table 7
Lavender Aromatherapy Mask on Menstrual Pain Intensity

Lavender Aromatherapy Mask	N	Std. Deviation	P-Value
Pre-Test	30	0.73983	0.000
Post Test	30	0.69222	

DISCUSSION

This study aims to determine the benefits of giving Lavender Aromatherapy Mask on Menstrual Pain Intensity in adolescents. Based on the hypothesis that there is a benefit of giving Lavender Aromatherapy Mask on the Intensity of Menstrual Pain (*Dysmenorrhea*) in adolescent girls.

Based on Table 1. It shows the overall age of the respondents, namely the age of teenagers 20-35 years. So it shows that young women are prone to menstrual pain (*dismenorhoe*) as many as 33 respondents (100%). Teenage girls are prone to menstrual disorders.

Based on Table 2. It shows that the highest social and family support is supported by family. So it shows that adolescent girls in a state of menstrual pain are psychologically supported by the family as many as 33 respondents (100%).

Based on Table 3. It shows that the highest past experience is having past experience as many as 27 respondents (81.8%). So that it shows that young women have past experience in dealing with menstrual pain that young women experience.

Based on Table 4. The highest action during menstrual pain (*Dismenorhoe*) is that there is an action during menstrual pain (*Dismenorhoe*) as many as 27 respondents (81.8%). So it shows that young women have action in dealing with menstrual pain.

Based on Table 5. It shows the intensity of the pain scale before the use of Lavender aromatherapy mask on the highest menstrual pain intensity, namely on the moderate pain scale value as many as 18 respondents (55%). Meanwhile, the lowest value, namely on the scale of severe pain as much as 1 respondent (3%).

Based on Table 6. It shows that the intensity of pain on the pain scale after the treatment of using Lavender aromatherapy mask on the intensity of menstrual pain is the highest, namely the value of the mild pain scale as many as 22 respondents (67%). Meanwhile, the lowest value, namely the value of the severe pain scale as many as 2 respondents (6%).

The dysmenorrhea experienced by Young Women before being given Lavender aromatherapy with a mask was almost entirely in the moderate pain range. It can also be said that in this study there was a significant difference between menstrual pain before and after giving the Lavender Aromatherapy mask, and in this study there was a significant difference between the menstrual pain scale before and after giving the Lavender Aromatherapy mask to adolescent girls, this is evidenced by P-Value = 0.000 < 0.05.

Based on data analysis using the Statistical Test of the *Sample T-Test*, the research conducted in accordance with Table 7. It shows the *P-Value value* of 0.000, which indicates that there is a benefit of giving Lavender Aromatherapy Mask on the Intensity of Menstrual Pain (*Dysmenorrhea*) in Young Women. This research is in line with research conducted by Rahayu Safitri (2019) which states that Lavender Aromatherapy can reduce the level of dysmenorrhea in adolescent girls. This is also in line with the concept of Najmi (2011) which states that Aromatherapy can reduce pain levels in someone who has experienced dysmenorrhea because aromatherapy can have a stimulating effect, provide a self-soothing sensation, a calming sensation for the brain, balance, a sensation of calming stress, relaxation of the mind. and physical body. If the mind and feel calm and relaxed it will create a comfortable atmosphere so as to reduce menstrual pain.

Some journals also say that Lavender Essential Oil (*Lavandula Angustifolia*) can provide relaxation (carminative), sedative benefits, reduce anxiety levels and can improve one's mood (Dewi, 2013). Young women in carrying out every activity during the pandemic can use masks containing Lavender essential oil aromatherapy, as well as helping to reduce menstrual pain during menstruation without using pharmacological drugs.

Based on the research objectives in the study of giving this Lavender Aromatherapy Mask as a cloth mask used by Young Women, it can be remade using cloth. The cloth mask model used is that there is a layer to place a filter that has been dripped with Lavender Aromatherapy Oil. The use of masks as a respiratory protective device from pollution or from viruses that are afflicting parts of the world, is absolutely necessary for everyone as a filter for air that enters the nose.

Based on the needs of research and users of this Lavender Aromatherapy cloth mask, innovation is needed in the development of masks so that their use can function optimally and provide comfort for the wearer. In this study, it has the advantage of providing modified Lavender aromatherapy by providing comfort and tranquility for its users. Lavender Aromatherapy is a safe and comfortable health therapy using the essential extract of Lavender flowers. Lavender oil is a well-known aromatherapy for its sedative, hypotonic, and anti-neurodepressive effects on humans. Because Lavender oil can provide a sense of calm so it can be used as stress management (Dewi, 2013).

CONCLUSION

This research was conducted in the Health Polytechnic Work Area of the Ministry of Health in Palangka Raya City, Central Kalimantan Province. The data were taken from March 2021 to December 2021. There were 33 respondents for the research sample. From this research it can be concluded that. There is Utilization of Lavender Aromatherapy Mask on Menstrual Pain Intensity in Young Women and there is a difference in the intensity of menstrual pain before and after using a lavender Aromatherapy mask cloth.

SUGGESTION

Suggestions that the author can convey based on the results of this study are the results of this study provide additional information, especially in schools and for young women who experience menstrual pain (*dysmenorrhea*) as an alternative treatment for menstrual pain (

dysmenorrhea) as well as providing benefits in intensive use of masks as protection and comfort for users and helping Adolescents in overcoming the problem of Menstrual Pain (*Dysmenorrhea*) in Young Women which can be done continuously with the use of Lavender Aromatherapy Masks.

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