



Combination of Autogenic Relaxation and Lavender on the Anxiety of Primigravida Trimester III Pregnant Women

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ABSTRACT

Anxiety about childbirth is a problem that is always experienced by every pregnant woman. Anxiety for pregnant women is caused by a lack of preparation for childbirth. Anxiety if not treated can cause adverse effects on the mother and fetus. The aim was to determine the effect of a combination of autogenic relaxation and lavender aromatherapy on the anxiety of third trimester pregnant women. This research uses quantitative methods and the sampling technique is accidental sampling. The instrument used in this study was to use a questionnaire using the PRAQ-R2 scale (Pregnancy Related Anxiety Questionnaire-Revised). The population and sample in this study were third trimester pregnant women with a total sample of 34 respondents. This research was conducted from January to May 2023. Bivariate data analysis used paired t-test analysis. The results of the analysis obtained a p value of 0.000 (<0.05), it can be concluded that there is an effect of a combination of autogenic relaxation and lavender aromatherapy on the anxiety of third trimester pregnant women.

Keywords: Autogenic, Anxiety, Lavender

ABSTRAK

Kecemasan akan persalinan merupakan masalah yang selalu dialami oleh setiap ibu hamil. Kecemasan bagi ibu hamil disebabkan oleh kurangnya persiapan untuk melahirkan. Kecemasan jika tidak ditangani dapat menimbulkan efek buruk bagi ibu dan janin. Tujuannya adalah untuk mengetahui efek kombinasi relaksasi autogenik dan aromaterapi lavender terhadap kecemasan ibu hamil trimester ketiga. Penelitian ini menggunakan metode kuantitatif dan teknik pengambilan sampelnya adalah *accidental sampling*. Instrumen yang digunakan dalam penelitian ini adalah menggunakan kuesioner menggunakan skala PRAQ-R2 (*Pregnancy Related Anxiety Questionnaire-Revised*). Populasi dan sampel dalam penelitian ini adalah ibu hamil trimester ketiga dengan total sampel 34 responden. Penelitian ini dilaksanakan pada bulan Januari hingga Mei 2023. Analisis data bivariat menggunakan analisis *paired t-test*. Hasil analisis diperoleh *p value* sebesar 0,000 (<0,05), dapat disimpulkan bahwa terdapat efek kombinasi relaksasi autogenik dan aromaterapi lavender terhadap kecemasan ibu hamil trimester III.

Kata Kunci : Autogenic, Kecemasan, Lavender

INTRODUCTION

Anxiety about childbirth is a problem that is always experienced by every pregnant woman. Anxiety for pregnant women is caused by a lack of preparation for childbirth. (Sinaga et al., 2020)

The third trimester is also known as the crisis period in pregnancy because it is in this trimester that childbirth syndrome occurs in pregnant women. Pregnant women will feel anxious, afraid for their lives, their babies, abnormalities in their babies, labor, pain during labor and pregnant women will never know when they will give birth. Pregnant women who experience anxiety will experience an increase in the production of the hormone adrenaline or epinephrine which can increase cardiac output. If this problem is not treated, pregnant women are at risk of experiencing increased blood pressure or preeclampsia. Anxiety that occurs in the third trimester can complicate the delivery process because excessive anxiety can cause the body's muscles to tense up, especially the muscles in the birth canal also become stiff and hard, making it difficult to expand and can endanger the life of the mother and fetus. (Sulastri, 2018)

Primigravida women are more prone to experiencing anxiety (Abegaz et al., 2022). Primigravidas are more prone to fear of childbirth because they have no prior birth

experience (Westerneng, 2020). This is also caused by fear of defects in the fetus, problems in childbirth and fear of pain (Tri Susilowati, 2020). Anxiety if not treated can cause adverse effects on the mother and fetus (Mumtaz & Akram, 2020). Thus, this fear of childbirth increases a woman's psychological vulnerability to factors related to anxiety due to higher expectations of labor pains, lack of new experiences, and increased demands and responsibilities. (Slade et al., 2019) Management of anxiety in pregnant women can be in the form of pharmacological therapy (Domínguez-Solís et al., 2021). The use of pharmacological therapy will certainly have a negative impact if used continuously and lead to dependence. In several studies, non-pharmacological therapy has been suggested as a safe alternative for pregnant women. An example of non-pharmacological therapy is yoga (Westbury, 2019). Systematic desensitization, exposure, modeling, firm training, and self-control techniques (Mumtaz & Akram, 2020). Meditation therapy, progressive muscle relaxation and autogenic relaxation. (Wijayanti et al., 2019).

Autogenic relaxation is one of the non-pharmacological therapies by using yourself as a therapy center by using yourself as a therapy center by using short

words or affirmations that can calm your mind (Nani & Setiyani, 2021). This relaxation can make pregnant women feel comfortable, peaceful by focusing on breathing and heart rate so that physiological tension can be reduced.

Aromatherapy is a therapeutic action using essential oils which has the benefit of improving a person's physical and psychological condition to be better. Each essential oil has a unique pharmacological effect such as vasodilator, sedative and stimulates the adrenals. (Sinaga et al., 2020)

The main goal of overcoming anxiety in pregnancy is avoid escalation in the anxiety symptoms while improving woman's quality of life. Management can be performed through non-pharmacological (psychotherapy) and pharmacological therapies. (Wallace & Araji, 2020) One of the most popular scents for aromatherapy is lavender. Derived from lavender flowers that are small and purple in color. Lavender flowers can be rubbed into the skin, in addition to providing a fragrant aroma, lavender can also prevent mosquito bites. Aromatherapy using lavender oil is believed to have a relaxing effect on nerves and tense muscles (carminative) after tired activities. Lavender flowers also have a drowsiness (sedative) effect. Non-pharmacological therapy plays an

important role in reducing the intensity of anxiety in primigravid women. Thus, researchers are interested in the effect of a combination of autogenic relaxation and lavender aromatherapy on the anxiety of third-trimester pregnant women. (Ikhasaruddin & Herinawati, 2021)

The findings presented in the current work are in line with the theory developed by German psychologist Johannes Heinrich Schultz in 1920 that one of the relaxation therapies that is believed to be able to help relieve anxiety is autogenic.

This relaxation technique is a form of relaxation technique that focuses on efforts to increase feelings of calm and relaxation in the body. The purpose of relaxation is basically to encourage the body's natural relaxation response by regulating breathing so as to produce a happier feeling and relieve anxiety. (Wulandari & Retno, 2022)

The purpose of this study was to determine the effect of a combination of autogenic relaxation and lavender aromatherapy on the anxiety of third trimester pregnant women.

METHOD

The type of research used was a Quasi experiment with the one group pretest and posttest design method. This research was conducted at the Pera Clinic in Medan from January to May 2023. The population

and sample in this study were 30 third trimester pregnant women. The sampling technique was accidental sampling. The instrument used in this study was a

questionnaire sheet using the PRAQ-R2 scale (Pregnancy Related Anxiety Questionnaire-Revised). Bivariate data analysis used paired t-test analysis.

RESULTS AND DISCUSSIONS

Results

Table 1. Frequency Distribution of Anxiety Levels in Primigravida Trimester III Pregnant Women

Table before and after the anxiety of pregnant women			
	Variable	Frequency	Percentage (%)
PreTest	Mild Anxiety	12	35,3
	Moderate Anxiety	19	55,9
	Severe Anxiety	3	8,8
PostTest	Mild Anxiety	22	64,7
	Moderate Anxiety	12	35,3

Source: Primary Data Processed 2023

Table 2. Differences in average anxiety of Primigravida Pregnant Women Trimester III

Variabel	Mean	p-Value
Before autogenic relaxation and lavender aromatherapy	27,15	0,000
After autogenic relaxation and lavender aromatherapy	14,25	

Source: Primary Data Processed 2023

Discussion

Based on table 1 above, the results of the frequency distribution before the intervention were given were 3 respondents (8.8%) experienced severe anxiety, 19 respondents (55.9%) experienced moderate anxiety, and 12 respondents (35.3%) experienced mild anxiety. After being given the intervention, the results obtained were that 22 respondents (64.7%) experienced mild anxiety and 12 respondents (35.3%) experienced mild respondents. Table 2. The results obtained using the Paired T Test can be interpreted that there is a difference between before and after the

intervention is given with a p value of 0.000 meaning that there is an effect of a combination of autogenic relaxation and lavender aromatherapy on the anxiety of third trimester pregnant women.

The relaxation used is self-relaxation with affirmations that can calm the mind. Spontaneous relaxation helps individuals control various bodily functions, such as heart rate, blood flow and breathing, thus eliminating anxiety (Nani & Setiyani, 2021) This study is supported by the research of Abdullah et.al., that primigravid anxiety was reduced after being given autogenic relaxation techniques (Abdullah et al., 2021). From

the results of the study, it was found that the effect of autogenic relaxation techniques on the anxiety level of primigravid pregnant women in the third trimester.

The findings presented in the current work are in line with the study conducted by (Puspendari, Wilda, 2019) which presented that autogenic relaxation therapy was effective in reducing the anxiety level among primigravida women in the third trimester of pregnancy. Furthermore, a study conducted by (Abdullah et al., 2021) presented that there was an effect of autogenic relaxation on the level of anxiety among pregnant women and the difference between before and after treatment was 17.0 ± 8.5 . A study conducted by (Wulandari & Retno, 2022) (Wulandari & Retno, 2022) further showed the similar finding that giving autogenic relaxation for 3 days with a duration of time for each exercise between 15-20 minutes was proven to be effective in relieving anxiety among pregnant women. that aromatherapy can affect parts of the brain related to mood, emotion, memory and learning. By inhaling lavender aromatherapy it will increase alpha waves in the brain and these waves can help to increase a relaxed state. There are many different types of aromatherapy fragrances available and each of them has different positive benefits. For example,

the smell of lavender is believed to reduce stress and reduce sleep difficulties (insomnia). Lavender aromatherapy oil is known as a calming oil. (Prima, 2018)

Lavender is one of the most widely used essential oils, traditionally used to treat burns. In ancient Greece, Pedanius Dioscorides, a physician, pharmacologist, and botanist, highly praised the efficacy of Lavender. In Greece, it was widely used as a perfume ingredient. In Rome, it was used in bathing facilities because of its antiseptic and healing properties. In Egypt it was used for perfume and incense.

Queen Elizabeth I used lavender for drinking tea which treated her frequent migraine problems. (Domínguez-Solís et al., 2021)

(Sinaga et al., 2020) in his research concluded that giving lavender aromatherapy is effective in reducing the anxiety of third-trimester pregnant women in preparation for childbirth. This is evidenced by the fact that giving lavender aromatherapy is more effective 1.52 in reducing the anxiety scale compared to not giving aromatherapy to third trimester pregnant women. Obtained from the average anxiety scale in the intervention group, 6.31 and the average anxiety scale in the control group, 4.16, so there is an effective difference of 1.52. This is the case with Kandace's research (2018) which concluded that aromatherapy is effective

for reducing anxiety in first-time mothers in BPM Simalungun district. (Sinaga et al., 2020)

According to (Gouda Nasr et al., 2019) the benefits of autogenic relaxation are influencing body functions so that hormones can flow properly throughout the body, in order to get maximum results, do autogenic relaxation techniques as much as 3 exercises, for 15 minutes, to help regulate equivalent bodily organs and body flow, increasing the liver and pancreas in normalizing blood sugar, increasing the parasympathetic nervous system which makes the brain give orders in regulating renin-angiotensin in the kidneys to help maintain normal blood pressure, protect injured organs (Smeltzer & Bare, 2019), (Putri et al., 2022) conducted in Yogyakarta Before relaxation, the percentage of anxiety of primigravida mothers was 2.9% of respondents experiencing severe anxiety, 64% with moderate anxiety and 20.6 with low anxiety. The largest percentage is experienced by third trimester mothers with moderate anxiety. After relaxation, the results showed that the percentage of anxiety for primigravida pregnant women, namely trimester III, was 2.95 respondents experiencing severe anxiety, 26.5% experiencing moderate anxiety and 0.6% low anxiety. The largest percentage experienced by third trimester

primigravida mothers is moderate anxiety and there is a decrease in anxiety levels after relaxation. It is known that the p-value is 0.001 $p < 0.05$ Wilcoxon test, meaning that relaxation has an effect on the anxiety level of third trimester primigravida mothers. The results of this study indicate that there is an effect of giving lavender aromatherapy, this happens because therapy using lavender essential oil can help raise spirits and refresh. (Salsabilla, 2020)

Giving lavender aromatherapy is effective in reducing labor anxiety. Aromatherapy has several molecules that are released into the air as water vapor. When water vapor containing these chemical components is inhaled, it will be absorbed by the body through the nose and lungs which then enters the bloodstream. Simultaneously when inhaled, water vapor will run immediately to the limbic system of the brain which is responsible for the system of integration and expression of feelings, learning, memory, emotions, and physical stimulation. (Prima, 2018)

Aromatherapy can affect the limbic system in the brain which is the center of emotions, moods or moods, and memory to produce the neurohormones endorphins and enkephalins, which act as pain relievers and serotonin which has the effect of relieving tension or stress and anxiety in facing childbirth. (Abegaz et al.,

2022) Lavender has a calming effect. The scent of lavender can provide calm, balance, a sense of comfort, a sense of openness and confidence. Besides that, lavender can also reduce feelings of depression, stress, pain, unbalanced emotions, hysteria, frustration and panic. (Slade et al., 2019) A study conducted in 87 maternity homes in New Zealand, that as many as 60% of the maternity homes studied used aromatherapy to reduce anxiety during labour (Lumajang, 2023). This was confirmed by other researchers that the use of aromatherapy in the maternity unit can increase maternal satisfaction during childbirth and the delivery process becomes more effective. A study reveals that gain (Hanifah, 2019). The results of research conducted by (Setiati, 2019), Provision of lavender aromatherapy is effective in reducing the anxiety of third trimester pregnant women

in preparation for childbirth. This is evidenced by the fact that giving lavender aromatherapy is more effective 1.52 in reducing the anxiety scale compared to not giving aromatherapy to third trimester pregnant women. Obtained from the average anxiety scale in the intervention group, 6.31 and the average anxiety scale in the control group, 4.16, so there is an effective difference of 1.52.

CONCLUSION

There is an effect of autogenic relaxation and lavender aromatherapy on the anxiety of third trimester primigravida pregnant women.

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