

SPIRITUAL EMOTIONAL FREEDOM TECHNIQUE (SEFT) AND LAVENDER AROMATHERAPY REDUCES MATERNAL ANXIETY

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ABSTRACT

Anxiety during the third trimester of pregnancy is a common issue that can negatively impact both maternal and fetal health. Non-pharmacological interventions such as the Spiritual Emotional Freedom Technique (SEFT) and lavender aromatherapy have been shown to effectively reduce anxiety levels. Preliminary data at Limpung indicated that approximately 30% of third trimester pregnant women experienced moderate to severe anxiety. **Objective:** To determine the effect of SEFT and lavender aromatherapy combination on anxiety levels in third trimester pregnant women. **Method:** This study used a pre-experimental design with a one group pretest-posttest approach. The sampling technique used purposive sampling, with a sample size of 22 respondents. The instrument used was the PRAQ-R2 questionnaire. Data were analyzed using the Wilcoxon test. **Results:** There was a significant decrease in anxiety levels before and after the intervention with a *p*-value obtained was less than 0.05. The average anxiety level decreased from moderate to mild. **Conclusion:** The combination of SEFT and lavender aromatherapy is effective in reducing maternal anxiety levels among third-trimester in the Limpung area.

Keywords: anxiety; lavender aromatherapy; pregnancy; SEFT; third trimester.

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INTRODUCTION

Pregnant women in their third trimester experience many physical and emotional changes. Physically, the mother's body prepares for labor, and the enlarging uterus can cause various discomforts, such as backaches, pelvic pain, and difficulty sleeping. Emotionally, pregnant women can also feel more anxious, worrying about the health of the fetus and the upcoming labor process. All of these changes can impact the mother's mental and physical health, one of which is anxiety (Salsabilla et al., 2023).

Maternal anxiety is a significant problem both globally and nationally. According to the World Health Organization (WHO), the prevalence of anxiety disorders during pregnancy and postpartum in developed countries reaches 12%, while in Indonesia, the number of anxiety disorders

among pregnant women reaches 373 million cases, with 28.7% of these occurring before delivery. This prevalence is quite high, especially in areas such as Batang Regency, Central Java, where many pregnant women experience anxiety due to health conditions, concerns about childbirth, and physical changes. Therefore, it is important to raise awareness and manage anxiety so that pregnant women can experience a calmer and healthier pregnancy (Batang, 2021).

The third trimester of pregnancy, which lasts from the 28th week until delivery, is a challenging time both physically and psychologically for expectant mothers. During this phase, the mother's body undergoes numerous changes due to the rapid growth of the fetus, often causing discomfort such as back pain, sleep disturbances, shortness of breath, and swelling in the feet and hands. Furthermore, hormonal changes also affect the mother's emotional state, often leading to feelings

of anxiety, fatigue, and stress leading up to delivery. Due to physical and emotional disturbances, the third trimester is also a period prone to various pregnancy complications. Several serious problems such as preeclampsia, premature rupture of membranes, anemia, and abnormal fetal position are often found during this period and can endanger the safety of both mother and fetus if not properly managed. Furthermore, mothers' lack of knowledge about danger signs and limited access to healthcare services also exacerbate these conditions, especially in areas with limited resources (Sitorus, 2021).

Anxiety in pregnant women can have far-reaching physical and psychological impacts, including affecting the fetus. Physically, anxiety can increase blood pressure, cause sleep disturbances, lower immunity, and increase the risk of premature labor and low birth weight (LBW). Psychologically, pregnant women who experience excessive anxiety are prone to stress, irritability, and even depression, which can persist into postpartum. Furthermore, anxiety can slow labor and increase the risk of impaired fetal brain development. Factors such as lack of social support, traumatic pregnancy experiences, economic hardship, lack of information, and medical complications can exacerbate anxiety. Therefore, adequate support is crucial to help pregnant women manage anxiety for the health of both mother and fetus (Amperaningsih et al., 2024).

Maternal anxiety can be done through pharmacological, non-pharmacological, and complementary approaches. Safer alternatives include non-pharmacological approaches, such as relaxation techniques, meditation, and behavioral therapy, which can help manage anxiety without side effects. Additionally, complementary therapies such as aromatherapy with lavender or chamomile essential oils have also been shown to be effective in providing a calming effect for pregnant women (Sena Hersandi Sala¹, Nur Eni Lestari², 2022)

Spiritual Emotional Freedom Technique (SEFT) is a relaxation method that helps reduce anxiety by stimulating specific points on the fingers. This technique combines self-reflection, body awareness, and breathing regulation to naturally relieve stress. SEFT has the advantage of being

practical, can be done anytime without special equipment, and is safe for pregnant women who want to avoid medication. The SEFT mechanism involves tapping techniques on the body's meridian points, positive affirmations, and spiritual suggestions that help reduce tension, increase relaxation, and foster a more optimistic mindset. Furthermore, SEFT can balance the body's energy and increase levels of endorphins and serotonin, which play a role in creating feelings of calm and happiness during pregnancy (Fitriasari, 2024). This research aligns with research by Andikawati Fitriasari (2024) who examined the effectiveness of SEFT in reducing anxiety in pregnant women in their third trimester. In her study, the SEFT intervention was conducted for seven consecutive days, with a duration of 15–20 minutes per session. The results showed that of the 30 respondents, 86.7% experienced a significant reduction in anxiety levels based on the Hamilton Anxiety Rating Scale (HARS). The average anxiety score decreased from moderate to mild, with some respondents even reaching normal levels. This decrease is believed to be related to the physiological effects of tapping and positive affirmations, which can reduce sympathetic nervous system activity and increase a sense of calm and emotional balance in pregnant women. Thus, SEFT has been proven to be an effective, safe, and easy-to-implement non-pharmacological intervention to reduce anxiety during pregnancy, especially in the final trimester (Fitriasari, 2024).

Lavender aromatherapy is an effective supportive therapy in overcoming anxiety in pregnant women. The aroma of lavender has a calming effect, helps reduce stress, improves sleep quality, and provides a sense of relaxation. The linalool and linalyl acetate content in lavender has a natural sedative effect that works on the central nervous system, reducing stress hormone levels (cortisol) and increasing serotonin and GABA production, which creates a feeling of calm. The combination of lavender aromatherapy with SEFT can provide a more optimal relaxation effect, making it a practical and safe natural solution for pregnant women who want to avoid the use of drugs during pregnancy (Rahayu, 2018). This study is in line with the research of Hanny Irmaya (2024) with these results

showing a decrease in the level of anxiety of mothers in labor after being given lavender aromatherapy. The results of the statistical test obtained p -value < 0.05 . Thus, there is an effect of giving lavender aromatherapy in reducing anxiety of mothers in labor. This research is expected to be able to apply TPMB to laboring mothers, thus serving as a non-pharmacological therapy for women experiencing anxiety (Irmaya & Chairiyah, 2024).

Based on data from the Limpung area in 2025, it was reported that 30% of pregnant women experienced anxiety disorders in the third trimester. The causes of anxiety include fear of childbirth, concern for the fetus, social pressure, and fatigue due to heavy physical work, such as working as emping (cracker) laborers and market traders, due to long working hours and excessive physical activity.

The main interventions provided were health education and counseling, such as light exercise, relaxation, listening to music, getting enough sleep, talking with family, or engaging in specific activities, as well as teaching relaxation techniques such as prenatal gymnastics, breathing exercises, and music therapy.

Based on preliminary studies, the combination of Spiritual Emotional Freedom Technique (SEFT) and lavender aromatherapy as a complementary intervention to reduce anxiety in pregnant women in the third trimester is still limited, especially in maternal health services in the Limpung area. Therefore, researchers are interested in providing a combination intervention of SEFT (Self-Relief Technique) and lavender aromatherapy to reduce anxiety in pregnant women in the third trimester, a practice that has never been done before in the Limpung area.

Research Objective: To determine the effect of the Spiritual Emotional Freedom Technique (SEFT) and lavender aromatherapy reduce maternal anxiety.

METHOD

This quantitative study used a pre-experimental design using a one-group pretest-posttest design (Sugiyono, 2020). This design was used to determine the effect of the combination of Spiritual

Emotional Freedom Technique (SEFT) and lavender aromatherapy on anxiety levels in third-trimester pregnant women in the Limpung area. The population in this study was all third-trimester pregnant women experiencing anxiety. The sampling technique used purposive sampling, with a sample size of 22 respondents.

Inclusion criteria included third-trimester pregnant women with a gestational age of ≥ 28 weeks and no complications, experiencing mild to moderate anxiety levels based on the Pregnancy Related Anxiety Questionnaire–Revised 2 (PRAQ-R2). The intervention involved SEFT applied to the body's meridian points for approximately 15 minutes. Lavender aromatherapy was administered through inhalation using a diffuser containing lavender essential oil for approximately 15 minutes. The total intervention lasted 30 minutes per session, administered three times a week for one week. Anxiety was measured using the PRAQ-R2 questionnaire. Validity and reliability testing conducted on the PRAQ-R2 instrument showed that the Cronbach alpha value was 0.8, meaning that the instrument was suitable for use.

Data were analyzed using the Wilcoxon Signed Rank Test.

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RESULTS

Table 1 Analysis of the effect of SEFT therapy and lavender aromatherapy on anxiety levels in pregnant women in the third trimester in the Limpung area (n : 22)

Anxiety	N	Mean	SD	P value
Pre test	22	27.07	6.30	0.000
Post test	22	18.81	6.59	

Based on the results of the statistical test, the p -value < 0.05 obtained was less than 0.05, which indicates that there is a significant influence between the combination of SEFT therapy and lavender aromatherapy on reducing anxiety levels in third-trimester pregnant women in the Limpung area. The average anxiety level before the

intervention was 27.07 with a standard deviation of 6.30, while after the intervention it decreased to 18.82 with a standard deviation of 6.59. This decrease indicates that the combination of SEFT therapy and lavender aromatherapy is effective in significantly reducing anxiety levels in third-trimester pregnant women.

DISCUSSION

Pregnant women in their third trimester often experience both physical and psychological discomfort. Physiological changes due to the growing fetus, increased body weight, hormonal changes during pregnancy, and fear of labor are major triggers for anxiety.

Other factors contributing to anxiety in pregnant women are closely related to psychosocial factors, including low education levels, unstable economic conditions, lack of social or family support, and concerns about potential complications during labor. In addition to these factors, the heavy physical burden of daily work activities also contributes to fatigue, which increases anxiety and makes mothers more emotionally sensitive (Fitriasari, 2024).

This condition is characterized by symptoms such as anxiety, irritability, difficulty sleeping, heart palpitations, and excessive fear of childbirth. Untreated anxiety risks increasing the activation of the sympathetic nervous system, triggering an increase in stress hormones (cortisol and adrenaline), which negatively impact the health of both the mother and the fetus.

Pregnant women in their third trimester who participated in the study showed signs of maternal anxiety, both physical and psychological. Several respondents complained of feelings of restlessness, excessive fear, difficulty concentrating, heart palpitations, and muscle tension. Furthermore, some mothers also expressed concerns about the pregnancy and childbirth, such as fear of labor pain, potential complications, and concerns about the baby's safety.

Other emotional symptoms include irritability, fatigue, and difficulty sleeping due to restless thoughts. Patients also described a lack of family support, with families rarely asking about their

condition. The anxiety experienced by pregnant women in their third trimester in the Limpung area is influenced by various psychological, social, and economic factors. Dominant concerns include the upcoming delivery process, the health of the fetus, and physical changes experienced during pregnancy, such as back pain and sleep disturbances.

Maternal anxiety management in the Limpung area prior to this study had been implemented through several routine programs. These programs included monthly prenatal classes aimed at providing education about pregnancy, childbirth preparation, the importance of maintaining mental health, and information on newborn care. Additionally, additional activities such as breathing exercises, prenatal gymnastics, simple relaxation techniques, and music therapy were provided to pregnant women to help reduce anxiety. However, field findings indicate that these interventions were not yet effective in significantly reducing anxiety, as women were still found to have mild to moderate anxiety. This is because the education did not fully address the emotional and spiritual aspects, which play a crucial role in managing anxiety in pregnant women. Therefore, non-pharmacological interventions that are safe, effective, easy to implement, and more specifically targeted at emotional management, such as relaxation or spiritual therapy, are needed.

One intervention proven effective is the combination of Spiritual Emotional Freedom Technique (SEFT) and lavender aromatherapy. SEFT works through light tapping on the body's energy meridian points accompanied by positive affirmations, thereby suppressing the activity of the amygdala, which processes fear and anxiety, and increasing the release of endorphins and serotonin, which promote a sense of calm. Meanwhile, lavender aromatherapy was chosen because it contains the active compounds linalool and linalyl acetate, which are scientifically proven to have sedative and anxiolytic effects. These compounds work through an inhalation mechanism that directly stimulates the limbic system, specifically the amygdala and hypothalamus, the centers for regulating emotions and stress hormones. This process triggers the activation of

the parasympathetic system, reducing muscle tension, slowing the heart rate, improving breathing patterns, and increasing serotonin and GABA levels, thus promoting relaxation and improving mood (Dyah Ayu Wulandari, 2021; Pujiati & Sariibu, 2022).

From the results of this study, researchers concluded that the combination of Spiritual Emotional Freedom Technique (SEFT) therapy and lavender aromatherapy is a non-pharmacological intervention that has been proven effective in reducing anxiety in pregnant women in the third trimester at the Limpung area. This is evidenced by respondents' statements that after being given the intervention twice, their anxiety levels decreased, accompanied by a decrease in post-test scores. SEFT works by stimulating the body's meridian points while reciting positive spiritual affirmations, which aims to balance emotions, suppress excessive stress reactions, and stabilize endorphins and serotonin hormones that affect mood. Lavender aromatherapy works through the brain's limbic system, influencing the amygdala, which plays a role in regulating emotions, thus providing a sedative effect, relaxation, and a feeling of comfort. After receiving regular intervention, pregnant women appeared calmer emotionally, more confident in facing childbirth, and able to control previously excessive anxiety.

Based on the results, p -value < 0.05 was obtained, indicating a significant effect of the combination of SEFT and lavender aromatherapy in reducing anxiety in third-trimester pregnant women. The average anxiety level before the intervention was 27.07 with a standard deviation of 6.30, decreasing to 18.82 with a standard deviation of 6.59 after the intervention. This decrease was not only statistically significant but also clinically meaningful because most pregnant women reported calmer psychological conditions, more stable moods, and more positive emotional responses.

Through light tapping on specific points on the body that correspond to meridian pathways, SEFT helps stabilize the body's energy flow disrupted by anxiety. At the same time, repeated positive affirmations help transform negative thought

patterns into more positive ones, thereby reducing the psychological response to anxiety.

Pathophysiologically, anxiety is triggered by activation of the limbic system, particularly the amygdala, which triggers the sympathetic nervous system to produce the hormones cortisol, adrenaline, and noradrenaline. SEFT inhibits this activity by providing a relaxing stimulus that suppresses the production of stress hormones and increases endorphins and serotonin, which produce a feeling of comfort, calm, and happiness. This results in a more relaxed body, a stable heart rate, calmer breathing, and more positive thoughts. SEFT also helps improve the function of the prefrontal cortex, which is responsible for cognitive control, enabling individuals to better manage their emotions rationally. The overall effect is a reduction in anxiety through physical, emotional, and spiritual mechanisms.

There was a significant decrease in anxiety scores after the intervention. SEFT (Spiritual Emotional Freedom Technique) works by combining tapping techniques on the body's meridian points while reciting positive affirmations, thereby calming the central nervous system and releasing pent-up negative emotions (Pratiwi, Simarmata C, Desi S, Sitepu Eu, 2023).

This process stimulates the release of endorphins and reduces activation of the amygdala, the part of the brain responsible for processing fear and anxiety. Meanwhile, lavender aromatherapy contains active compounds such as linalool and linalyl acetate, which are known to have a sedative effect, lower blood pressure, slow the heart rate, and increase alpha wave activity in the brain associated with calm and relaxation (Fitriasari, 2024).

Lavender aromatherapy works through the olfactory mechanism (inhalation), which directly affects the limbic system, the brain's emotional regulatory center. When lavender scent is inhaled, active compounds such as linalool and linalyl acetate stimulate olfactory receptors, which are then transmitted to the hypothalamus and amygdala via the limbic system. This system plays a role in regulating emotions, hormones, mood, and stress responses. Linalool is known to have sedative and anxiolytic effects, providing a sense

of comfort and calm, and reducing psychological and physical tension.

A meta-analysis confirmed that lavender aromatherapy consistently reduces anxiety during pregnancy (state anxiety), with significant reductions in scores and changes in clinical status. Although not specific to pregnant women, statistical analysis showed a significant difference and a strong relaxation effect. In this study, a p -value < 0.05 indicated a statistically significant change in anxiety levels in pregnant women after the intervention. This finding aligns with the results of various meta-analyses showing that non-pharmacological interventions such as SEFT and lavender aromatherapy consistently reduce anxiety scores, even in the moderate to severe anxiety category. Practically, these results confirm that this combination intervention has a real and clinically meaningful impact on managing anxiety in pregnant women in the third trimester. The statistical strength of these findings reflects the contemporary relevance and empirical validity of the approach used. Thus, the results of this study are not only consistent with global evidence but also provide strong support for the effectiveness of the intervention in the local context (Rezaei et al., 2024).

The decrease in anxiety experienced by most pregnant women in their third trimester after the intervention was due to the combination of SEFT therapy and lavender aromatherapy, which directly targets the main triggers of anxiety, namely the emotional, psychological, and spiritual aspects. Before the intervention, many respondents experienced anxiety due to concerns about the delivery process, the condition of the fetus, fatigue from physical activity, and unfavorable socioeconomic factors, as previously explained. After the therapy, respondents experienced mental relaxation, peace of mind, and a gradual decrease in anxiety because SEFT helped control negative thoughts and emotions, while lavender aromatherapy provided a calming, comfortable, and relaxing effect. Pregnant women who previously felt anxious, had difficulty sleeping, and were easily anxious began to show emotional changes, becoming calmer, more patient, and thinking positively. This indicates that the decrease

in anxiety is not solely the result of education or information, but also due to the strengthening of the emotional, spiritual, and physiological aspects of the body obtained through this combination of therapies. Thus, this change in anxiety scores reflects the success of the method used in the study.

The combination of SEFT and aromatherapy works synergistically by reducing psychological distress and stimulating the parasympathetic nervous system. These results suggest that non-pharmacological interventions can be a safe and effective alternative for managing anxiety during pregnancy. Therefore, this approach is worthy of recommendation in both community and clinical midwifery practice. The effectiveness demonstrated by local data is also supported by global literature supporting the use of relaxation techniques in managing anxiety in pregnant women (Rejeki et al., 2022).

Therefore, pregnant women who received the hypnobirthing intervention combined with lavender aromatherapy demonstrated a greater rate of anxiety reduction compared to the group receiving the combination of hypnobirthing and ylang-ylang aromatherapy. In a relevant study, this combination was reported to significantly reduce anxiety levels, with an average decrease of 3.05 mmHg in systolic blood pressure and an effect size of 0.24, indicating a small but significant clinical effect.²⁸ This effectiveness is strongly suspected to be related to the ability of the active compounds in lavender to increase alpha wave activity in the brain, which is closely related to a relaxed state and a reduced stress response (Afifah, 2023).

Therefore, the combination of SEFT and lavender aromatherapy can be recommended as a scientifically valid, safe, and applicable strategy for implementation in community midwifery practice

CONCLUSION

The combination of SEFT and lavender aromatherapy demonstrated significant effectiveness in reducing anxiety levels in third-trimester pregnant women in the Limpung area. This intervention as a safe and practical complementary strategy for anxiety management during pregnancy.

Therefore, the combination of SEFT and lavender aromatherapy can be recommended for healthcare professionals as a supportive intervention to provide psychological and spiritual support to improve the well-being of pregnant women approaching labor.

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