

Case Study Literature Review (Sclr) Effectiveness Of Lavender Aromatherapy And Thought-Stopping Therapy To Reduce Anxiety In Primary Post-Partum Mothers At Tarogong Public Health Center, Garut City In 2025

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ABSTRACT

The postpartum period is the beginning of a new family for young families, so it is necessary to adapt to their new roles, because family responsibilities increase with the birth of their baby. A holistic approach involving education, psychological support, and monitoring of maternal mental health during the postpartum period is needed to reduce the risk of psychological disorders and ensure the well-being of both mother and baby. The purpose of this study was to compare the effectiveness of lavender aromatherapy and thought stopping therapy as an effort to reduce anxiety in primiparous postpartum mothers. This type of research is a Pre-Experimental Design using One Group Pre-test and Post-Test Design. In this study, there were 2 samples where 1 sample used lavender aromatherapy intervention and 1 sample thought stopping therapy intervention. The study was conducted at PKM Tarogong and was conducted in August 2025. The study used univariate analysis to describe midwifery care and to determine the effectiveness of lavender aromatherapy with thought stopping therapy on reducing anxiety levels of primiparous postpartum mothers at PKM Tarogong in 2025. The results showed that both interventions were equally effective in reducing anxiety levels of primiparous postpartum mothers. Thought-stopping therapy reduced anxiety scores by 13 points within 3 days, while lavender aromatherapy reduced anxiety scores by 12 points within 7 days. Thus, thought-stopping therapy was deemed quantitatively more effective and faster in reducing anxiety, while lavender aromatherapy remains relevant as a safe and easy-to-implement complementary therapy. Suggestions for primiparous postpartum mothers are expected to increase their knowledge about non-pharmacological anxiety reduction methods such as lavender aromatherapy and thought-stopping therapy

Keywords: *Lavender aromatherapy, thought stopping therapy, anxiety*

I. INTRODUCTION

The postpartum period is a crucial phase in a woman's journey to motherhood, particularly for first-time mothers. The postpartum period refers to the time following childbirth, during which the mother undergoes physiological and psychological changes as her body returns to its pre-pregnancy state. The postpartum period is known as the puerperium, which begins with the delivery of the placenta and continues until full physiological recovery – that is, the return of all organ systems to their pre-pregnancy state (Chaudan, 2021).

The postpartum period marks the beginning of a new family for young couples, requiring adaptation to their new roles, as family responsibilities increase with the birth of their baby (Ernawati, 2020). During the postpartum period, women must cope with both the physiological and psychological changes that occur after childbirth (Nova & Zagoto, 2020).

The World Health Organization (WHO) has identified maternal mental health as the most critical public health issue due to its connection to the health of both mother and child (Racine et al., 2021). According to the World Health Organization (WHO), 1 in 5 women from pregnancy through the first year after childbirth will experience mental

health issues that can harm the health of both mother and child if not properly addressed. One of the mental health issues that may arise is stress (WHO, 2022).

Age, parity, and psychosocial factors, such as a lack of social support and support from a partner, increase the risk of mental health disorders in pregnant women. Some of these issues stem from a lack of education regarding the psychological changes that occur during pregnancy (Zulaekah & Kusumawati, 2021). Research by Anggarani (2023) also revealed that anxiety during the postpartum period is not only caused by hormonal changes but is also influenced by factors such as social pressure, lack of emotional support, and a lack of confidence in caring for the baby. Therefore, a holistic approach involving education, psychological support, and monitoring of the mother's mental health during the postpartum period is needed to reduce the risk of psychological disorders and ensure the well-being of both mother and baby.

Several studies have been conducted, both globally and nationally. In Ireland, research shows that within one year of the birth of their first child, 1 in 10 mothers experience high levels of anxiety (9.5%), 14.2% experience symptoms of depression, and 1 in 5 (19.2%) mothers experience high levels of stress. This indicates that the incidence of postpartum stress among mothers is quite high (Hannon et al., 2022). In Indonesia, the prevalence of anxiety among primiparous mothers reached 83.4% with severe anxiety, 16.6% with moderate anxiety, while among multiparous mothers, it reached 7% with severe anxiety, 71.5% with moderate anxiety, and 21.5% with mild anxiety (Central Statistics Agency, 2020). The prevalence of postpartum blues in West Java in 2023 varies, estimated between 50% and 80% among postpartum mothers (West Java Health Office, 2023). The incidence of anxiety among primiparous postpartum mothers in Garut Regency is not yet known with certainty, particularly at the Tarogong Community Health Center. However, there were 45 primiparous mothers out of a total of 117 births over the past 3 months

The results of a preliminary study conducted by the researchers through interviews with 10 first-time mothers on days 1-2 postpartum revealed that the mothers experienced anxiety primarily due to the lack of breast milk on the first day and their limited knowledge of lactation management. This was indicated by the fact that 7 mothers could not explain the proper and effective breastfeeding method; one of them believed that only the nipple should enter the baby's mouth. Another mother expressed fear of being unable to care for her baby, as well as anxiety due to pain from the surgical incision.

A primiparous mother is a mother who has just given birth to her first child, while a multiparous mother is a mother who has previously had more than one child (Layyinah & Abidin, 2023). According to Motegi et al. (2020), there are differences in the psychological conditions of the two groups, with primiparous mothers being more likely to experience negative emotions. Research by Nakamura (2020) shows that primiparous mothers experience higher levels of fear, anxiety, depression, and stress than multiparous mothers after childbirth.

II. LITERATURE REVIEW

Postpartum stress is a condition in which a new mother is unable to adjust to the demands of life and her new responsibilities (Sa'adah, 2023). One of the effects of the high levels of stress a mother experiences during the postpartum period is that it can lead to delayed healing of postpartum wounds (Sa'adah, 2023). Additionally, mothers

experiencing high levels of stress may also experience reduced breast milk production and a tendency to decrease breastfeeding for their infants (Ulfa & Setyaningsih, 2020). Stress in mothers during the postpartum period has a strong impact on them; if left unaddressed, it can develop into postpartum depression. Therefore, first-time mothers particularly need time to adapt to the conditions following childbirth (Purnamawati et al., 2022).

Methods or approaches to manage postpartum anxiety include pharmacological and non-pharmacological therapies. Pharmacological treatment for anxiety disorders includes various antidepressants (SSRIs, SNRIs, TCAs, and MAOIs), anti-anxiety medications (benzodiazepines and buspirone), and β -blockers. According to several guidelines, SSRIs are recommended as first-line therapy for most anxiety disorders (Putri, Hilda, and Purwaningsih, 2023). Meanwhile, non-pharmacological therapies that can be employed include massage therapy, hypnotherapy, and aromatherapy. If anxiety management relies solely on pharmacological.

Based on research cited in several articles, there are several therapies that can be used to reduce anxiety levels, such as aromatherapy, a complementary therapy that uses liquid substances derived from plants that easily evaporate. Aromatherapy is a relaxation technique that can reduce physical fatigue and prevent postpartum depression. Aromatherapy is known for its essential oils and other aromatic compounds that can influence the mind, emotions, and cognitive functions as well as a person's overall health (Putri & Amalia, 2021). Lavender aromatherapy can help reduce stress levels, especially when used in conjunction with pharmacological techniques. However, this is a physical and cognitive intervention, which is non-invasive, cost-effective, low-risk, easy to perform, and capable of providing comfort, improving mobility, and aiding physiological responses (Sundara et al., 2022).

Next is thought-stopping therapy. Thought-stopping techniques serve various constructive purposes in helping individuals reduce anxiety and refrain from thinking about threatening or unwanted thoughts. This therapy aims to stop the negative thoughts that arise in postpartum mothers and replace them with more positive thoughts (Asmara et al., 2023).

Given the high incidence of postpartum anxiety, particularly among primiparous women in Garut City, and the potential benefits of lavender aromatherapy and thought-stopping therapy, this study aims to evaluate the effectiveness of these two non-pharmacological treatments – or natural methods – as complementary therapies that can serve as an alternative for addressing complaints and facilitating recovery during the postpartum period, thereby avoiding the use of chemical substances to reduce anxiety in primiparous postpartum mothers. The results of this study are expected to provide a more effective contribution to addressing the problem of anxiety among primiparous postpartum mothers in the city of Garut, particularly at the Tarogong Community Health Center.

III. RESEARCH METHODOLOGY

In this study, the author employed a pre-experimental research design using a one-group pretest-posttest design. This pre-experimental design does not constitute a true experiment, as external variables in this design can still influence the dependent variable. Therefore, the experimental results – which represent the dependent variable – are not solely determined by the independent variable (Sugiyono, 2022).

According to Sugiyono (2022), the one-group pretest-posttest design is a research design in which a pretest is administered before the treatment is implemented, followed by a posttest after the treatment has been administered.

IV. RESULT AND DISCUSSION

Table 1: HARS Scores for Respondent 1 Following Lavender Aromatherapy Intervention

Visit	TOTAL HARS SCORE														Total	Notes
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Visit 1 August 27, 2025	2	3	1	3	2	1	0	0	1	3	1	0	2	1	22	Moderate anxiety
Visit 2 August 30, 2025	1	2	1	3	1	1	0	0	1	2	1	0	2	1	16	Mild anxiety
Visit 3 September 2, 2025	1	2	1	1	1	1	0	0	0	2	0	0	1	0	10	No anxiety

Table 2: HARS Scores for Respondent 2 Undergoing Thought-Stopping Therapy

Visit	TOTAL HARS SCORE														Total	Notes
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Visit 1 August 29, 2025	2	2	0	3	2	1	2	1	3	3	0	0	1	0	20	Moderate anxiety
Visit 2 August 30, 2025	1	2	0	2	1	1	1	1	2	2	0	0	1	0	14	Mild anxiety
Visit 3 September 31, 2025	1	1	1	1	1	0	1	1	0	0	0	0	1	0	7	No anxiety

Table 3 Comparison of HARS Scores for Respondent 1 and Respondent 2 on the Pretest and Posttest

Item HARS (1-14)	Aromaterapi Lavender (K1)	Aromaterapi Lavender (K2)	Aromaterapi Lavender (K3)	Thought Stopping (K1)	Thought Stopping (K2)	Thought Stopping (K3)
1	2	↓ 1	1	2	↓ 1	1
2	3	↓ 2	2	2	= 2	1
3	1	= 1	1	0	= 0	1
4	3	= 3	1	3	↓ 2	1
5	2	↓ 1	1	2	↓ 1	1
6	1	= 1	1	1	= 1	0
7	0	= 0	0	2	↓ 1	1
8	0	= 0	0	1	= 1	1
9	1	= 1	0	3	↓ 2	0
10	3	↓ 2	2	3	↓ 2	0
11	1	= 1	0	0	= 0	0
12	0	= 0	0	0	= 0	0
13	2	= 2	1	1	= 1	1
14	1	= 1	0	0	= 0	0
Total	22	16	10	20	14	7
Category	Moderate anxiety	Mild anxiety	No anxiety	Mild anxiety	Mild anxiety	No anxiety

* The HARS scale was administered at the first and third visits. At the second visit, anxiety was assessed clinically through interviews and observations based on the 14 HARS items, without assigning numerical scores.

Reduction in Anxiety Levels Among Primiparous Postpartum Mothers Through Lavender Aromatherapy.

As shown in Table 1, for respondent 1 (Mrs. R), who received the lavender aromatherapy intervention, the anxiety level measurement using the Hamilton Anxiety Rating Scale (HARS) at the first visit yielded a score of 22, which falls within the moderate anxiety category. This condition is characterized by complaints of anxiety, emotional tension, sleep disturbances, and several somatic symptoms such as discomfort and restlessness commonly experienced by primiparous postpartum mothers during the early adaptation period.

At the second visit, HARS measurements showed a decrease in the score to 16, which falls within the mild anxiety category. This decrease in score indicates an improvement in the respondents' psychological condition following the administration of lavender aromatherapy, as evidenced by reduced feelings of tension, fewer anxiety complaints, and the mothers appearing calmer and more relaxed during the interview and observation process. This reduction in anxiety symptoms was evident in several HARS components, particularly in items related to tension, fear, and somatic complaints, indicating that lavender aromatherapy began to produce therapeutic effects midway through the intervention period.

Furthermore, at the third visit (posttest), the respondents' HARS scores decreased again to 10, falling into the "no anxiety" category. These results indicate that the administration of lavender aromatherapy during the intervention period effectively reduced anxiety levels from the "moderate anxiety" category to "no anxiety," with a 12-point decrease in scores. The gradual decrease in scores at each visit indicates a progressive improvement in psychological condition, where the relaxing effects of lavender aromatherapy became increasingly optimal as the intervention continued.

During the study, the researchers conducted seven visits; however, anxiety measurements were taken only twice—at the pretest and posttest. These two measurements align with the pretest-posttest protocol, where the instrument is administered only before and after the intervention to assess changes in anxiety levels. The study by Rahmawati et al. (2023) also used the HARS with a one-group pretest-posttest design and successfully demonstrated a reduction in anxiety following the relaxation intervention. The pretest-posttest design is a standard approach for evaluating the effectiveness of interventions, and two measurements are considered sufficient to detect significant changes in psychological variables.

Stress experienced by postpartum mothers can be managed using pharmacological and non-pharmacological techniques. Pharmacological techniques may involve the use of antidepressants and anti-anxiety medications in the benzodiazepine class, such as alprazolam, which can lead to significant dependence. Meanwhile, non-pharmacological techniques may include talk therapy, music therapy, massage therapy, yoga, and relaxation therapies, one of which is aromatherapy (Putri & Amalia, 2021).

Aromatherapy is a complementary treatment that uses liquid substances derived from plants that are easily vaporized. Aromatherapy is a relaxation technique that can reduce physical fatigue and prevent postpartum depression. Aromatherapy is known for its essential oils and other aromatic compounds that can influence the mind, emotions, cognitive functions, and overall health (Putri & Amalia, 2021). The types of aromatherapy include bergamot, black pepper, lemon, and lavender, which function to alleviate emotions, anxiety, and depression while enhancing physical and mental well-being

(providing a sense of comfort, calmness, and sedation) (Amalia Nuril Rahmati & Dewi, 2021).

Based on subjective data from the first-day visit, the mother reported feeling soreness at the incision site, still feeling weak, experiencing mild abdominal cramps, and feeling anxious because her breast milk had not yet come in. During the examination, the mother appeared restless and sweaty because her baby had not yet been able to latch on. Based on other complaints, it was also noted that the mother was very easily irritated, her face appeared tense, she was easily startled and restless, afraid of crowds, had difficulty concentrating and a decline in memory, felt sad, experienced a pounding heart, and had digestive issues such as fear of having a bowel movement.

According to Ciselia & Oktari (2021), the dependency stage is a phase of acceptance. This period lasts from the first day after childbirth through the second day. The mother is now preoccupied with herself. She often recounts stories about her entire childbirth experience from start to finish. Pain from stitches, heartburn, and other physical discomforts, lack of sleep, and the fatigue experienced by the mother during this period are unavoidable.

Individuals experiencing anxiety may exhibit disturbances in personal equilibrium such as tension, restlessness, agitation, fear, and sweating. Those with anxiety will feel far from a sense of freedom (Liliana et al., 2022). Anxiety conditions indicate that the HARS anxiety scale can yield valid and reliable results. This aligns with (Noviandry, 2023), who notes that the HARS scale measures all signs of anxiety – both mental and somatic – using diverse anxiety measurement tools tailored to specific needs. This measurement tool consists of 14 symptom groups, each rated on a scale of 0–4, with a total score of < 14 = no anxiety, 14–20 = mild anxiety, 21–27 = moderate anxiety, 28–41 = severe anxiety, and 42–56 = very severe anxiety. Based on the theory above, there is no gap between theory and practice in the field.

On the third day of her visit, the mother reported that she was still experiencing pain at the incision site and felt tired due to lack of sleep at night. The mother still felt a little anxious because her milk supply was still low and the baby was crying constantly. She was afraid she wouldn't be able to provide her baby with exclusive breastfeeding. Based on other complaints, she was still experiencing anxiety and irritability, her face appeared tense, she was easily startled and restless, felt sad, had a pounding heart, and was prone to sweating.

According to Ciselia & Oktari (2021), the "taking hold" phase is the period lasting 3–10 days after childbirth. There are concerns about responsibility and the inability to care for the baby. The mother's highly sensitive emotions make her easily anxious and angry. Maintaining communication with the mother requires caution. To boost a mother's self-esteem, emotional support is crucial. Based on HARS scores (Noviandry, 2023) obtained through interviews, there was a decrease in anxiety levels. The mother no longer experienced difficulty concentrating or memory loss, nor digestive issues such as difficulty having a bowel movement.

During the final visit on the seventh day, the mother reported no complaints and said she was getting enough sleep. She was happy to receive mental and emotional support from her family, especially her husband. She no longer felt the anxiety that had been troubling her mind. The mother had begun to feel calm and no longer restless, as she was able to start adapting to her new role as a mother and was beginning to learn to

take responsibility for caring for her baby, although this was still accompanied by feelings of worry about her own inadequacy.

Lavender aromatherapy contains 18–48% linalool and 1–36% linalyl acetate. Linalool can provide a calming effect, while linalyl acetate can provide a pain-relieving effect to enhance euphoria. Linalyl acetate and linalool contain oils that can function to relax or soothe the nervous system and tense muscles, and can reduce anxiety, stress, and sleep disturbances, while supporting mental alertness and reducing aggression (Sundara et al. 2022). The purpose of using lavender aromatherapy during the postpartum or puerperium period is to reduce physical fatigue, anxiety, soothe emotions, manage stress, provide a sense of comfort, and prevent postpartum depression (Ika, 2021).

This study is consistent with the research by Ali & Djunaid (2020) on the use of lavender aromatherapy to reduce pain and prevent stress in postpartum mothers. The researchers administered 8–10 drops of lavender essential oil mixed with approximately 180 ml of water, which was vaporized using a steam inhaler and inhaled by the participants for 10 minutes. The results of the study showed that prior to the lavender aromatherapy intervention, the majority of respondents experiencing postpartum stress were in the moderate stress category. After the lavender aromatherapy intervention for postpartum stress, there was a reduction: out of the total 29 respondents in the study, 27 respondents in the moderate stress category shifted to the mild stress category, 1 respondent in the severe stress category moved to the moderate stress category, and another 1 respondent moved to the mild stress category. From these research results, it can be concluded that one effective relaxation technique for reducing stress levels in postpartum mothers is lavender aromatherapy. Based on the study by Malahayati and Nainggolan (2020), which examined stress in postpartum mothers over seven sessions – from the third to the tenth day postpartum – the intervention, consisting of seven sessions of lavender aromatherapy administered consecutively over seven days, will.

Researchers hypothesize that aromatherapy interventions are effective in reducing anxiety among first-time postpartum mothers. With a content of 18–48% linalool and 1–36% linalyl acetate, lavender can provide a calming and relaxing effect, particularly for first-time mothers who are vulnerable to depression due to hormonal factors, role and psychological changes, and a lack of experience. The researchers hypothesized that an aromatherapy intervention derived from lavender could be used to reduce stress levels and anxiety disorders, particularly in cases of anxiety, tension, sleep disturbances, cognitive disturbances, cardiovascular symptoms such as palpitations, digestive disorders, and to reduce excessive sweating and restlessness, as experienced by Mrs. R. It can be concluded that there is no gap between theory and practice in the field

Reduction in Anxiety Levels Among Primiparous Postpartum Mothers Through Thought-Stopping Therapy

Based on Table 2, for respondent 2 (Mrs. N), who received the thought-stopping therapy intervention, the anxiety level measured using the Hamilton Anxiety Rating Scale (HARS) at the first visit showed a score of 20, which falls within the mild anxiety category. This condition is characterized by complaints of anxiety, emotional tension, irritability, and mild somatic complaints such as palpitations and sleep disturbances experienced by primiparous postpartum mothers during the early adaptation period. At the second visit, the HARS measurement results showed a decrease in the score to 14, which still falls within the mild anxiety category. Although the anxiety category has not

changed, this significant decrease in the score indicates an improvement in the respondents' psychological condition following the administration of thought-stopping therapy. The respondent appeared better able to recognize and stop recurring negative thoughts, displayed a calmer demeanor, and exhibited more adaptive emotional responses to situations that previously triggered anxiety. This indicates that thought-stopping therapy began to produce therapeutic effects rapidly from the outset of the intervention.

Furthermore, at the third visit (posttest), the HARS score decreased again to 7, falling into the "no anxiety" category. This decrease in score indicates that thought-stopping therapy effectively reduced anxiety levels from the mild anxiety category to no anxiety, with a 13-point decrease in the score. This change demonstrates a progressive and relatively rapid improvement, with a reduction in anxiety already evident by the second visit and reaching optimal results by the end of the intervention.

Overall, the results of this discussion indicate that thought-stopping therapy produces a significant reduction in anxiety within a relatively short timeframe – specifically, over the course of three visits. The speed and magnitude of the decrease in HARS scores suggest that thought-stopping therapy is effective in helping primiparous postpartum mothers manage anxiety, particularly regarding cognitive and emotional aspects.

Thought-stopping therapy is a technique for stopping negative thoughts that can be used to eliminate intrusive thoughts by saying "stop!" and replacing them with more positive thoughts. In other words, thought-stopping therapy involves giving yourself instructions to halt the flow of negative thoughts through a startling stimulus (Rilyani & Andrianti, 2020). Thought-stopping therapy is a self-taught thought-stopping technique that can be easily used by new mothers to eliminate unpleasant or negative thoughts by visualizing a stop sign (STOP) (Rilyani et al., 2020). The advantages of thought stopping are that it is easy to use, easy for clients to understand, and can be used by clients to adjust their attitudes (Rilyani et al., 2020).

Based on subjective data from the first-day visit, the mother reported still feeling mild abdominal cramps, pain at the incision site, and anxiety that her breast milk supply had not yet established. During the examination, the mother appeared restless and sweaty because her baby had not yet been able to latch on. She wanted to breastfeed immediately; she felt tense and her heart was racing as her baby continued to cry, and she feared her baby would not be able to receive exclusive breastfeeding. The mother also appeared tired due to lack of sleep at night. Other complaints reported by the mother included being easily irritated, a tense facial expression, being easily startled and anxious, fear of crowds, difficulty concentrating and memory loss, feelings of sadness, muscle twitching, weakness, and a pounding heart.

According to Ciselia & Oktari (2021), the dependency stage is a phase of acceptance. This period lasts from the first day after childbirth through the second day. The mother is now preoccupied with herself. She often recounts stories about her entire childbirth experience from start to finish. Pain from stitches, heartburn, and other physical discomforts, lack of sleep, and the fatigue experienced by the mother during this period are unavoidable.

Individuals experiencing anxiety may exhibit disturbances in personal equilibrium such as tension, restlessness, agitation, fear, and sweating. Those with anxiety will feel far from a sense of freedom (Liliana et al., 2022). Anxiety conditions indicate that the HARS anxiety scale can yield valid and reliable results. This aligns with (Noviandry, 2023), who

notes that the HARS scale measures all signs of anxiety – both mental and somatic – using diverse anxiety measurement tools tailored to specific needs. This measurement tool consists of 14 symptom groups, each rated on a scale of 0–4, with a total score of < 14 = no anxiety, 14–20 = mild anxiety, 21–27 = moderate anxiety, 28–41 = severe anxiety, and 42–56 = very severe anxiety. Based on the theory above, there is no gap between theory and practice in the field.

On the third day of the visit, the mother was still anxious about pain at the incision site and worried that her milk supply was still low, though her baby was already latching on well. She was concerned that she would not be able to exclusively breastfeed her baby. She said she was tired due to lack of sleep. She still remembered the proper way to breastfeed her baby. The mother said she sometimes trembled and sweated because she needed to use the restroom but still felt afraid. Based on other complaints, she still felt easily irritable, her face appeared tense, she was easily startled and restless, afraid of crowds, felt sad, and experienced a pounding heart.

According to Ciselia & Oktari (2021), the “taking hold” phase is a period lasting 3–10 days after childbirth. There are concerns about responsibility and the inability to care for the baby. The mother’s highly sensitive emotions make her easily anxious and angry. Maintaining communication with the mother requires caution. To boost a mother’s self-esteem, emotional support is crucial. Based on HARS scores (Noviandry, 2023) obtained through interviews, there was a decrease in anxiety levels. The mother no longer experienced difficulty concentrating or memory loss, and muscle twitching had ceased. However, she remains in the mild anxiety category.

During her last visit on the seventh day, the mother still felt a slight ache from her stitches but was happy that her milk supply was flowing smoothly. Her baby was also breastfeeding well. The mother said she no longer had any troubling thoughts. She was able to rest peacefully thanks to the emotional and mental support from her family, especially her husband. The mother had begun to show interest in learning how to care for and take responsibility for her baby, although this was still accompanied by feelings of worry about her own inadequacy.

This study aligns with Abdurrahman & Mubin (2020), who reported that thought-stopping therapy administered to two patients diagnosed with anxiety resulted in a reduction in patients’ anxiety levels after three therapy sessions. This was determined through measurements using the Hamilton Anxiety Rating Scale (HARS). Patient I, who had a HARS score of 26 before receiving thought-stopping therapy, saw their score decrease to 11, and Patient II, who had a score of 22 (moderate anxiety) before receiving thought-stopping therapy, saw their score decrease to 12 (no anxiety) after receiving the therapy.

Researchers assume that thought-stopping therapy is effective in reducing anxiety among first-time postpartum mothers. This is because thought-stopping therapy is a self-taught technique that postpartum mothers can use to consciously eliminate intrusive, negative, or unwanted thoughts – particularly among first-time mothers, who are vulnerable to depression due to hormonal factors, role and psychological changes, and a lack of experience. Thought-stopping therapy can also be self-taught; it can be practiced anywhere and anytime when a mother wishes to eliminate intrusive thoughts, without the need for a therapist’s supervision. The researchers hypothesize that thought-stopping therapy can be used to reduce stress levels and anxiety symptoms, particularly feelings of anxiety, tension, sleep disturbances, cognitive difficulties, persistent unpleasant

feelings throughout the day, feelings of weakness and fatigue, and a sensation of pressure in the chest, as experienced by Mrs. N. It can be concluded that there is no gap between theory and practice in the field.

Comparison of Lavender Aromatherapy and Thought-Stopping Therapy Interventions

Based on the results in Table 3, it can be seen that both interventions – lavender aromatherapy and thought-stopping therapy – are equally effective in reducing anxiety levels in primiparous postpartum mothers. For respondent 1 (Mrs. R), who received the lavender aromatherapy intervention, the Hamilton Anxiety Rating Scale (HARS) score at the initial measurement (pretest) was 22, falling into the moderate anxiety category. After receiving lavender aromatherapy for seven days, the HARS score gradually decreased to 10 at the post-test, falling into the “no anxiety” category. This 12-point decrease indicates that lavender aromatherapy was able to reduce anxiety levels from the moderate category to the “no anxiety” category.

Meanwhile, for respondent 2 (Mrs. N), who received thought-stopping therapy, the initial HARS score (pretest) was 20, indicating mild anxiety. After three days of thought-stopping therapy, the HARS score decreased to 7 on the final assessment (posttest), indicating no anxiety. A 13-point decrease in the score indicates that thought-stopping therapy is also effective in reducing anxiety in primiparous postpartum mothers.

When compared, thought-stopping therapy demonstrated superior effectiveness compared to lavender aromatherapy. This is evident from the larger absolute decrease in HARS scores in thought-stopping therapy (13 points) compared to lavender aromatherapy (12 points). Additionally, the relative percentage decrease in anxiety in thought-stopping therapy was higher, at 65%, compared to 54.6% for lavender aromatherapy. In terms of the rate of score reduction per day, thought-stopping therapy showed a faster reduction, approximately 6.5 points per day over the two-day intervention period, whereas lavender aromatherapy showed an average reduction of 1.71 points per day over the seven-day intervention period.

Thus, although both interventions were equally effective in reducing anxiety to the “no anxiety” category, thought-stopping therapy proved to be more effective and efficient because it was able to achieve a greater reduction in anxiety scores in a shorter period of time. This indicates that thought-stopping therapy is superior in managing anxiety in primiparous postpartum mothers, particularly in cognitive and emotional aspects, compared to lavender aromatherapy, which works more gradually through physiological relaxation mechanisms.

Theoretically, lavender aromatherapy works through the olfactory pathway, which is directly connected to the limbic system in the brain, particularly the amygdala and hypothalamus, which play a role in regulating emotions and stress responses. Active compounds in lavender essential oil, such as linalool and linalyl acetate, are known to have sedative and anxiolytic effects through increased activity of the neurotransmitter GABA in the central nervous system (Fisser et al., 2022). This explains why aromatherapy interventions provide a gradual effect in reducing anxiety in postpartum mothers.

On the other hand, thought-stopping therapy is a cognitive-behavioral technique designed to interrupt intrusive or ruminative thought patterns through internal verbal commands such as "STOP," which are then replaced with adaptive thoughts. Cognitive theory suggests that postpartum anxiety is often exacerbated by obsessive thoughts about the baby's condition and the mother herself, so this technique can rapidly reduce symptoms (Heimberg & Magee, 2020). Thus, thought-stopping is more effective at quickly reducing the psychological com

Ponents of anxiety compared to interventions that work physiologically, such as aromatherapy.

When compared, it is evident that the reduction in anxiety scores among the two groups differs in terms of absolute values, percentage, and the rate of daily reduction. For the respondent receiving lavender aromatherapy, the initial anxiety score of 22 (moderate category) dropped to 10 (no anxiety), resulting in an absolute reduction of 12 points. Relatively, this decrease equates to 54.6% of the initial score. The average rate of decrease was 1.71 points per day, as the intervention lasted 7 days. Meanwhile, for participants who received thought-stopping therapy, the initial anxiety score of 20 (mild category) dropped to 7 (no anxiety), representing an absolute decrease of 13 points.

The relative reduction in this therapy reached 65% of the baseline score, with an average decrease of 4.33 points per day, as the intervention lasted only 3 days. This comparison indicates that although both interventions were equally effective, thought stopping resulted in a greater reduction—in absolute and relative terms—and a faster daily reduction compared to lavender aromatherapy. These findings are consistent with previous research. A study by Sutrisno et al. (2021) showed that the administration of lavender aromatherapy to mothers post-cesarean section effectively reduced anxiety and improved comfort, although the effects were gradual and required several days of intervention.

Another study by Putri and Widyaningrum (2022) also demonstrated that inhaling lavender aromatherapy significantly reduced anxiety levels in postpartum mothers, with a more pronounced relaxing effect on physiological symptoms such as sleep disturbances and muscle tension. Conversely, research by Kurniawati et al. (2023) indicates that cognitive-behavioral interventions, including thought-stopping techniques, are effective in reducing anxiety in postpartum mothers within a relatively short timeframe, particularly in cases where psychological symptoms predominate.

Based on the results and discussion above, the lavender aromatherapy intervention was most effective at reducing HARS scores by 2 points for sleep disturbances. Meanwhile, thought-stopping therapy was most effective at reducing HARS scores by 2 points for sleep disturbances, 3 points for cardiovascular symptoms, and 3 points for respiratory symptoms.

The researchers hypothesize that these differences in effectiveness are influenced by baseline anxiety levels and the mechanisms of action of the interventions. The first group of participants with moderate anxiety took longer to achieve a state of anxiety-free through lavender aromatherapy, while the second group with mild anxiety responded more quickly to thought-stopping. Additionally, the expectancy effect and emotional support from healthcare providers likely contributed to the intervention outcomes. Consequently, the researchers concluded that thought stopping is quantitatively more

effective, while lavender aromatherapy remains relevant as a safe and easily implementable complementary therapy.

V. KESIMPULAN

1. The administration of lavender aromatherapy to primiparous postpartum women resulted in a decrease in anxiety levels, with HARS scores dropping from 22 on the pretest to 10 on the posttest after a 7-day intervention, representing a 12-point decrease.
2. The administration of thought-stopping therapy to primiparous postpartum mothers showed a reduction in anxiety levels, with HARS scores decreasing from 20 on the pretest to 7 on the posttest after a 3-day intervention, representing a 13-point decrease.
3. Both interventions were effective in reducing anxiety in primiparous postpartum mothers. However, thought-stopping therapy demonstrated superior effectiveness compared to lavender aromatherapy, as evidenced by a greater reduction in scores, a higher percentage reduction (65% vs. 54.6%), and a faster rate of anxiety reduction—approximately 6.5 points per day compared to 1.71 points per day for lavender aromatherapy.

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