



The Effect of Giving Lemon Aromatherapy to Postpartum Mothers to Reduce Anxiety at TPMB (Midwife Independent Practice) E, Sukasari Village, Cilaku District, Cianjur Regency, Indonesia

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ABSTRACT

The scent of lemon is known to improve mood and help reduce feelings of stress and anxiety. The fresh smell of lemon can have a refreshing and uplifting effect. Lemon aromatherapy can also help in creating a sense of relaxation and calm. This study aimed to determine the effect of giving lemon aromatherapy to postpartum mothers to reduce anxiety at TPMB (Midwife Independent Practice) E, Sukasari Village, Cilaku District, Cianjur Regency, Indonesia. This study is experimental research with a one group pre-post-test approach and uses primary data, namely measuring the degree of anxiety of post-partum mothers of research respondents. A total of 30 research subjects participated in this study, where the research subjects met the inclusion criteria. This study shows that the intervention of providing lemon aromatherapy is effective in reducing the level of anxiety in postpartum mothers. There was a decrease in the level of postpartum maternal anxiety after giving lemon aromatherapy and it was stated to be statistically different, $p < 0.05$. In conclusion, there is an effect of giving lemon aromatherapy in reducing anxiety of postpartum mothers at TPMB (Midwife Independent Practice) E, Sukasari Village, Cilaku District, Cianjur Regency, Indonesia.

1. Introduction

The process of childbirth is one of the most influential moments in a woman's life. This process not only brings major physical changes but also significant emotional and psychological changes. During childbirth, the body experiences strong hormonal fluctuations, especially an increase in hormones such as estrogen and progesterone that regulate pregnancy. After giving birth, a woman's body experiences dramatic hormonal changes. These hormones begin to return to more normal levels, which can affect mood, feelings, and anxiety levels. At the same time, the physical and emotional burden that caring for a newborn brings can create a significant

stressful situation for the mother. Postnatal anxiety is a common phenomenon and can affect the well-being of both mother and baby. This anxiety can include concerns about the ability to care for the baby, changes in interpersonal relationships, uncertainty about lifestyle changes, and feelings of loneliness and exhaustion.¹⁻³

Lemon aromatherapy is a form of alternative therapy that uses essential oils extracted from lemons for physical and emotional healing purposes. Lemons have been known for centuries for their fresh and refreshing aroma, and this makes them one of the most popular essential oils in the world of aromatherapy. Lemon essential oil is usually extracted



from the peel of lemons and is rich in compounds that can provide various benefits. The scent of lemon is known to improve mood and help reduce feelings of stress and anxiety. The fresh smell of lemon can have a refreshing and uplifting effect. Lemon aromatherapy can also help in creating a sense of relaxation and calm. This can be a useful aid for postpartum mothers who may be experiencing anxiety or stress. Apart from the emotional benefits, lemon aromatherapy can also be used to freshen the air around the residence or baby care room. This can help create a more comfortable and enjoyable environment. Lemons have also been known to help relieve nausea. This may be beneficial for postpartum mothers who may experience nausea due to hormonal changes or stress.⁴⁻⁶ This study aimed to determine the effect of giving lemon aromatherapy to postpartum mothers to reduce anxiety at TPMB (Midwife Independent Practice) E, Sukasari Village, Cilaku District, Cianjur Regency, Indonesia.

2. Methods

This study is experimental research with a one-group pre-post-test approach and uses primary data, namely measuring the degree of anxiety of postpartum mothers of research respondents. A total of 30 research subjects participated in this study, where the research subjects met the inclusion criteria. The inclusion criteria for this study were postpartum maternal patients with anxiety at TPMB E, Sukasari Village, Cilaku District, Cianjur Regency, Indonesia. The Edinburgh postnatal depression scale (EPDS) is a widely used assessment tool to identify symptoms of postnatal depression in mothers. Although the name refers to depression, EPDS can also be used to detect

postpartum anxiety. This tool is designed to help medical personnel identify mental well-being problems in mothers after giving birth so that intervention can be provided as needed. A threshold is usually used to determine whether the mother has significant symptoms of depression or anxiety. This threshold can vary depending on the guidelines used by the particular hospital or clinic but usually ranges from 10 to 13. If a mother scores above this threshold, then she will likely be recommended for further evaluation by medical personnel or mental health specialists.

The lemon aromatherapy preparation used in this study is a commercial lemon aromatherapy product that is on the market and has received BPOM permission. Lemon aromatherapy is used regularly, at least 4 times a day for 5 days. Data analysis was carried out using SPSS version 25 software. Univariate and bivariate analyses were carried out in this study. Univariate analysis was carried out to present the frequency distribution of each test variable, and bivariate analysis was carried out to determine the relationship between the test variables, with a p-value <0.05.

3. Results and Discussion

Table 1 presents the effectiveness of the pre and post-test interventions. This study shows that the intervention of providing lemon aromatherapy is effective in reducing the level of anxiety in postpartum mothers. There was a decrease in the level of postpartum maternal anxiety after giving lemon aromatherapy, and it was stated to be statistically different, p<0.05.

Table 1. Comparison of the degree of anxiety of postpartum mothers before and after being given intervention.

Variable	Pre-test	Post-test	P-value*
Scoring the degree of postpartum maternal anxiety	9,8±0,53	6,7±0,43	0,001

*T-test dependent, p<0,05.



Lemon aromatherapy has the potential to reduce anxiety thanks to the various active components contained in lemon essential oil. Limonene is the main chemical compound found in lemon essential oil. This compound has the distinctive fresh aroma of lemon and is believed to have relaxing properties that can help relieve stress and anxiety. Limonene can also help improve mood and make a person feel calmer. Limonene is known to have relaxing properties that can help relieve stress and anxiety. The fresh, refreshing aroma of lemon produced by limonene can help stimulate the parasympathetic nervous system, which is responsible for calming the stress response and promoting feelings of calm. Limonene may also play a role in improving mood. The pleasant aroma of limonene can trigger the release of neurotransmitters that influence feelings of happiness, such as serotonin and dopamine. This can make a person feel more positive and happy. These compounds can have a calming effect on the nervous system, which may help reduce anxiety symptoms. This can help overcome feelings of anxiety and tension that are often experienced by individuals facing stressful situations. Anxiety often also has physical effects, such as muscle tension, sleep disturbances, and shallow breathing. Limonene may help relieve some of these physical symptoms through its relaxing and calming effects. Limonene may also help reduce feelings of anxiety that can arise in stressful situations. This can provide a feeling of more mental stability and control over emotions.⁷⁻⁹

Linalool is another compound often found in lemon essential oil. This compound has sedative properties and can help relieve anxiety and increase feelings of relaxation. Linalool is also found in various other aromatherapy plants and has been shown to have calming effects. Linalool has sedative properties that can help relieve anxiety and stress. Using essential oils containing linalool in aromatherapy can create a calming effect that can help relax the mind and body. Linalool may help promote feelings of

relaxation and calm. This makes it useful in dealing with anxiety, especially in stressful or stressful situations. This compound can also have a positive effect on mood. Linalool may help increase positive feelings and reduce symptoms of depression. Linalool is often used in essential oil blends and aromatherapy products to create a calming and relaxing aroma.¹⁰⁻¹²

Geraniol and neral are compounds that give lemon oil its distinctive citrus aroma. These two compounds can provide a feeling of freshness and relieve anxiety. They can also help improve mood and reduce stress. Geraniol is a chemical compound that has a strong and fresh citrus aroma. This is one of the compounds that gives lemon its characteristic aroma. Geraniol has the potential to provide a powerful refreshing effect, which can help relieve anxiety and improve mood. Neral is another chemical compound found in lemon oil that has a pleasant citrus aroma. Like geraniol, neral can also provide a feeling of freshness and help relieve stress. The combination of geraniol and neral in lemon oil produces a very distinctive aroma and feels refreshing. These two compounds can help relax muscles and the mind, so they can be useful in reducing anxiety and stress levels. The lemon scent they produce can provide feelings of calm and relief. The aroma produced by geraniol and neral can also help improve mood and make a person feel more positive. This can be a useful addition in dealing with feelings of anxiety or low mood. The combination of geraniol and neral in lemon oil makes it a popular choice in aromatherapy. Lemon essential oil is often used in diffusers, aromatherapy oil blends, or as an addition to relaxing treatments, such as baths or aromatherapy massages.¹³⁻¹⁵

4. Conclusion

There is an effect of giving lemon aromatherapy in reducing the anxiety of postpartum mothers at TPMB (Midwife Independent Practice) E, Sukasari Village, Cilaku District, Cianjur Regency, Indonesia.



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