


The relationship of providing lemon aroma therapy with mother's anxiety in care of newborn babies in the health center area

Tiarnida Nababan¹, Arilia Buulolo², Arnisa Lubis³, Arisa Rahmah Kholid⁴,
Arlida Barros⁵, Arnisfu⁶

^{1,2,3,4,5,6}Undergraduate Midwifery Study Program, Faculty of Nursing and Midwifery, Universitas Prima Indonesia

Article Info	ABSTRACT
Keywords: Aroma Therapy, Lemon, Mother's Anxiety, Newborn Babies	Worry or anxiety is tension, feeling no safety, and the concerns that arise because something will happen that isn't fun, but the source part is known. Worry is an emotion without a specific object because it is No known and preceded by experience. Worry differs from fear. Study This aim is to determine the effectiveness of providing lemon aromatherapy for lower-level anxiety in postpartum mothers at the Community Health Center, and also the influence of lemon therapy. Benefits of research: This gives information and adds knowledge to carry out care. Midwifery is complementary, specifically in overcoming maternal anxiety postpartum. Deep-method study This is a quasi-experiment with a design pre-test and post-test with a control design. Samples used in the study This is namely postpartum mothers who experience worry as many as 28 people. Research result This shows that giving lemon aromatherapy is effective in lowering maternal anxiety postpartum in the work area public health center, expressed with a P value of <0.05. Advice from the study This is expected of health workers to provide counseling to the public, especially mothers, related to giving aroma therapy as a non-pharmacological treatment given to mothers who experience anxiety. Postpartum period, or postpartum period, is term for 6 weeks, first after birth. During this, mother and family will experience lots of changes, including changes in structure and function in the family. In stages, this mother starts to adapt to the new role. Therefore, there is seldom impact change psychological mother among them that is worried. Therefore, that required some intervention to reduce impact anxiety, and one of them was the lemon aromatherapy method. Study this aim to know the influence of lemon aromatherapy (Citrus limon) against level of worry in mothers postpartum.
This is an open access article under the CC BY-NC license 	Corresponding Author: Arilia Buulolo Undergraduate Midwifery Study Program, Faculty of Nursing and Midwifery, Universitas Prima Indonesia buuloloarilia@gmail.com

INTRODUCTION

Normal newborns are babies born with a posterior presentation head through the vagina without using tools, at 37 weeks of gestation until with 42 Sunday, with heavy body 2500-4000 grams, mark APGAR >7 Andwithout congenital defects. According to Unicef, the birth rate of normal newborns in the world at the beginning of 2020 there will be 13,020 babies

The relationship of providing lemon aroma therapy with mother's anxiety in care of newborn babies in the health center area– Tiarnida Nababan et.al

born and babies from Indonesia accounted for around 3.32 percent of the total 392,078 'new year' babies. Based on Sustainable Development Goals (SDGs) in the third goal regarding Health and Well-being, Number Death Neonatal in Indonesia on year 2020 as big as 24 per 1000 birth life. Province with amount death neonate highest in Indonesia namely North Sumatra, Banten, West Java, Central Java, East Java and Sulawesi South. Reducing the neonatal mortality rate is very important, Because death neonate give contribution as big as 60% to Number Infant Death (World Health Organization (WHO), 2018).

Newborns or neonates are the period of life (0–28 days), where happen change Which very big from life in in womb going to outside womb and organ maturation occurs in almost all systems. Infants up to under age One month is group age Which own risk disturbance health most high and various health problems can arise, leaving without proper treatment appropriate Can caused fatal (Ministry of Health RI, 2020).

According to World Health Organization (WHO) year 2017, every year infant death Newborn and neonate in world achieved 37% from all death in toddlers. 8,000 newborn babies in the world die from unknown causes can prevented every the day. Reason main death baby new born in world between others LBW 29%, sepsis and pneumonia 25% and asphyxia 23%. Dead cause baby to 3 in world in period beginning life is asphyxia. According to data Survey Demographics And Health Indonesia (IDHS) year 2017 show AKB as big as 24 per 1,000 birth life. Interventions Which can support Child survival is aimed at reducing the IMR to 16 per child 1000 birth life in year 2024. Reason death other in among them asphyxia, abnormality default, sepsis, tetanus neonatorium, And other. (Profile Health Indonesia, 2019).

Based on data according to reports from the Central Statistics Agency (BPS), Indonesia has an infant mortality rate of 16.85 per 1,000 live births in 2022. This means, from every 1,000 baby Which born with Happy, around 16 baby in among them died before reaching the age of 1 year. Papua is a province with numbers highest infant mortality, namely 38.17 per 1,000 live births in 2022. Meanwhile The lowest figure is in DKI Jakarta as seen in the graph. BPS noted The lowest district/city infant mortality rate is in Central Jakarta City, ie 9.18 per 1,000 birth life. Temporary number the highest is at in Nduga Regency, namely 56.69 per 1,000 live births. According to the Ministry Health, the main causes of infant death include respiratory problems, birth premature, infection blood (sepsis neonatorium), as well as abnormality default since born (malformation congenital) (Profile Body Center Statistics, 2012-2017).

Worry (*Anxiety*) is something we're here emotional Which No pleasant , Which be marked by flavor afraid as well as symptom physique Which nerve-wracking in a way No desired. Anxiety be marked with symptom physique like ; anxiety, limbs tremble, sweat a lot, difficulty breathing, heart beats fast, feeling weak, hot and cold, irritable or irritable. Behavioral symptoms such as behave dodge And shaken, as well as symptom cognitive like ; worry about something, a feeling of being disturbed by fear of something that will happen in the future front, confidence that something Which scary will quick happen, afraid will inability For overcome problem, thought felt mixed stir or confusion, difficulty concentrate (Irma, 2016).

Anxiety disorders are something that is often experienced by primiparous mothers Which appear consequence inability And Not yet ready Mother For accept presence the baby Which need maintenance special on Sunday Sunday first birth. However, this anxiety is generally relative, meaning it exists people who are anxious and can calm down after receiving support from people around him but there are also people who are constantly worried even though people around him provide support. Anxiety occurs frequently connected with disturbance worry prenatal linked with quality Mothers' relationships with their postpartum babies were worse, measured by bonding reported Alone by Mother and observe interaction mother-baby (Nath et al., 2019).

One way to reduce anxiety is to use therapy non pharmacological. Therapy This useful For lower worry patient Which will undergo therapy hemodialysis. Wrong One therapy non pharmacological Which can used is therapy complementary that is Complementary and Alternatives Medicine (CAM) (Lin & Cheifetz, 2018). One type of moderate CAM therapy Popularly used in the health sector, namely aromatherapy. This is appropriate with research by Bouya, et al (2018) that aromatherapy can reduce some hemodialysis complications such as anxiety, fatigue, pain, sleep quality, stress, and Sick head.

Dehkordi, et al (2017) say that compound aroma therapy through inhalation will direct give effect to system nerve center And influence balance cortex cerebral as well as nerves Which there is on brain. Aroma therapy inhalation damask Rose And extract orange effective For reduce worry on patient hemodialysis. Besides That aroma therapy lavender, flower rosemary,peppermint oil, sunflower oil, chicory essence, tea tree oil, Jojoba oil is also effective in reducing anxiety in patients hemodialysis (Bouya, 2018).

Lemon aromatherapy where the oil is extracted from the fruit. The effect can clarify And stimulating Where can increase tension, feeling Happy, view positive, motivation, confidence in take decision And stability as well as can reduce problem Respiratory, stress, And thought negative (Aini S Hutasoid, 2012). Substance Which contained in lemons Wrong the only one is Linalol Which useful stabilize nerve so that can give rise to effect calm for anyone Which inhale it (Donna L Wong, 2010).

Based on data And results study Which has mentioned, study interested to research "The Relationship between Providing Lemon Aromatherapy with Maternal Anxiety in Maintenance Baby New Born in Region Public health center". The purpose of study This is for know effectiveness giving aroma therapy lemons can reducing anxiety as an effort to anticipate events that occur when the mother is in care baby new born in region Public health center. Identify characteristics Mother in care baby new born . Identify level worried on Mother in maintenance baby new born before giving aroma therapy lemons . Identify level worried on Mother in maintenance baby new born after giving aroma therapy lemons . Analyze influence giving aroma terami lemons to level worry Mother in maintenance baby new born .

METHODS

Type and design of research using a pre-experimental design type one group pretest-posttest. Research sites are at the Community Health Center. Research was conducted in June 2023–August 2023. Population in the study This is a postpartum mother in the Community Health Center Work Area, involving 3 participants. The sampling technique used is accidental sampling. Data was collected using the Hamilton Anxiety Rating Scale. Data were analyzed using Predictive Analytics SoftWare Version 18 with tests, a paired sample t-test at the level of significance for the postpartum period or post-birth term for 6 weeks. During this, mother and family will experience lots of changes, including the structure and function of a family. In stages, this mother Mother start for adapt to his new role. Therefore, there is seldom impact on psychological change. These include anxiety and depression postpartum (Lowdermilk et al., 2021). Anxiety in mother postpartum own Lots consequence negative on health Mother. Maternal consequences include physical health, health psychology, relationships, and behavior risk of interaction disruption mother-child, including bonding, breastfeeding, and role mother. Worry postpartum will impact the increased psychological pressure (psychological distress), which has a negative impact on the mother's mental health status and the functioning of mothers, families, and babies. Postpartum anxiety is present as a comorbidity; however, it is often not recognized in clinical practice or underestimated as a comorbidity in the mother (Murphey et al., 2020).

Data Measurement Aspects

Aspect Measurement Level Study by Tikotzky (2019) Globally, postpartum anxiety ranges between 20 and 25% of the total population. Mother-giving birth in general occurs in women who are mature, 17%–22% in their early postpartum period and 15%–33% at the end of postpartum. Period 4,22,24. About 6% of women experience high anxiety at 2 weeks, 2 months, or 6 months after giving birth (Rados et al., 2020). Meanwhile, in Indonesia, it is 28.7%. The level of anxiety that occurs in primiparous mothers reaches 83.4% with the level of anxiety severe (16.6% with anxiety moderate), while what occurs in muliparous mothers reaches 7% with worry medium and 21.5% with worry light (Central Statistics Agency, 2020).

Based on studies Preliminary will be held in May 2022 via interview against 10 mothers postpartum. It was obtained that on the mothers given postpartum aroma therapy, 7 mothers disclose feeling comfortable or not worried, whereas as many as 3 mothers still disclose feeling worried or worried. Worry is a circumstance. Where there exists feeling worried, nervous, or nervous about something with no results definite (Lerner, 2021), Anxiety postpartum is more sensitive to stress and causes some people to feel overwhelmed, afraid, or panic after giving birth. Worry postpartum can endure beyond the period postpartum and cause problems psychologically, symptoms, self-adjustment, and tendencies that kill high self-esteem (María et al., 2021). Postpartum anxiety is associated with being afraid previously. For giving birth, fear of death, and lack of trust in oneself. trust myself. The Diagnostic and Statistical Manual for Mental Disorder 5 (DSM5) offers various criteria for disturbance worry, like anxiety, worry, or a symptom related to what makes it difficult to do day-to-day activities and responsibilities (Kohler & Annerstedt 2019).

Anxiety in mother postpartum will have no influence. Good for baby, mother's mentality from baby That Alone, as well as the hormonal relationship of marriage. Hormonal anxiety will impact a significant change and will make the atmosphere of the heart change, which is like the hormones progesterone, estrogen, thyroid, cortisol, and prolactin. Anxiety for mother neglected postpartum and what not done handling, This worry will continue to progress to more critical stages, that is, depression in mothers postpartum (Christine et al., 2020).

One intervention in the management of patients with problem anxiety is the aromatherapy method (Barati et al., 2016). Aromatherapy is one of them forms of therapy complementary alternative, also known as complementary and alternative medicine (Yeung & Chung., 2015). The use of aromatherapy in practice for health is based on the implementation of essence concentrated from extracted plants with a distillation process (Herz, 2019). One of the recommended scents in mediate worry is aromatherapy-based oil lemon essentials (Citrus limon) (Moslemi et al., 2019). Oil Lemon essential oil (Citrus limon) is one of the most commonly used herbal oils in pregnancy and is considered a safe medicine in pregnancy. One or two drops of inner lemon essential burner oil or a diffuser in the room can help soothe stress and emotional stress (Yavari et al., 2020).

Data Processing and Analysis Methods

The next stage after data collection is a study conducted by Karimzadeh and Forouzi (2021), which shows the effectiveness of giving citrus aromatherapy to level-of-worry intensive care patients three hours after intervention. A study by Rambod (2020) shows that there is an anxiolytic effect after giving lemon aromatherapy to patients with myocardial infarction I.

Data processing

a. Editing

The accuracy of the information collected or obtained through questionnaire known with editing terms.

b. Coding

To make it easier for researchers to enter data into a computer, coding is the process of coding the collected data after researched.

c. Data Entry

The process of digitizing data on the computer used by researchers

d. Tabulation

In particular, create a data table based on the research objectives or preferences of the researcher and then add to it into the table distribution.

Data analysis

Descriptive data analysis was carried out by examining the percentage of data displayed in the frequency distribution, and a study by Moslemi (2019) revealed that patients with acute coronary syndrome given aromatherapy experienced a significant decrease in anxiety scores compared to patients who did not receive aromatherapy. Based on studies, the toxicology and teratogenicity of the substance active in Citrus aurantium are safe to use and consume by pregnant women or postpartum mothers (Price, 2019). It can

be seen that the use of therapy in the study was previously directed at adult patients treated in intensive care and with diseases of the cardiovascular system. In this study, we will do interventions on different subjects, namely postpartum mothers. Based on the background behind that, a study is needed about the influence of lemon aromatherapy (Citrus limon) on the anxiety level of postpartum mothers in the Work Area Public Health Center.

RESULTS AND DISCUSSION

The result of this research is to determine the effect of giving lemon aromatherapy on reducing the intensity of labor pain during the first active phase in primigravida mothers. Postpartum period, or postpartum period, is term for 6 weeks, first after birth. During today, mothers and their families will experience many changes, including changes in the structure and function of a family. At this stage, the mother begins to adapt to the new role. Therefore, it often has an impact on the mother's psychological changes, among them worry. Therefore, that is required. An intervention to reduce the impact of anxiety, one of which is the aromatherapy method, this study aims to determine the effect of lemon aromatherapy (Citrus limon) on anxiety levels in mothers postpartum.

Draft Theory

Understanding New Baby Born

Newborn babies (Neonates) are babies who have just experienced the birth process, aged 0-28 day And need adjustment physiological in the form of maturation, adaptation (adapt self from life intra uterine to extra uterine) and tolerance for newborn babies to live well. Babies are humans who are just born to 12 months old, but not There is limitation Which Certain, period baby is period Which very depend on person mature. Lots activity psychological Which happen only for starters like Language, thinking symbolic, coordination sensorimotor and study social. On period This man very funny And cute but also vulnerable to death. Infant mortality is divided into two, neonatal mortality (death in the first 27 days of life) and post-neonatal (after 27 days) (Marmi & Rahardjo, 2018).

Maintenance Newborn baby

Newborn care is an act of caring for a baby new born since moment recovery from his birth until He go out from the hospital which aims to ensure that the baby remains warm, Get adequate nutrition and be free from infection. (Farrer, 2014).

According to Bobak (2015), the components of baby care at home include preventing heat loss, bathing the baby, caring for the hands and feet, cleaning the genitalia, wearing clothes on the baby and breastfeeding. Researcher at times This research 4 component from seven maintenance components baby new born according to Bobak (2015) that is bathe baby, umbilical cord care, cleaning genitalia/changing diapers and breastfeeding. The reason researchers chose 4 components from seven new baby care born because of the four components that's more tend on the risk of infection in newborn care.

Understanding Anxiety

Worry on Mother can give influence Which No Good for babies, the mental state of the baby's mother and her marital relationship. Hormones that experiencing changes in

numbers Enough big will change the mother's mood, namely the hormones progesterone, estrogen, thyroid gland, cortisol and prolactin. Mother's anxiety is usually just ignored and not treated, this is worrying will continues to stage Which more critical that is depression in post partum mothers (Ita, 2019).

Basically, anxiety is a person's full psychological condition with flavor Afraid And worry, Where feeling Afraid And worry about something that is not certain to happen. Anxiety comes from Latin (anxius) and from German (anst), which is a word used to describe negative effects and physiological stimulation (Muyasaroh et al. 2020). According to the American Psychological Association (APA) in (Muyasaroh et al. 2020), anxiety is an emotional state appears when individual currently stress, And marked by feeling tense, thought Which make individual feel worry And accompanied physical response (fast heartbeat, increased blood pressure, etc.).

Understanding Aroma therapy

Aroma therapy originate from say aroma Which means fragrant or fragrant, and therapy Which can interpreted as : “ something method maintenance body And or healing diseases using essential oils. Aromatherapy is a form of therapy using aromatic oils or essential oils or in Indonesian, essential oils. Pharmacologically, essential oils have real benefits in treating and healing our bodies from various health problems, apart from providing warmth, aromatherapy can also relieve breathing, prevent nasal blockages, reduce tension muscle, And expedite process digestion (Julianto, 2016).

Aromatherapy is a therapeutic action using essential oils which is useful for improving a person's physical and psychological condition for the better. Some essential oils have pharmacological effects Which unique like anti bacteria, anti virus, diuretic, vasodilator, sedative and adrenaline stimulant. When inhaled through the nasal cavity, the molecules in essential oils can stimulate the limbic system in the brain. The limbic system in the brain is an area that influences emotions And memory as well as directly related with adrenaline, pituitary gland, hypothalamus, parts body Which arrange pulse heart, blood pressure, stress, body balance and breathing (Rosalinna, 2019).

Aromatherapy is therapy or treatment using odors that come from plants, fruits, flowers, trees that smell fragrant and delicious. Aromatherapy uses oils high-concentration essentials extracted from different parts of the plant to obtain beneficial properties therapeutic. Essential oils are naturally found in plant cells to facilitate development And protect plant from infection And parasite, as well as Work with method Which The same exactly with medicines Which conventional. (Rasida & Indri, 2020).

Understanding Aroma therapy Lemons

Lemon aroma therapy is an essential oil produced from the extraction of lemon peel (citrus lemon) which is often used in aromatherapy. Aroma therapy lemons is type aroma therapy Which safe for pregnancy and childbirth (Medforth et al., 2013). It has antibacterial properties, is good for lowering blood pressure, stopping bleeding, canker sores, a source of potassium which is good for the heart, increases stamina and increases energy, can relieve coughs and relax fatigue, balances the body's pH (Medforth et al., 2013).

Lemon aromatherapy contains limonene which inhibits the action of prostaglandins

so that it can reduce pain and functions to control cyclooxygenase I and II, preventing prostaglandin activity and reducing pain including nausea and vomiting. The linalyl acetate content in lemon aromatherapy is an ester compound which is formed by combining organic acids and alcohol. Esters are useful for normalizing emotional states and unbalanced body conditions and have sedative properties. The terpinol content in lemon aromatherapy can stabilize the central nervous system, cause feelings of pleasure, increase appetite, improve blood circulation, and also act as a sedative (Maternity et al, 2017).

CONCLUSION

Based on the problem formulation and research results, it is known that the level of worry for mothers postpartum before the intervention part The large number is at the medium level, namely 24 mothers (63.2%) in the community health center. Level of Anxiety in Postpartum Mothers in the Work Area Level of worry Mother postpartum before giving lemon aromatherapy (Citrus limon) was 19.58 (SD ± 5.6). Meanwhile, the average level of worry for Mother postpartum after giving lemon aromatherapy (Citrus limon) was 12.71 (SD ± 6.018). Before and after giving lemon aromatherapy (citrus limon) in the work area of the public health center Before done giving lemon aromatherapy (citrus limon), shows worry currently as much as 63.2%. Severe anxiety was 26.3% and anxiety heavy as much as 10.5%. After giving lemon aromatherapy (citrus limon), it shows worry levels as high as 57.9%. Moderate anxiety was 26.3%. Severe anxiety is as high as 13.2%, and very severe anxiety is as high as 2.6%. Research result This can be a reference for student nursing and midwifery, specifically eye-studying midwifery. Postpartum maternal anxiety level After giving lemon Lemon Aromatherapy (Citrus Limon) in the Work Area Community Health Center, postpartum patients experienced worry at various levels. This matter give a reason scientific about impact psychosocial mainly maternal anxiety post partum caused by multifactors. that in the early postpartum period, the mother feels tired as a consequence of childbirth and increases tiredness tired consequence breastfeeding and caring for the baby. Whereas mothers postpartum experience physical conditions other than tiredness and exhaustion, like related problems with sleep, pain, problems related to sex, hemorrhoids, constipation, and problems with breasts, fatigue is the main.

REFERENCES

- Adams, JD, "Massage and Other CAM in Pregnancy." International Journal of Childbirth Education, 2020.
- Ana, Soumy. Third trimester, pregnancy. Yogyakarta: Blue Book, 2020.
- Budget, Deri Rizki. Completely peeled about pregnancy and postpartum period. Jakarta: PT Agro Media Pustaka, 2020.
- Arief Hariana. Lemon aroma therapy. Jakarta: Spreader Self-Help, 2019.
- Aryasatiani, "Keeping Women Afraid of Normal Childbirth." Article on health checks in 2021 from <http://www.dinkes.diy.org> Asmadi . Procedural Techniques in Nursing: Concepts and Applications Client Basic Needs Jakarta: Salemba Medika, 2020.

Atsushi Imagawa, et al. "Peppermint Oil Solution is Useful as an Antispasmodic Drug for Esophagogastroduodenoscopy, Especially for Elderly Patients, Springer Science." Business Media, 2021.

Statistics Agency, BKKBN, Indonesian Ministry of Health, Measure DHS. Survey Demographics and Indonesian Health Calverton, Maryland, USA, 2021.

Baladewa, P., "Differences in Anxiety Levels in Preoperative Hernia Patients After Providing Informed Consent for General Anesthesia and Regional Anesthesia at RSUP Dr. Moh. Hoesin Palembang." Department of Health of the Republic of Indonesia Yogyakarta Health Polytechnic, 2021.

Bobak, IM, Lo Wdermik, DL., & Jensen, MD. Nursing Textbook: Maternity. Jakarta: EGC, 2020.