



The effectiveness of giving lemon aromatherapy to reduce the frequency of emesis gravidarum in pregnant women

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ABSTRACT

Background: Emesis gravidarum is a state of nausea sometimes accompanied by vomiting that occurs in early pregnancy. These symptoms usually occur 6 weeks after the first day of the last menstrual period and last approximately 10 weeks, but in some cases can continue until the second and third trimester of pregnancy. About 50-90% of pregnant women experience complaints of nausea and vomiting. This complaint is usually accompanied by hypersalivation (excessive salivation), headaches, flatulence, and weakness in the body. These complaints are commonly known as "morning sickness". The frequency of morning sickness is not only in the morning but can be day and even night. Hormonal changes in each pregnant woman will respond differently, so not all experience nausea vomiting. Objective: to examine more deeply the effectiveness of lemon aromatherapy on reducing the frequency of nausea and vomiting (emesis gravidarum) in pregnant women who are in accordance with previous studies by reviewing several studies. Method: This study uses several sources including searching several journals through (Google Scholar) with the literature review method. The results of statistical analysis: that there is an effect of lemon aromatherapy on emesis gravidarum. Bottom Line: Lemon is an effective aromatherapy for reducing nausea and vomiting in pregnant women with emesis gravidarum.

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1. INTRODUCTION

Pregnancy is a physiological part of a woman's life. This pregnancy is usually accompanied by a feeling of discomfort that is often experienced by pregnant women, especially in the first trimester of pregnancy, namely nausea and vomiting. The cause is an increase in the hormones estrogen and progesterone produced by Human Chorionic Gonadotropine (HCG) (Akbarini, Lestari, and Lamana 2022). The hormone in question is an increase in the hormone estrogen and Human Chorionic Gonadotropin (HCG) which if not treated immediately will continue to hyperemesis gravidarum (Ayudia and Ramadhani 2020).

Although nausea and vomiting in pregnancy or what is known as nausea and vomiting in pregnancy (NVP) occurs in the first trimester of pregnancy, in some people it continues until delivery, although in a small percentage. Continuous nausea and vomiting can cause body fluids to decrease, so

that blood becomes thick (hemoconcentration) and blood circulation to tissues is delayed (Info 2021). This situation can slow down blood circulation so that the supply of oxygen and food to the tissues is also reduced, this can cause tissue damage that endangers the health of the mother and fetus (Wijayanti et al. 2017).

Nausea and vomiting during pregnancy has a significant impact on family life, ability to carry out usual daily activities, social functioning and the development of stressful situations and causes other symptoms such as fatigue in pregnant women, impaired nutrition, dehydration, weakness, weight loss, and electrolyte imbalance (Fitria, Prawita, and Yana 2021). How to deal with nausea and vomiting during pregnancy can be done through pharmacological and non-pharmacological actions. Non-pharmacological actions that are usually recommended by health workers, such as encouraging pregnant women to do aromatherapy (Fadlilah et al. 2021).

In Indonesia there are 50-90% cases of nausea and vomiting experienced by pregnant women. The main factor causing the maternal mortality rate (MMR) in Indonesia is indeed not nausea and vomiting, but the incidence of nausea and vomiting is quite large, namely nausea and vomiting occurs in primigravidas 60-80% and multigravidas 40-60% (Siti Rizco Khadijah 2020). However, in some cases, there are also pregnant women who do not experience cases of nausea and vomiting until the delivery phase. Then the age factor of pregnant women also affects the chances of success for pregnancy, and it is still easy to accept changes in the reduction of nausea and vomiting and is also influenced by the mother's education factor, the higher the respondent's education, the better his knowledge will be to know about reducing nausea and vomiting (Husna, Yolanda Febby 2021).

Handling of emesis gravidarum can be done through pharmacological and non-pharmacological measures. Non-pharmacological actions that are usually recommended by health workers, such as encouraging pregnant women to do aromatherapy (Fitria et al. 2021). Aromatherapy has a positive impact because the aroma is fragrant, fresh, stimulates receptors, sensory, and in the end it can also affect other organs so that it can have a strong impact on an emotion. The response to the smell it produces will stimulate the work of the brain's neurochemical cells (Fadlilah et al. 2021).

Lemon aromatherapy is a way of curing disease by using lemon essential oil, where 2-3 drops of lemon essential oil on a tissue paper or handkerchief attached to the nose and inhaling the aroma can reduce nausea and vomiting. This response will be able to stimulate the production of brain nerve conductors (neurotransmitters), which are related to the recovery of psychological conditions (Fitria et al. 2021). As well as handling with lemon aromatherapy is a treatment that is easier and more practical, you can also drip 3-5 drops of aromatherapy on inhalation and then inhale slowly (Siti Rizco Khadijah 2020).

Lemon aromatherapy is also a branch of herbal medicine that uses the medicinal aspects of essential oils. Lemon aromatherapy with essential oil produced from orange peel extract (citrus lemon) which is often used in aromatherapy. This lemon aromatherapy is an aromatherapy that is safe to use during pregnancy and childbirth (Muliatul Jannah, Alfiah Rahmawati, and Dwi Indah Lestari 2021).

The main principle of aromatherapy is the use of smells from plants or flowers to change feelings, psychology, spiritual status and affect a person's physical condition through the relationship between the patient's mind and body (Dewi and Safitri 2018). Lemon aromatherapy has ingredients that can kill meningococcal bacteria (meningococcus), typhus bacteria, have an antifungal effect and are effective in neutralizing unpleasant odors, as well as producing anti-anxiety, anti-depressive, anti-stress, and to elevate and focus the mind (Fratidina et al. 2022) . Aromatherapy provides various effects for inhalers, such as calmness, freshness, and can even help pregnant women overcome nausea (Setiowati and Arianti 2019). Aromatherapy essential oils can overcome physical and psychological complaints. Several types of essential oils can be used as aromatherapy,

Articles with literature reviews examine more deeply the effectiveness of giving lemon aromatherapy to reducing the frequency of emesis gravidarum in pregnant women, in which there is compatibility with previous studies, by reviewing several articles. The results of this clinical trial prove that lemon aromatherapy is effective in reducing emesis gravidarum in pregnant women.

2. RESEARCH METHOD

The method used in this writing is the research method of reviewing literature or reviewing journals. Methods This literature review is a series of studies using the library data collection method, or research whose research object is from various library information, this review includes a study of searching several sources/journals via Google Scholar which were taken in the last 5 years, starting from 2018 to 2018. 2023. The sources were obtained through a search of 20 journals, but after reviewing the articles and adjusting them to the criteria, there were 8 journals related to case actions.

3. RESULTS AND DISCUSSIONS

From the results of the literature review above, the results showed that there was an effect of giving lemon aromatherapy to emesis gravidarum, with 8 articles using subjects who were given non-pharmacological therapy with lemon aromatherapy. The following is a research study of pregnant women with nausea and vomiting used,

Table 1. Journals related to the effectiveness of giving lemon aromatherapy to reducing the frequency of emesis gravidarum in pregnant women

Author Title	Method	Sample	Data analysis	Results
Aromatherapy for Reducing Nausea and Vomiting in Pregnant Women/ Febby Yolanda Husna, Al aini, Natia yunisa, Ecy Anjelina br. Sianturi	Qualitative approach method (library research) with literature or literature research	30 pregnant women	Data analysis using univariate in form of central tendency and bivariate using the T Paired test as well also T independent	The results of this research are pregnant women who experience vomiting or nausea and find a decrease in the average vomiting and nausea after and before giving citrus-based aromatherapy to pregnant women
The Effectiveness of Giving Lemon Aromatherapy to Reduce the Frequency of Nausea & Vomiting in First Trimester Pregnant Women / Muliatul Jannah, Alfiah Rahmawati, Dwi indah lestari	Literature review method	7 articles using research subjects of pregnant women with nausea and vomiting	<i>Univariate analysis</i> And <i>bivariate</i> use <i>Wilcoxon Sign Test-Rank Test</i> .	The results of the review have shown that there is influence Significant lemon aromatherapy on nausea and vomiting in first trimester pregnant women
Lemon Aromatherapy is Effective for Overcoming Emesis Gravidarum / Heni Wijayanti, Ika Melasari	Methods in research This is done through literature studies/review journals	5 similar journals and 1 comparison journal	Analysis using Index of Nausea, Vomiting and Retching (INVR) questionnaire	Search results and discussion obtained emesis results <i>gravidarum</i> in first trimester mothers can overcome by giving lemon aromatherapy
Lemon Aromatherapy Reduces Nausea Vomiting in First Trimester Pregnant Women/ Siti Cholifah, Titin Eka Nuriyanah	The method used was pre-experimental with One Group Pre-Post Test Design	36 pregnant women	Data analysis with <i>Wilcoxon Sign Rank Test</i> use significance level $\alpha = 0.05$	research results show that lemon aromatherapy significantly has an effect on reducing nausea vomiting in first trimester pregnant women.

Effect of Lemon Aromatherapy on Emesis Gravidarum Trimester I/ Aida Fitria, Ade Ayu Prawita, Sari Yana	Method: Design research in this study is to use the Pre- <i>Experimental Design</i> in the form of One Group Pre-test and Post-test.	20 pregnant women	Data analysis with statistical tests with dependent T test	Based on the normality test, the Shapiro Wilk value obtained the pre-test value $0.153 > 0.05$ and post-test $0.230 > 0.05$ means that the data is normally distributed. Then statistical test was carried out with the t test with a confidence level of 95% and a value of $\alpha = 0.05$, it can be seen that the value of $p = 0.000 < 0.05$ which means that there is an effect of aromatherapy lemon on emesis gravidarum in first trimester pregnant women
Assessing the Effect of Giving Lemon on Emesis Gravidarum Susiloningtyas and Siti Suhartinah	Methods foreign literature traced through electronic media with keyword guidance.	8 selected articles	Data analysis using ANOVA test.	The results showed a difference in nausea vomiting in respondents before and after it was carried out treatment with lemon aromatherapy.
The Effect of Giving Lemon (Citrus Lemon) Aromatherapy Against Nausea Vomiting in First Trimester Pregnant Women / Wiulin Setiowati, Nor Aida Arianti	Research methods in research this is Pre Experimental with the design used is One Group Pretest Post Test design <i>Design</i> .	20 pregnant women	Data analysis with Wilcoxon test	The result that most of the respondents decreased nausea vomiting after administration aromatherapy lemon (citrus lemon)

From the results of the review described in the article above, it shows that there is a significant effect of lemon aromatherapy on nausea and vomiting in pregnant women. Nausea and vomiting in the first trimester of pregnant women in the community often occurs and most of them still use pharmacological therapy to overcome them. However, pregnant women will be better off if they are able to overcome the problem of nausea in early pregnancy by using non-pharmacological complementary therapies. Non-pharmacological therapy can be carried out by means of emotional support, dietary adjustments and administration of aromatherapy (Rofi'ah, Widatiningsih, and Sukini 2019).

Based on the analysis of the first journal, Adi here stated that the content in lavender aromatherapy is very affected by the vomiting and nausea experienced by pregnant women in the 1st trimester of pregnancy. This is because when inhaled with the nose, the content in lavender has an effect on so it is directly related to the hypothalamus which can get relaxation and also reduce the feeling of nausea experienced by pregnant women (Muliatul Jannah et al. 2021).

Nausea and vomiting during pregnancy can be caused by changes in the endocrine system that occur during pregnancy, mainly caused by high fluctuations in hCG levels, especially because the most common period of gestational nausea or vomiting is in the first 12-16 weeks, so hCG levels are highest (Maesaroh and Putri 2019). secreted by trophoblastic blastoblast cells. hCG can be secreted in a

woman's blood from about three weeks' gestation (ie one week after fertilization), and the increased amount of placental tissue also increases the total hours of nausea in early pregnancy. hCG is responsible for the decrease in TSH (thyroid stimulating hormone) which occurs mostly in women who experience hyperemesis gravidarum which is proven to have increased thyroid function,

Pregnant women who experience emesis gravidarum do not recover completely when given lemon aromatherapy, but this aromatherapy can be used as an alternative treatment for pregnant women to reduce the intensity of nausea and vomiting, because it can prevent the adverse effects that can be caused by emesis gravidarum such as hyperemesis gravidarum (Cholifah and Nuriyanah 2018). Nausea and vomiting experienced by pregnant women, especially in the first trimester, can be given complementary therapy in the care of pregnant women, so that the frequency of nausea and vomiting experienced decreases. It is necessary to socialize this therapy to pregnant women, even other cases who experience nausea and vomiting.

Aromatherapy provides a variety of effects for the inhaler, such as calmness, freshness, and can even help pregnant women overcome nausea. Essential oil aromatherapy can overcome physical and psychological complaints. The simplest is through the sense of smell by smelling the aroma of essential oils (yustina 2020 2020). One of the effective aromatherapy in reducing nausea is lemon and ginger aromatherapy. Other research supports using aromatherapy oils as an effective intervention for nausea. (Harahap, Oktafiranda, and Manggabarani 2020) Lemon aromatherapy is also recognized as an effective herbal treatment for nausea. Peppermint aromatherapy is also known as an effective method of therapy (Tamar, Nursanti, and Nugroho 2020).

It can be concluded from the various articles above that the research or research is also in line with the results of this research article, with the collected literature being analyzed again to answer the purpose of the measurement and compared with the results of simple measurements. That by giving lemon aromatherapy can reduce the degree of emesis gravidarum in pregnant women with a certain severity in improving emotional and physical health. It is recommended for midwives or health workers to provide non-pharmacological therapy such as encouraging pregnant women to do aromatherapy, with lemon aromatherapy to treat emesis gravidarum.

4. CONCLUSION

Conclusion based on the results of the analysis of journals related to the use of lemon aromatherapy is effective in reducing nausea and vomiting in pregnancy (emesis gravidarum), using a literature review study in 8 relevant journals about the effect of lemon aromatherapy on nausea and vomiting in pregnant women, that there is an effect of giving lemon aromatherapy against nausea and vomiting of pregnant women. Based on the results of this study, it can also be concluded that this effect is positive, when pregnant women experience vomiting and inhale lemon aromatherapy, pregnant women will feel the difference between before and after using lemon aromatherapy. This is because when essential oils are inhaled, the molecules enter the nasal cavity, thus stimulating messages that are delivered throughout the body in the form of feelings of pleasure, relaxation, calm.

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