

THE EFFECTIVENESS OF PEPPERMINT AROMATHERAPY AND LEMON AROMATHERAPY TO REDUCE NAUSEA AND VOMITING IN PREGNANT WOMEN IN TRIMESTER I

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ABSTRAK EFEKTIFITAS AROMATERAPI PEPPERMINT DAN AROMATERAPI LEMON UNTUK MENGURANGI NAUSEA DAN VOMITING PADA IBU HAMIL PADA TRIMESTER I

Latar Belakang: Prevalensi ibu hamil yang mengalami mual muntah (emesis gravidarum) adalah 70%-80%. Mual dan muntah (muntah) kebanyakan terjadi pada usia kehamilan sebelum 12 minggu dan keluhan terjadi pada pagi hari. Hal ini mengganggu aktivitas ibu hamil. Ada beberapa cara, salah satunya adalah aromaterapi.

Tujuan: mengetahui pengaruh pemberian aromaterapi peppermint dan lemon terhadap penurunan frekuensi mual muntah pada ibu hamil trimester I di BPM Eem Markonah Kabupaten Bandung Tahun 2021.

Metode: Peneliti menggunakan desain eksperimen semu dengan desain non-equivalent control group design. Sampel dalam penelitian terdiri dari 30 ibu hamil yang diberikan terdiri dari 15 ibu hamil kelompok intervensi yang diberi aromaterapi peppermint dan 15 ibu hamil kelompok kontrol yang diberi aromaterapi lemon. Teknik pengambilan sampel menggunakan purposive sampling. Aromaterapi diberikan secara inhalasi selama 10 menit sebanyak 2 tetes, digunakan setiap pagi sekali, selama 7 hari. Instrumen penelitian berupa lembar observasi frekuensi mual muntah sebelum dan sesudah diberikan intervensi dan dijumlahkan skornya menggunakan sistem PUQE-24 yang diukur frekuensi mual muntahnya selama 24 jam. Pengukuran dilakukan sebelum dan sesudah pemberian aromaterapi. Analisis yang digunakan adalah uji t berpasangan untuk menguji kelompok dan uji t independen untuk uji antar kelompok.

Hasil: Pada kelompok intervensi aromaterapi peppermint, skor frekuensi mual muntah sebelum dan sesudah intervensi adalah 6,87 dan 3,87 dengan uji t berpasangan $< 0,05$. Pada kelompok pembandingan aromaterapi lemon, skor frekuensi mual muntah sebelum dan sesudah intervensi adalah 7,33 dan 4,67 dengan uji t berpasangan $< 0,05$. Hasil uji independent t-test antara kelompok peppermint dan kelompok lemon p value $< 0,05$, sehingga tidak ada perbedaan antara kelompok peppermint dan kelompok lemon dalam menurunkan frekuensi mual muntah.

Kesimpulan: Aromaterapi peppermint dan aromaterapi Lemon berpengaruh dalam menurunkan frekuensi mual muntah pada ibu hamil trimester I.

Saran; Aromaterapi peppermint dan lemon dapat diterapkan dalam kehidupan sehari-hari bagi ibu hamil untuk mengurangi mual dan muntah.

Kata kunci: Aromaterapi Lemon, Mual Muntah, Peppermint.

ABSTRACT

Background: Prevalence pregnant women who experience nausea and vomiting (emesis gravidarum) as much as 70% -80%, nausea (nausea) and vomiting (vomiting) often occur at gestational age before 12 weeks and complaints occur in the morning. This interferes with the activities of pregnant women. There are several ways, one of which is aromatherapy.

Objective: Knowing the effect of giving peppermint and lemon aromatherapy to reduce the frequency of nausea and vomiting in first trimester pregnant women at BPM Eem Markonah, Bandung district in 2021.

Methodology: The researcher used a quasi-experimental design with a non-equivalent control group design. The sample in the study consisted of 30 pregnant women consisting of 15 pregnant women in the intervention group who were given peppermint aromatherapy and 15 pregnant women in the control group who were given lemon aromatherapy. The sampling technique used was purposive sampling. Aromatherapy is given by inhalation for 10 minutes as much as 2 drops, used once every morning, for 7 days. The research instrument was an observation sheet on the frequency of nausea and vomiting before and after the intervention was given and the scores were added up using the PUQE-24 system which measures the frequency of nausea and vomiting for 24 hours. Measurements were taken before and after giving aromatherapy.

Result: In the peppermint aromatherapy intervention group, the frequency scores of nausea and vomiting before and after the intervention were 6.87 and 3.87 with paired t-test <0.05 . In the comparison group of lemon aromatherapy, the frequency scores of nausea and vomiting before and after the intervention were 7.33 and 4.67 with paired t-test <0.05 . The results of independent t-test between the peppermint group and the lemon group p value <0.05 , so there is no difference between the peppermint group and the lemon group in reducing the frequency of nausea and vomiting.

Conclusion: Peppermint and lemon aromatherapy can reduce the frequency of nausea and vomiting in first trimester pregnant women.

Suggestion: Peppermint and lemon aromatherapy can be suggested by midwives to reduce the frequency of nausea and vomiting in first trimester pregnant women.

Keywords :lemon aromatherapy, nausea and vomiting, peppermint

INTRODUCTION

Pregnancy is a process that starts from the stage of conception until the birth of the fetus. The normal length of pregnancy is 280 days (40 weeks) calculated from the first day of the last menstrual period. One of the signs of pregnancy is nausea and vometa or nausea and vomiting. The complaint of nausea and vomiting is often felt by pregnant women in the first trimester and is also called morning sickness. These complaints generally occur until the age of 12 weeks (Widatiningsih et al., 2017).

Based on research data conducted by Heitmenn in Norway, pregnant women can experience nausea and vomiting. These are signs and symptoms that are generally felt by pregnant women. From the research, it was found that 70%-80% of pregnant women feel nauseated and 50% of pregnant women experience vomiting (Heitmenn et al., 2017).

Based on research data from pregnant women around the world, as many as 80% of pregnant women in the first trimester feel nausea, vomiting or emesis gravidum. However, severe nausea and vomiting or hyperemesis gravidarum occurs with an incidence of about 1-3% of all pregnancies in Indonesia. (Oktavia, 2016).

Non-pharmacological treatment that can be done to reduce nausea and vomiting is aromatherapy essential oil. Aromatherapy is a therapy that uses essential oils or pure oil extracts that help repair, awaken the spirit and refresh and soothe the soul and body (Astuti, 2015).

One type of aromatherapy that can be used is peppermint aromatherapy (*Menthae piperita* L). Peppermint has a refreshing aroma, fragrant, cold taste and also relieves. The scent of mint leaves is due to the fact that mint leaves contain essential oils in the form of menthol. Mint leaves also contain provitamin A, phosphorus, vitamin C, iron, potassium and potassium (Setiawan et al., 2017).

Based on Gas Chromatography Mass Spectrometry (GCMS) peppermint contains menthol (45.34%), menthofuran (8.91%), ciscarane (8.70%), cineole (9.45%), trans-caryophyllene (2.76%), neomenthol (2.37%), pinene (2.26%), transabinene hydrate (1.28%) and neoisomenthyl acetate (1.02%) (Taherpour et.al., 2017).

Besides peppermint, another aromatherapy that can be used is lemon aromatherapy. Based on Gas Chromatography Mass Spectrometry (GCMS) analysis, lemon contains 5 components that function as anti-nausea and vomiting. These components include limonene (5.96%), cis-dihydrocarvon (19.19%), pulegone (13.30%), carvone (42.53%) and b-carphyllen (6.78%) (Naran et al. al., 2013).

Based on the results of a preliminary study conducted by researchers at BPM Eem Markonah, it was found that as first-trimester pregnant women who experienced nausea and vomiting, however, these pregnant women were only pegged on giving drugs given by midwives. From 15 first trimester pregnant women, it was found that 12 pregnant women did not know about aromatherapy and had never tried aromatherapy to reduce nausea and vomiting. Meanwhile, 3 other pregnant women have known about aromatherapy, but have never tried to use it as a non-pharmacological treatment to reduce the frequency of nausea and vomiting.

From this background, researchers are interested in conducting research on "The Effect of Peppermint and Lemon Aromatherapy on Reducing the Frequency of Nausea and Vomiting in First Trimester Pregnant Women at BPM Eem Markonah, Bandung Regency in 2021"

RESEARCH METHODOLOGY

This type of research uses quantitative research with a Quasi Experimental research design with Non-equivalent Control Group Design. This study used a design using an experimental group and a control group aimed at identifying the effect of

peppermint aromatherapy and lemon aromatherapy on reducing the frequency of nausea and vomiting in first trimester pregnant women.

The population in this study were all pregnant women who visited BPM Eem Markonah, Bandung Regency in 2021. The total population of pregnant women from January to June in 2021 was 184 pregnant women.

The sample in this study used purposive sampling technique. The number of respondents was 30 first trimester pregnant women who were divided into two groups, namely the experimental group and the control group. The experimental group consisted of 15 first trimester pregnant women who were given peppermint aromatherapy and a comparison group consisting of 15 first trimester pregnant women who were given lemon aromatherapy.

This research was conducted at BPM Eem Markonah, Bandung Regency. Instruments in pNausea and vomiting score data was collected using an observation sheet for 24 hours, then calculated using the PUQE-24 score system (Pregnancy-Unique Quantification Of Emesis/Nausea). The experimental group respondents were given peppermint aromatherapy and the control group respondents were given lemon aromatherapy. Each respondent was given aromatherapy essential oil equipped with a pipette and tissue. Peppermint and lemon aromatherapy were used in the morning at 08.00 WIB as much as 2 drops were dropped on 2 pieces of tissue and used by inhalation. The aromatherapy was used for 7 days and monitoring was carried out through the whatsapp

group, after the 7th day, data collection on nausea and vomiting scores was carried out using the observation sheet and the PUQE-24 calculation.

The analysis performed was univariate analysis, namely to determine the distribution of the average decrease in nausea and vomiting scores in the intervention group before and after being given peppermint aromatherapy. This was also done to determine the distribution of the average decrease in nausea and vomiting scores in the comparison group before and after being given lemon aromatherapy. Paired t-test bivariate analysis to compare the effect of peppermint and lemon aromatherapy on first trimester pregnant women before and after the intervention. Analysis with independent t-test was conducted to determine the difference between the effectiveness of peppermint aromatherapy and lemon aromatherapy.

RESEARCH RESULTS

Univariate analysis

Based on table 1 data, it shows that of the 15 respondents the average score of nausea and vomiting before being given peppermint aromatherapy treatment is 6.87 with a standard deviation of 2.200, the highest score for nausea and vomiting is 10 and the lowest score for nausea and vomiting is 3. After being given peppermint aromatherapy treatment, the average results are obtained. The average was 3.87 with a standard deviation of 1.685, the highest nausea and vomiting score was 7 and the lowest nausea and vomiting score was 1.

Table 1
Average Distribution Nausea Vomiting Score in the Experimental Group Before and After being given Peppermint Aromatherapy

Nausea Vomiting Frequency	N	Minimum	Maximum	Mean	Std. Deviation
Peppermint group pre-test	15	3	10	6.87	2,200
Peppermint group post-test	15	1	7	3.87	1,685

Table 2
Average Distribution Nausea Vomiting Score in the control group before and after being given lemon aromatherapy

Nausea Vomiting Frequency	N	Min	Max	mean	Std. Deviation
Lemon group pre-test	15	3	10	7.33	2.024
Lemon group post-test	15	1	7	4.67	2.093

Based on data Table 2 shows that from 15 respondents the average score of nausea and vomiting before being given lemon aromatherapy treatment was 7.33 with a standard deviation of 2.024. The highest score for nausea and vomiting is

11 and the lowest score for nausea and vomiting is 3. After being given lemon aromatherapy treatment, the average result was 4.67 with a standard deviation of 2.093, the highest score for nausea and vomiting

was 8 and the lowest score for nausea and vomiting was 1.

Bivariate analysis

Based on the table above, it can be seen that Sig in the experimental group and the control group both pre-test and post-test is greater than 0.05. In the

experimental group the pretest sig value was 0.571 and the sig pretest value was 0.667. Meanwhile, in the control group, the pretest sig value was 0.953 and the post-test sig value was 0.524. Based on this research, the data used is <50 so that it uses Shapiro Wilk with SPSS. Thus, the data is normally distributed.

**Table 3
Shapiro Wilk Data Normality Test Results**

Group	Sig	Information
Pre-test Experiment (peppermint)	0.571	Normal
Post test Experiment (peppermint)	0.667	Normal
Pre test Control (lemon)	0.953	Normal
Post test Control (lemon)	0.524	Normal

**Table 4
Homogeneity Test**

Group	Sig	Information
Peppermint Experiment Group	0.323	Normal
Lemon Control Group	0.590	Normal

Based on the table above, it can be seen that Sig in the experimental group and control group is greater than 0.05. In the experimental group the sig value was 0.323 > 0.05. Meanwhile, in the control

group, the sig value was 0.590 > 0.05. Based on this research, the data for the experimental group and the control group have homogeneous data.

**Table 5
Effect of Peppermint Aromatherapy on Reducing Frequency Nausea Vomiting in First Trimester Pregnant Women**

Experimental Group	N	Min	Max	Std. deviation	Mean	Difference Mean	T	P value
Peppermint Pre-Test	15	3	10	2,200	6.87	3.00	10,247	0.00
Peppermint Post Test	15	1	7	1,685	3.87			

*paired sample t-test

Based on the table above shows the results before and after peppermint. A minimum score of nausea and vomiting was obtained before 3 and after 1, a maximum score of nausea and vomiting before 10 and after 7, Std. Deviation before 2.200 and std. deviation after 1.685, the mean value before 6.87

and after 3.87 with a mean difference 3. This statistical test uses a paired t-test with a t-value of 10.247 and a sig value of 0.00 <0.05, which means that peppermint has an effect on reducing the frequency of nausea and vomiting in pregnant women

**Table 6.
The Effect of Lemon Aromatherapy on Reducing the Frequency of Nausea and Vomiting in First Trimester Pregnant Women**

Control Group	N	Min	Max	Std. deviation	mean	Difference Mean	T	P value
Pre-Test Lemon	15	3	11	2.024	7.33	2,667	14,270	0.00
Lemon Post Test	15	1	8	2.093	4.67			

*paired sample t-test

Based on the table above shows the results before and after lemon. A minimum score of nausea

and vomiting was obtained before 3 and after 1, a maximum score of nausea and vomiting before 11

and after 8, Std. Deviation before 2.024 and std. deviation after 2.093, the mean before 7.33 and after 4.67 with a mean difference of 2.667. This statistical test uses a paired t-test with a t-value of 14.270 and

a sig value of 0.00 < 0.05, which means that lemon has an effect on reducing the frequency of nausea and vomiting in pregnant women.

Table 7.
Differences in the Effectiveness of Peppermint Aromatherapy and Lemon Aromatherapy on Reducing the Frequency of Nausea Vomiting in First Trimester Pregnant Women

Group	N	mean	Mean Difference	T	P value
Peppermint Aromatherapy	15	3,000	0.333	0.480	0.635
Lemon Aromatherapy	15	2,667			

*test independent t-test

Based on the table above, the mean peppermint aromatherapy result is 3,000 and the mean lemon aromatherapy result is 2,667 with a mean difference of 0.333. The t value of the two groups is 0.480. This statistical test uses an independent t-test because it will compare the effectiveness of two aromatherapy, namely peppermint and lemon aromatherapy. Based on the data, the P value was 0.653 > 0.05, so there was no difference between the peppermint aromatherapy group and the lemon group.

DISCUSSION

Distribution of the Average Nausea Vomiting Score in the Experimental Group Before and After being given Peppermint Aromatherapy

Based on research data, the experimental group has been given a research intervention in the form of peppermint aromatherapy for 7 days which is used as an effort to reduce the frequency of nausea and vomiting in first trimester pregnant women. In this study, from 15 respondents, the average score for nausea and vomiting before being given peppermint aromatherapy treatment was 6.87 with a standard deviation of 2.200, the highest score for nausea and vomiting was 10 and the lowest was 3. Meanwhile, after being given peppermint aromatherapy treatment, the average result was obtained. 3.87 with a standard deviation of 1.685, the highest nausea and vomiting score was 7 and the lowest nausea and vomiting score was one with a mean difference of 3.00. So it can be concluded that there is a decrease in the frequency of nausea and vomiting in first trimester pregnant women.

The results of this study are also in line with the theory that peppermint contains menthol and menthone substances that function as antispasmodics and antiemetics that can reduce nausea and vomiting. Peppermint oil has a very high

level of fragrance, a cool and refreshing aroma. (Rismahara, 2014).

This study is in accordance with the results of research by Zuraida and Sari (2018) with the average intensity of nausea and vomiting before the peppermint aromatherapy intervention was 11.57 and after the peppermint aromatherapy intervention decreased to 6.14. There is an average difference in the intensity of nausea and vomiting of respondents between before and after giving peppermint essential oil therapy with an average difference of 5.42 and there is a significant effect of peppermint aromatherapy on reducing nausea and vomiting in first trimester pregnant women (Zuraida, 2018).

According to the research assumption, the cause of the decrease in the frequency of nausea and vomiting in the experimental group was the administration of peppermint aromatherapy. The decrease in the frequency of nausea and vomiting occurs due to the presence of menthol and menthone substances that function as antispasmodics and antiemetics that can reduce nausea and vomiting. The use of peppermint aromatherapy by inhalation for 7 days has been carried out well by the respondents and in accordance with the recommendations given by the researcher, resulting in a decrease in the frequency of nausea and vomiting.

Distribution of the Average Nausea Vomiting Score in the control group before and after being given Lemon Aromatherapy

Based on the results of the study, the control group was given a research intervention in the form of giving lemon aromatherapy for 7 days which was used as an effort to reduce the frequency of nausea and vomiting in first trimester pregnant women. Based on research from 15 respondents, the average score for nausea and vomiting before being given lemon aromatherapy treatment was 7.33 with a standard deviation of 2.024. The highest nausea

and vomiting score was 11 and the lowest was 3. After being given lemon aromatherapy treatment, the average result was 4.67 with a standard deviation of 2.093, the highest nausea and vomiting score was 8 and the lowest nausea and vomiting score was one.

The results of this study are also in line with the theory that Lemon can control and overcome nausea and vomiting. Lemon contains limonene, citral, linalyl and linalool, terpineol which can stabilize the central nervous, cause feelings of freshness and pleasure, increase appetite, improve blood circulation, sedation, reduce nausea and vomiting (Maternity et al., 2017).

This study is in accordance with the results of Vitrianiingsih and Khodijah's research (2019) showing the average score of nausea and vomiting before being given lemon aromatherapy to pregnant women with emesis gravidarum is 22, 1 and there is a decrease in nausea and vomiting scores after being given lemon aromatherapy to 19.8 and there is a significant effect. significant effect of lemon aromatherapy on reducing nausea and vomiting in first trimester pregnant women (Vitrianiingsih and Khodijah, 2019).

According to the research assumption, the cause of the decrease in the frequency of nausea and vomiting in the control group was the administration of lemon aromatherapy. Lemon essential oil is a non-pharmacological treatment that is safe to use and its effect is proven to reduce the frequency of nausea and vomiting in first trimester pregnant women. Lemon has an anti-nausea component that can be used for first trimester pregnant women.

The Effect of Peppermint Aromatherapy on Reducing the Frequency of Nausea Vomiting in First Trimester Pregnant Women at BPM Eem Markonah

Based on the results of the study showed that there was an effect of peppermint aromatherapy on decreasing the frequency of nausea and vomiting in first trimester pregnant women. The difference in the average score for nausea and vomiting in pregnant women is 3.00. The average score of nausea and vomiting before being given peppermint was 6.87 and there was a decrease in the average score for nausea and vomiting after being given peppermint to 3.87, so there was a decrease in the frequency of nausea and vomiting in pregnant women after being given peppermint aromatherapy. In addition, the different test results before and after being given peppermint aromatherapy obtained Sig. $0.00 < 0.05$ means that there is an effect of peppermint

aromatherapy on reducing the frequency of nausea and vomiting in pregnant women.

The results of this study are also in line with the theory that peppermint aromatherapy is widely used to treat nausea and vomiting during pregnancy. Aromatherapy peppermint 2-3 drops that are inhaled regularly with a prescribed dose can provide an interaction between the compounds present in peppermint with the digestive system of pregnant women. The anti-nausea-vomiting content contained in peppermint aromatherapy can provide a relaxed, calm and refreshing sensation so that it can reduce autonomic stimulation by reducing saliva production and reducing nausea and vomiting reactions in pregnant women (Kartikasari et al., 2017).

The results of this study are in accordance with the results of research conducted by Rismahara (2019) showing the average score of nausea and vomiting of pregnant women in the first trimester before being given peppermint aromatherapy is 9.80 and the average score of nausea and vomiting after being given peppermint aromatherapy is 3.67. In this study, there was a decrease in the average nausea and vomiting score of 6.13 and there was a significant effect on the frequency of nausea and vomiting before and after being given peppermint aromatherapy (Rismahara, 2019).

According to the researcher's assumption, there are several factors that can affect the decrease in the frequency of nausea and vomiting, such as decreased HcG levels, changes in endocrine hormones and the influence of antiemetic substances such as menthol and menthone contained in peppermint aromatherapy. These substances are able to reduce the frequency of nausea and vomiting and help affect the limbic system through the inhalation process of aromatherapy.

The Effect of Lemon Aromatherapy on Reducing the Frequency of Nausea and Vomiting in First Trimester Pregnant Women at BPM Eem Markonah

Based on the results of the study, it showed that there was an effect of lemon aromatherapy on decreasing the frequency of nausea and vomiting in first trimester pregnant women. the difference in the average score of nausea and vomiting in pregnant women is 2,667. The average score of nausea and vomiting before being given lemon was 7.33 and there was a decrease in the average score of nausea and vomiting after being given peppermint to 4.67, so there was a decrease in the frequency of nausea and vomiting in pregnant women after being given lemon aromatherapy. In addition, the different test results

before and after being given lemon aromatherapy obtained Sig. $0.00 < 0.05$ means that there is an effect of lemon aromatherapy on reducing the frequency of nausea and vomiting in pregnant women.

The results of this study are also in line with the theory that the use of lemon inhalation is better at reducing the frequency of nausea and vomiting or emesis gravidarum. This is influenced by several factors that focus on the content of lemons such as limonene which has benefits as mentally, stimulating, anti-emetic, antispasmodic, hypotensive, antistress and sedative. In addition, lemon aromatherapy works through the olfactory process located in the nose so that it accelerates the drug to be absorbed more quickly. Inhalation provides faster signaling across a large surface area of the respiratory tract and lung epithelium (Sari Puspan Selvi et al., 2018).

The results of this study are in accordance with the results of research conducted by Afriyanti and Rahenza (2020) showing the average score of nausea and vomiting of pregnant women in the first trimester before being given lemon aromatherapy is 5.27 and the average score of nausea and vomiting after being given lemon aromatherapy is 3.27. . In this study, there was a decrease in the average nausea and vomiting score of 2.00 and there was a significant effect on the frequency of nausea and vomiting before and after being given lemon aromatherapy (Afriyanti and Rahenzda, 2020)

According to the researcher's assumption, the factors that can affect the decrease in the frequency of nausea and vomiting are one of them due to the use of aromatherapy. Aromatherapy is a treatment and treatment technique that uses odors to overcome physical and psychological complaints through the sense of smell so that it can stimulate emotional and physical reactions through brain electrochemical messages. to the limbic system which can cause pleasure, relax and calm. In addition, lemon content such as limonene, citral and linalool as anti-emetics as substances that provide anti-nausea and vomiting effects.

Differences in the Effectiveness of Peppermint Aromatherapy and Lemon Aromatherapy Groups.

Based on the results of the study, the mean results of the peppermint aromatherapy group were 3,000 and the mean results for lemon aromatherapy were 2,667 with a mean difference of 0.333. The t value of the two groups is 0.480. This statistical test uses an independent t-test because it will compare the effectiveness of two aromatherapy, namely

peppermint and lemon aromatherapy. Based on the data, the P value was $0.653 > 0.05$, so there was no difference between the peppermint aromatherapy group and the lemon group.

The results of this study are in accordance with the results of research conducted by Khodijah (2020) whose research results show that there is no difference between inhalation of peppermint aromatherapy and lemon aromatherapy for pregnant women with a P Value of 0.853 (Khadijah, 2020).

According to the researcher's assumption, one of the factors that can affect the work of aromatherapy by inhalation in pregnant women is the distinctive smell or aroma contained in the aromatherapy. Because each individual has a different opinion about an aroma, such as the aromatherapy of peppermint which is strong and has a cold characteristic and the aromatherapy of lemon which has a characteristic refreshing fragrance.

CONCLUSION

In the intervention group that was given peppermint aromatherapy there was a decrease in nausea and vomiting scores with an average score of nausea and vomiting before being given peppermint aromatherapy which was 6.87 and the average after being given peppermint aromatherapy was 3.87. While in the control group given lemon aromatherapy there was also a decrease in nausea and vomiting scores with an average score of nausea and vomiting before being given lemon aromatherapy which was 7.33 and the average after being given lemon aromatherapy was 4.67. In addition, the administration of peppermint aromatherapy and lemon aromatherapy by inhalation has an effect on decreasing the frequency of nausea and vomiting in first trimester pregnant women with a P value of 0.00. Based on the different test, there was no difference between the peppermint aromatherapy group and the lemon aromatherapy group.

SUGGESTION

For midwives and pregnant women who know the benefits of using inhaled peppermint and lemon aromatherapy in reducing the frequency of nausea and vomiting, it is hoped that they will be able to apply it in daily life and share the knowledge they know with other pregnant women who experience nausea and vomiting in pregnancy and prevent complications from nausea and vomiting that occurs in the first trimester of pregnancy.

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