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The Effect Of Giving Ginger Drink On Emesis Gravidarum In 1st Trimester Pregnant Women At The Gedung Karya Jitu Health Center

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ABSTRACT

The prevalence of emesis gravidarum in pregnant women in Indonesia is 14.8%. Based on the Lampung Province Health Profile, the incidence of emesis gravidarum in pregnant women is 50-90%. This study aims to determine the effect of giving ginger drink on emesis gravidarum in first trimester pregnant women. Type of quantitative research and pre-experimental plan with one group pre test-post test design. The subjects of this research were all 20 pregnant women in the first trimester, using a purposive sampling technique. Data analysis test used in dependent t research (paired t test). The results of the study showed that the average emesis gravidarum in first trimester pregnant women before being given ginger drink had an average value of 9.65 and a standard deviation of 1.309. The average emesis gravidarum in first trimester pregnant women after being given ginger drink had an average value of 4.60 and a standard deviation of 0.940. There is an effect of giving ginger drink on emesis gravidarum in first trimester pregnant women, with p-value = 0.000. It is recommended that pregnant women carry out routine pregnancy checks and carry out ginger drink therapy at home to reduce nausea and vomiting in the first trimester of pregnancy.

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1. INTRODUCTION (10 PT)

Emesis gravidarum, commonly experienced during the first trimester of pregnancy, presents as nausea and vomiting that may disrupt daily activities. According to the World Health Organization (WHO), about 12.5% of pregnancies are affected globally, with varying incidence across countries. In Indonesia, the prevalence is approximately 14.8%, and in Lampung Province, the rate ranges from 50% to 90%.

Nausea and vomiting during pregnancy (NVP) are caused by elevated levels of human chorionic gonadotropin (hCG) and estrogen, leading to gastrointestinal disturbances such as delayed gastric emptying. Alternative treatments, including herbal therapy using ginger, have been explored for their antiemetic effects through serotonin receptor inhibition and enhanced gastric motility.

A preliminary survey conducted at the Gedung Karya Jitu Health Center identified that among 20 first-trimester pregnant women, 70% reported nausea and vomiting symptoms. Considering the popularity, accessibility, and traditional use of ginger as a remedy, this study aimed to determine the effect of ginger drink administration on emesis gravidarum in first-trimester pregnant women.

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2. RESEARCH METHOD

This study applied a quantitative method with a pre-experimental one-group pretest-posttest design. The research was conducted in January 2024 at the Gedung Karya Jitu Health Center, Tulang Bawang Regency.

The population comprised 34 first-trimester pregnant women, with a purposive sample of 20 respondents. The inclusion criteria included first-trimester gestational age (up to 12 weeks), experiencing emesis symptoms, and willingness to participate.

Data collection employed the PUQE-24 questionnaire (Pregnancy-Unique Quantification of Emesis and Nausea). The intervention involved administering 250 ml of warm ginger drink (prepared by boiling 2 grams of fresh ginger slices in 250 ml water for 10 minutes) once daily for three consecutive days. Nausea and vomiting were assessed before and after the intervention.

Data were analyzed using the Shapiro-Wilk test for normality and paired t-test for differences in pre-post scores.

3. RESULTS AND ANALYSIS

A. Respondent Characteristics

Table 4.1
Characteristics education. employment and parity of pregnant women at the Community Health Center
Jitu Work Building. Tulang Bawang Regency in 2024

Characteristics	Frequency	Percentage %
Education		
a. SD	0	0.00
b. JUNIOR HIGH SCHOOL	6	30.00
c. SENIOR HIGH SCHOOL	13	65.00
d. PT	1	5.00
Work		
a. civil servant	0	0.00
b. Housewife (IRT)	17	85.00
c. Self-employed	3	15.00
Parity		
a. Primigravida	14	70.00
b. Multigravida	6	30.00
c. Grand Multigravida	0	0.00

Based on Table 4.1 then it can be seen that the characteristics education for pregnant women in the first trimester at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024 . most of them is high school as many as 13 respondents (65%). most of them pregnant women's jobs are housewives (IRT) as many as 17 respondents (85%). the majority of pregnant women are primigravida as many as 14 respondents (70%).

B. Univariate Analysis

1. Average *emesis gravidarum* in pregnant women in the first trimester before being given ginger drink.

Table 4.2
Average *emesis gravidarum* in pregnant women in the first trimester before being given ginger drink at the Gedung Karya Jitu Health Center. Tulang Bawang Regency. Onion Year 2024

Group	Mean	SD	SE	Min	Max
Before	9.65	1,309	0.293	7	12

The test results showed that the average *emesis gravidarum* in pregnant women in the first trimester before being given ginger drink at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024. had an average value of 9.65 and a standard deviation of 1.309. *Emesis scale gravidarum* minimum 7 and *emesis scale gravidarum* maximum 12.

2. Average *emesis gravidarum* in pregnant women in the first trimester after being given ginger drink .

Table 4.3
Average *emesis gravidarum* in pregnant women in the first trimester after being given ginger drink at the Gedung Karya Jitu Health Center. Tulang Bawang Regency. Onion Year 2024

Group	Mean	SD	SE	Min	Max
After	4.60	0.940	0.210	3	6

The test results showed that the average *emesis gravidarum* in pregnant women in the first trimester after being given ginger drink at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024. had an average value of 4.60 and a standard deviation of 0.940. *Emesis* scale *gravidarum* minimum 3 and *emesis scale gravidarum* maximum 6.

C. Normality test

Table 4.4
Normality Test
Tests of Normality

	Shapiro Wilk		
	Statistics	df	Sig.
Before	0.942	20	0.262
After	0.876	20	0.105

Normality test is conducted to determine whether the sample studied is normally distributed or not. In this study. the normality test used is the *Shapiro-Wilk test* . The criteria for the normality test are that the data is normally distributed if the significance level is > α (0.05). From the results of the analysis. it is known that the significance level before the intervention is 0.262 and after the intervention is 0.105 > (α 0.05). So it can be said that the data is normally distributed. Because the requirements for normally distributed data are met. the hypothesis test used is the paired *t test* .

D. Bivariate Analysis

Table 4.5
Analysis of the effect of giving ginger drink on *emesis gravidarum* in pregnant women in the first trimester at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024

Group	Mean	SD	t	p-value	Difference in means CI 95%
Before	9.65	0.945	23,911	0,000	5,050 4,608-5,492
After	4.60				

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The results of the analysis of the table above show the difference in average *emesis. gravidarum* in pregnant women in the first trimester before and after being given ginger drink was 5.050. and the standard deviation was 0.945. The test results obtained a p value = (0.000 < 0.05) so that there was an effect of giving ginger drink on *emesis. gravidarum* in pregnant women trimester I at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024.

DISCUSSION

1. Univariate Analysis

a. Average *emesis gravidarum* in pregnant women in the first trimester before being given ginger drink

The statistical results in this research case with a minimum value of 7 and after the research the minimum value was 3. this indicates that there was a change before and after giving ginger drink. From 20 respondents. the average results *for emesis were obtained. gravidarum* in pregnant women in the first trimester before being given ginger drink at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024. had an average value of 9.65 and a standard deviation of 1.309. *Emesis scale gravidarum* minimum 7 and *emesis scale gravidarum* maximum 12. All of them with moderate nausea and vomiting category 20 respondents (100%).

The results of this study are similar to the research of Ningsih.. et al. (2020). The effectiveness of giving ginger infusion on the frequency of emesis gravidarum in the first trimester. The results of the study showed that the average frequency of nausea and vomiting before giving ginger infusion was 9.36 times/day. while the average after giving ginger infusion was 4.86 times/day.

Journal in line with research related to the results of this study supported the theory stating that *emesis gravidarum (HG)* is a pregnancy complication characterized by continuous nausea and vomiting that can cause weight loss of more than 5% of pre-pregnancy weight. dehydration. metabolic acidosis due to starvation. alkalosis due to loss of hydrochloric acid. and hypokalemia. At least 80% of pregnant women experience nausea and vomiting during pregnancy (Rini. 2021).

Based on matter the. researcher to argue that *emesis gravidarum* is the most common discomfort in pregnant women in the first trimester. In pregnancy. there is an increase in the hormone estrogen which causes stomach acid levels to increase. resulting in complaints of nausea. This complaint usually appears in the morning when the mother's stomach is empty and there is an increase in stomach acid. Based on this. it is recommended that pregnant women in the first trimester drink enough to avoid dehydration due to vomiting. Drink water. avoid drinks that contain caffeine and carbonates. Eat small amounts but often. avoid fatty foods.

b. Average *emesis gravidarum* in pregnant women in the first trimester after being given ginger drink

After the intervention was carried out by giving ginger drink . the researcher re-evaluated *the emesis. gravidarum* . Based on the results of data processing. it can be seen that average *emesis gravidarum* in pregnant women in the first trimester after being given ginger drink at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024. had an average value of 4.60 and a standard deviation of 0.940. *Emesis scale gravidarum* minimum 3 and *emesis scale gravidarum* maximum 6.

According to Hatijar.. Saleh.. Yanti (2020). In the pregnancy process. there are changes in the mother's body system. all of which require adaptation. both physically and psychologically. In the adaptation process. it is not uncommon for the mother to feel discomfort. Although this is normal physiology. prevention and care still need to be given. Some of the changes include the gastrointestinal/digestive system . namely a condition where estrogen and hCG increase. with side effects of nausea and vomiting. In addition. there are also changes in peristalsis with symptoms of frequent bloating. constipation. more frequent hunger/feelings of wanting to eat continuously (cravings). also due to increased stomach acid. In certain pathological conditions. there is profuse vomiting up to more than 10 times per day (hyperemesis gravidarum). (Hatijar.. et al.. 2020).

One of the alternative and complementary therapies to reduce nausea and vomiting during pregnancy is to use ginger. Ginger or (*Zingiber officinale Rosc*) is a plant with an upright stem. The leaves are often clearly 2 rows with a sheath that hugs the stem and a tongue between the border of the sheath and leaf blade. Zygomorph flowers are 2-sexed. The calyx is tubular with a pointed tip. often split like a sheath. The rhizome is rather flat. the tip is branched. there is a scar that curves inward.

The outer cut is elongated. sometimes free fiber (Ministry of Health of the Republic of Indonesia. 2016).

The results of this study are supported by research conducted by Nugraha. et al. (2022). Combination of acupressure at pericardium point 6 (p6) and warm ginger drink on emesis gravidarum . *Quasi experiment. pretest posttest with control design* . The median pretest value in the control group was 10.00. the median posttest value was 5.00 with *p value* = 0.001. There is an effect of acupressure on the pericardium point 6 (P6) and warm ginger drink on reducing nausea and vomiting in pregnant women. trimester I.

Research by Lazdia.. Putri. (2020). The Effect of Warm Ginger in Reducing Nausea. Vomiting in Pregnant Women with Hypermesis Gravidarum . The provision of warm ginger intervention had a significant effect on reducing hyperemesis gravidarum in pregnant women in the first trimester with an average difference in reduction between the intervention group and the control group of 10.87.

Based on this. the researcher is of the opinion that *eremesis gravidarum* is nausea and vomiting during pregnancy. This dangerous vomiting is distinguished from normal *morning sickness* that is commonly experienced by pregnant women because its intensity exceeds normal vomiting and lasts throughout the first trimester of pregnancy. (Rosdianah.. et al.. 2019).

2. Bivariate Analysis

a. The effect of giving ginger drink on *emesis gravidarum* in pregnant women trimester I.

Difference in mean *emesis gravidarum* in pregnant women in the first trimester before and after being given ginger drink was 5.050. and the standard deviation was 0.945. The test results obtained a value of p= (0.000 < 0.05) so there is an effect of giving ginger drink on *emesis gravidarum* in pregnant women trimester I at the Gedung Karya Jitu Health Center. Tulang Bawang Regency in 2024.

The results of this study are in accordance with the statement put forward by Ningsih.. et al. (2020). Nausea and vomiting in pregnancy are usually treated with pharmacological therapy. namely pyridoxine (vitamin B6). However. nausea and vomiting can also be treated non- pharmacologically or with complementary therapy. including herbal or traditional plants that can be done and are easy to obtain. such as ginger. peppermint leaves. lemon. etc. Therefore. in addition to consuming drugs to overcome nausea and vomiting. pregnant women can try various traditional concoctions such as ginger by brewing it.

Furthermore. Ningsih.. et al. (2020). Said that the ginger content contained in Zingiberena (zingirona) essential oil. zingiberol. bilene. curcumin. gingerol. flandrena. has a bitter resin that can block serotonin. a neurotransmitter synthesized in serotonergic neurons in the central nervous system and enterochromaffin cells in the digestive tract. as a result the work of the digestive tract muscles relaxes and weakens then causes a feeling of comfort in the stomach. so that nausea and vomiting can be reduced.

The results of this study are in line with research by Harahap et al. (2020). Regarding the effect of giving boiled ginger water on reducing nausea and vomiting in pregnant women. trimester I. Quantitative research type with *pre-experimental research design* using *one-group pretest-posttest design* . Samples of 30 people using total sampling. The measuring instrument used the PUQE-24 sheet. processed and analyzed using the *Wilcoxon test* . The results of the study showed There was a significant difference in the administration of boiled ginger water from the first day to the third day. before and after being given boiled ginger water with a p-value of 0.000 < 0.05.

Similar research has also been conducted by Warni.. Manurung. (2023). The effect of giving warm ginger in reducing hyperemesis gravidarum in pregnant women in the first trimester . Results The results obtained in this study were from 50 respondents. there was a decrease in nausea and vomiting in pregnant women with the administration of warm ginger with a p value = 0.000. Conclusion: There is an Effect of Giving Warm Ginger in reducing emesis gravidarum in pregnant women in the first trimester.

The administration of ginger drink significantly reduced the intensity of emesis gravidarum among first-trimester pregnant women at the Gedung Karya Jitu Health Center (p-value = 0.000). This suggests ginger may serve as an effective, accessible, and low-risk alternative therapy to alleviate nausea and vomiting in early pregnancy. Further studies with larger samples and control groups are recommended to explore long-term effects and optimal dosage.

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4. CONCLUSION

There is an effect of giving ginger drink on *emesis gravidarum* in pregnant women trimester I at the Gedung Karya Jitu Health Center. with *p-value* = 0.000.

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