

The Effectiveness Of Ginging Ginger Candy Towards Nausea And Vomiting In Pregnant Women In Air Teluk Ki Village In 2022

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ABSTRACT

Keywords:

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Nausea and vomiting (emesis gravidarum) are symptoms that often appear in the 1st trimester of pregnancy, nausea usually occurs in the morning, but can also occur every day and night, this occurs due to relaxation of the digestive muscles, including peristalsis in the stomach so that food is digested, by the stomach it becomes longer and peristalsis is easy to return to the esophagus, besides that it is also due to the influence of the HCG hormone. In Air Teluk Kiri Village as many as 30 pregnant women experience nausea and vomiting, various ways are done to overcome nausea and vomiting, one of which is giving candy ginger. The aim was to analyze the effect of ginger candy on the reduction of emesis gravidarum in pregnant women in Air Teluk Kiri Village. The research method used is pre-experimental research with a static group comparison/posttest only control group design, using a sample of 30 respondents. The instrument used to measure nausea and vomiting is an observation sheet. The data was collected by the researcher himself and the data were analyzed univariately and bivariately using the Mann Whitney test. The results showed that there was an effect of ginger candy on emesis gravidarum in pregnant women with p value ($p = 0.001, = 0.05$). Conclusions from this study There is an effect of ginger candy on reducing nausea and vomiting in first trimester pregnant women in Air Teluk Kiri Village. It is hoped that ginger candy can be an alternative choice in overcoming emesis gravidarum in pregnant women in 2022. The instrument used to measure nausea and vomiting is an observation sheet. The data was collected by the researcher himself and the data were analyzed univariately and bivariately using the Mann Whitney test. The results showed that there was an effect of ginger candy on emesis gravidarum in pregnant women with p value ($p = 0.001, = 0.05$). Conclusions from this study There is an effect of ginger candy on reducing nausea and vomiting in first trimester pregnant women in Air Teluk Kiri Village. It is hoped that ginger candy can be an alternative choice in overcoming emesis gravidarum in pregnant women in 2022. The instrument used to measure nausea and vomiting is an observation sheet. The data was collected by the researcher himself and the data were analyzed univariately and bivariately using the Mann Whitney test. The results showed that there was an effect of ginger candy on emesis gravidarum in pregnant women with p value ($p = 0.001, = 0.05$). Conclusions from this study There is an effect of ginger candy on reducing nausea and vomiting in first trimester pregnant women in Air Teluk Kiri Village. It is hoped that ginger candy can be an alternative choice in overcoming emesis gravidarum in pregnant women in 2022. The results showed that there was an effect of ginger candy on emesis gravidarum in pregnant women with p value ($p = 0.001, = 0.05$). Conclusions from this study There is an effect of ginger candy on reducing nausea and vomiting in first trimester pregnant women in Air Teluk Kiri Village. It is hoped that ginger candy can be an alternative choice in overcoming emesis gravidarum in pregnant women in 2022. The results showed that there was an effect of ginger candy on emesis gravidarum in pregnant women with p value ($p = 0.001, = 0.05$). Conclusions from this study There is an effect of ginger candy on reducing nausea and vomiting in first trimester pregnant women in Air Teluk Kiri Village. It is hoped that ginger candy can be an alternative choice in overcoming emesis gravidarum in pregnant women in 2022.

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1. Introduction

Pregnancy is a physiological and natural process. Pregnancy is counted from the first day of the last menstrual period. The length of pregnancy from the beginning of conception to the newborn is 40 weeks or 280 days. There are three parts to pregnancy, the first trimester from conception to three months, the second trimester from four months to six months, and the third trimester starting from 7 months to 9 months (Runjati, 2018).

Pregnancy causes physical, psychological and hormonal changes in the mother's body, this causes various complaints, one of which is nausea and vomiting or morning sickness which usually occurs in early pregnancy, nausea and vomiting is one of the earliest, most common and most common symptoms. cause stress associated with pregnancy, nearly 50-90% of pregnant women experience nausea and vomiting in the first trimester. Nausea and vomiting are often ignored because they are considered a consequence in early pregnancy. Nausea and vomiting that occurs in pregnancy is caused by an increase in levels of the hormones estrogen and progesterone which are produced by Human Chorionic Gonadotropin (HCG) in the serum from the placenta. The frequency

of occurrence of morning sickness does not only occur in the morning but can be in the afternoon or even at night. In addition, because of the smell of a dish, half a day pregnant women will definitely experience nausea and vomiting. Hormonal changes in each pregnant woman will respond differently, so not all experience nausea and vomiting in pregnancy (Putri, 2017).

Ginger is an ingredient that can remove gas from the stomach, this will relieve flatulence. Ginger is also a strong aromatic stimulant, besides being able to control vomiting by increasing intestinal peristaltic movements. About six compounds in ginger have been shown to have potent antiemetic (anti-vomiting) activity. The nutrients contained in ginger are 3.4% potassium, 3.0% magnesium, and 2.5% vitamin B6 (pyridixnine) (Fitria, 2013).

Nausea and vomiting in first trimester mothers in the community still occur and most of them still use pharmacological therapy or leave it alone. However, it would be better if in the community especially pregnant women were able to overcome the problem of nausea and vomiting in early pregnancy with non-pharmacological complementary therapy first. Pregnancy with hyperemesis gravidarum according to the World Health Organization (WHO) Reaching 12.5% of all pregnancies in the world with various incidence rates ranging from 0.3% in Sweden, 0.5% in California, 0.8% in Canada , 10.8% in China, 0.9% in Norway, 2.2% in Pakistan, and 1.9% in Turkey. Meanwhile, the incidence of hyperemesis gravidarum in Indonesia is from 1-3 of all pregnancies (Mururoh, 2016).

2. Method

This research is a type of pre-experimental design research, because this design is not yet a real experiment. Because there are still external variables that also influence the formation of the dependent variable. So the experimental result which is the dependent is not solely influenced by the independent variable. This happened because there were no control variables, and the samples were not chosen randomly (Sugiyono, 2019).

a. Population and Research Sample

The population in this study were all pregnant women experiencing problems with the frequency of nausea and vomiting in the first trimester as many as 20 pregnant women in Air Teluk Kiri Village in 2022. The sample in this study was the entire population with a total sampling of 20 pregnant women in the village. Left Bay Water In 2022.

b. Data collection

In this study, the researcher used a research design, namely One-Group Pretest-Posttest. So in this design there is a pretest, before treatment. Thus the results of the treatment can be known more accurately, because it can compare with the situation before being given treatment

c. Processing and data analysis

The data will be processed using SPSS version 20 software. Data analysis is carried out using quantitative analysis to obtain research results.

3. Research Results and Discussion

A. Characteristics of Respondents

The frequency distribution based on the characteristics of the respondents is presented in the following table:

TABLE 1.
DISTRIBUTION OF FREQUENCY BASED ON CHARACTERISTICS OF RESPONDENTS ON THE EFFECTIVENESS OF GIVING GINGER CANDY ON NAUSEA AND VOMITING IN PREGNANT WOMEN IN AIR TELUK KIRI VILLAGE IN 2022

No	Characteristics	F	%
1	Age		
	20-25 Years	10	33.3%
	26-30 Years	13	43.3%
	31-35 Years	6	20%
	36-40 Years	1	3.3%
	Total	30	100%
2	Education		
	senior High School	19	63.3%

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	DI/D II/ D III	8	26.7%
	S1	3	10%
	Total	30	100%
3	Gestational Age		
	0 Months	7	23.3%
	1 month	6	20%
	2 months	6	20%
	3 months	11	36.7%
	Total	30	100%
4	Work		
	Housewife	17	56.7%
	Private sector employee	9	30%
	entrepreneur	1	3.3%
	civil servant	3	10%
	Total	30	100%
5	Gravida Status		
	Gravida 1	21	70%
	Gravida 2	9	30%
	Total	30	100%

Primary data obtained in 2022

Based on table 1, it is known from 30 respondents of first trimester pregnant women based on the characteristics of the majority of the age of pregnant women from 26-30 years as many as 13 people or 43.3%, based on the characteristics of the majority of mothers' education, namely high school education as many as 19 people or 63.3%, based on the characteristics the majority of mothers' gestational age, namely 3 months of age, as many as 11 people or 36.7%, based on the characteristics of the majority of work as housewives as many as 17 people or 56.7%, based on the characteristics of the majority of mothers with gravida status 1 namely as many as 21 people or 70%.

B. Univariate Analysis

TABLE 2.
CATEGORIES OF NAUSEA AND VOMITING BEFORE AND AFTER THE INTERVENTION

No	Intervention	Category	F	%
1	Before	Light	10	33.33%
		Currently	10	33.33%
		Heavy	10	33.33%
		Total	30	100%
2	After	No Vomit	20	66.7%
		Light	5	16.7%
		Currently	5	16.7%
		Heavy	0	0
	Total	30	100%	

Primary data obtained in 2022

Based on table 2 before the intervention was given, on average, pregnant women experienced nausea and vomiting with categories, namely mild, moderate and severe with a total of 10 respondents (33.3%), meanwhile after being given the intervention there were no vomiting categories as many as 20 respondents (66, 7%).

C. Bivariate Analysis

TABLE 3.
BIVARIATE ANALYSIS OF THE FREQUENCY OF NAUSEA VOMITING BEFORE AND AFTER INTERVENTIONS ARE GIVEN TO PREGNANT WOMEN IN THE 1ST TRIMESTER

Intervention	mean	N	SD	SE	Pvalue
Before	2.43	30	1.088	0.199	0.001
After	1.73	30			

Primary data obtained in 2022

Based on table 3, it is known the mean value of each variable. Where this value is obtained by adding up all the data in each variable and then dividing by the number of data that is 30. It is known that the average value for the frequency of nausea and vomiting before consuming ginger candy is 2.43 and for the frequency after consuming ginger candy is 1.73 . The output above shows the results of the correlation test or the relationship between the two data or the relationship between variables before consuming ginger candy and after consuming ginger candy. The resulting significance value for this test is 0.001. The results of the statistical test found that the significance value for this test was 0.01. Because the p value is $0.01 < 0.05$, it can be concluded that the consumption of ginger candy is effective in reducing nausea and vomiting in pregnant women.

4. Discussion

A. Before Consuming Ginger Candy

Based on table 2 before the intervention was given, on average pregnant women experienced nausea and vomiting with categories namely mild, moderate and severe with a total of 10 respondents (33.3%). According to the researcher's assumption, this is because most primigravida have not been able to adapt to the hormones estrogen and HCG so that emesis gravidarum is more common. Meanwhile, the multigravida and grandemultigravida have been able to adapt to the hormones estrogen and chorionic gonadotropin because they already have experience with pregnancy and childbirth. In primigravida, the lack of knowledge, information and poor communication between women and their caregivers also affects women's perception of nausea and vomiting symptoms. While the multigravida and grandemultigravida already have experience,

The results of this study are also in accordance with the theory of Tiran (2013), nausea and vomiting is one of the earliest, most common and most stressful symptoms associated with pregnancy. Nausea and vomiting are often overlooked because they are considered a normal consequence of early pregnancy without acknowledging the severe impact it has on women and their families. For some women, symptoms may last all day, or may not occur at all upon waking in the morning. Nausea and vomiting during pregnancy are usually caused by changes in the endocrine system that occur during pregnancy, mainly due to high fluctuations in human chorionic gonadotropin (HCG) levels, in particular because the most common period of gestational nausea or vomiting is in the first 12-16 weeks, which in at that time

According to Rofi'ah, Handayani, Rahmawati (2017) Initial therapy for emesis should be conservative, accompanied by dietary changes, emotional support, and alternative therapies such as herbs. Traditional herbs can be used by drinking a cup of warm ginger. In India, ginger is made as a drink to treat nausea in pregnant women. Ginger can be consumed in various forms such as drinks, candies, or sweets.

B. After Consuming Ginger Candy

Based on table 2, before the intervention was given, on average, pregnant women experienced nausea and vomiting with categories namely mild, moderate and severe with a total of 10 respondents (33.3%), meanwhile after being given the intervention there were no vomiting categories as many as 20 respondents (66, 7%).

According to the researcher's assumption, ginger candy is effective in reducing nausea and vomiting in first trimester pregnant women. Where nausea and vomiting is caused by changes in the endocrine system that occur during pregnancy, mainly due to high fluctuations in HCG (human chorionic gonadotrophin) levels, especially in the period of gestational nausea or vomiting the most

common is in the first 12-16 weeks. While ginger candy made from ginger contains chemical compounds in which the spicy taste in ginger is caused by zingerone, while the distinctive aroma in ginger is caused by zingiberol. Where ginger can work to inhibit serotonin receptors and cause antiemetic effects on the gastrointestinal system and central nervous system.

This study is in accordance with the statement of Vutyavanich (2018) that ginger is an effective treatment to relieve nausea and vomiting in pregnancy. Types of diseases that can be treated with ginger include: headache, dizziness, appetite enhancer, and vomiting. According to Sasmito's theory, E (2017) Ginger is usually safe as an herbal medicine. Ginger does not have acute toxicity at doses commonly consumed for food or medicine. At large doses of 6 g or more, ginger rhizome can cause gastric irritation and loss of protective gastric mucosa. At normal doses (up to 2 g daily), ginger does not affect blood clotting or blood coagulation parameters.

C. Bivariate Analysis

The Effectiveness of Consuming Ginger Candy on Reducing Nausea and Vomiting in Pregnant Women

Based on the results of the output of the dependent t test, it is known that the significant value produced is 0.01. Because the significant value < 0.05 , it is known that the final result is H_a is accepted, H_o is rejected, meaning that consuming ginger candy can reduce nausea and vomiting in respondents.

The results of this study are supported by research conducted by Nugrahani (2015) on the effectiveness of giving steeped ginger with grapefruit juice on the frequency of nausea and vomiting of pregnant women in the first trimester. Puskesmas Adan - Adan, Kediri Regency using the Independent T-Test statistical test, the average frequency of nausea and vomiting of respondents after being given ginger steeping was 1.62. While the average frequency of nausea and vomiting in respondents who were given grapefruit juice was 2.00. So it can be concluded that the administration of steeping ginger is more effective than giving grapefruit juice.

According to research also conducted by Ardani, Ayu (2014) on the comparison of the effectiveness of giving ginger drink therapy with cardamom drink against morning sickness in first trimester pregnant women, it was found that the results of statistical tests showed the average level of morning sickness of pregnant women after being given ginger drink therapy was 7.5. This value is lower than the average value of the level of morning sickness after being given cardamom drink therapy of 9.93. With a p-value of $0.005 < (0.05)$, it can be concluded that there is a significant difference in the effectiveness of ginger drink therapy with cardamom drink therapy against morning sickness in first trimester pregnant women.

In another study by Putri, Ayu (2016) regarding the effectiveness of giving warm ginger in reducing the frequency of nausea and vomiting in first trimester pregnant women, it was found that the results showed that the average frequency of nausea and vomiting before being given a warm ginger drink was 13 times and after being given it decreased to 3.18 times. The test results showed that hot ginger drink was effective in reducing nausea and vomiting in pregnant women ($p=0.000$).

The results of this study are also in accordance with the theory of Tiran (2013), nausea and vomiting is one of the earliest, most common and most stressful symptoms associated with pregnancy. Nausea and vomiting are often overlooked because they are considered a normal consequence of early pregnancy without acknowledging the severe impact it has on women and their families. For some women, symptoms may last all day, or may not occur at all upon waking in the morning.), particularly because the most common period of gestational nausea or vomiting is in the first 12-16 weeks, at which time.

According to the researcher's assumption, because ginger also contains essential oils that function as anti-inflammatory, ginger can inhibit the inflammatory process caused by *H. pylori* infection. therefore, the frequency of nausea and vomiting caused by *H. pylori* infection can be reduced. So it can be concluded that ginger candy is effective in reducing nausea and vomiting in pregnant women, the researcher's assumption was proven in this study with the results of the study $p < 0.05$.

5. Conclusions and suggestions

A. Conclusion

Based on the data obtained from the results of the study, it can be concluded that:

- a. Before being given ginger candy, the frequency of pregnant women who experienced nausea and vomiting on average was that pregnant women experienced nausea and vomiting with categories namely mild, moderate and severe with a total of 10 respondents (33.3%)
- b. Meanwhile, after the intervention, there were 20 respondents (66.7%).
- c. There is an effect of giving ginger candy on nausea and vomiting in pregnant women because it can be seen that the significance value generated for this test is 0.001. The results of the statistical test found that the significance value for this test was 0.01. Because the p value is $0.01 > 0.05$, so it can be concluded that consuming ginger candy is effective in reducing nausea and vomiting in pregnant women. It is known that the average value for the frequency of nausea and vomiting before consuming ginger candy is 2.43 and for the frequency after consuming sweets. ginger is 1.73. The output above shows the results of the correlation test or the relationship between the two data or the relationship between variables before consuming ginger candy and after consuming ginger candy.

B. Suggestion

Based on the conclusions above can be put forward some suggestions as follows:

1. For Respondents
It is hoped that this research can provide benefits for pregnant women who experience hyperemesis gravidarum in overcoming the problem of nausea and vomiting during pregnancy.
2. For Research Places
It is hoped that the village community, especially health workers, will take this research into consideration which might help overcome the problem of hyperemesis gravidarum in pregnant women.
3. For Educational Institutions
It is recommended for educational institutions that the results of this research can be used as some input or information for further researchers in developing knowledge, especially in the D3 Midwifery program STIKes As Syifa Kisaran.
4. For Further Researchers
It is recommended that the results of the study can be used as comparison material for further researchers who will conduct research with the same topic and different research methods

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