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Quantification of the emesis scale (puqe-24) through giving ginger wedding to 1st trimester pregnant women

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ABSTRACT

Nausea, vomiting or morning sickness is the most common symptom experienced in early pregnancy due to an imbalance in the hormones estrogen and progesterone. To determine the quantification of the emesis scale (PUQE-24) before being given Wedang Ginger at the Fina Sembing Clinic in Medan in 2023. To determine the quantification of the emesis scale (PUQE-24) after being given Wedang Ginger. To analyze and determine the effect of giving Wedang Ginger to reduce emesis gravidarum in Pregnant Women in the 1st Trimester. Using a quasi-experimental design with a one group pretest posttest design that has treatment. The sampling technique was purposive sampling, namely 10 respondents with all respondents given treatment, while the sample was taken from the entire population. The data analysis used in this research is univariate analysis and bivariate analysis with the Wilcoxon test. The research showed that pregnant women in the first trimester who experienced emesis gravidarum before and after giving ginger tea had a p value = 0.003 < 0.05, indicating that Ho would be rejected and Ha would be accepted. Conclusion: there is an effect of giving ginger tea to reduce emesis gravidarum in pregnant women in the first trimester at the Fina Sembiring Clinic, Medan. It is hoped that health workers can apply ginger tea to pregnant women in the first trimester who experience nausea and vomiting as an additional therapy to accompany conventional medicine for pregnant women.

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1. Introduction

Pregnancy is a reproductive process that requires special care so that it can proceed well in order to achieve a safe delivery and give birth to a healthy baby. Pregnancy is a condition where a woman requires psychological and physiological adaptation to pregnancy hormones and mechanical stress due to the enlargement of the uterus and other tissues. Pregnancy can also cause physical, psychological and hormonal changes in the mother's body (Hastuty, 2021).

During pregnancy, a woman's body undergoes transformation, especially in the female reproductive system and breasts. This change is caused by an imbalance in the hormones estrogen and prosterone. The hormone estrogen causes increased gastric acid secretion and results in nausea and vomiting. Apart from that, the secretion of Human Chorionic Gonadotropin (HCG) in the blood causes nausea and vomiting (AULIA et al., 2022).

Nausea, vomiting or morning sickness is the most common symptom experienced in early pregnancy, which can cause discomfort in pregnant women. When the muscle tone of the digestive tract weakens, motility and food will stay in the digestive tract longer. Nausea and vomiting often occur in early pregnancy, especially in primigravida, multiple pregnancies and hydatidiform mole (NIKMAH, 2020). According to the World Health Organization (WHO) in 2015, the incidence of emesis gravidarum was at least 15% of all pregnant women. Emesis gravidarum occurs throughout the world with varying incidence rates, namely 0.9% in Sweden, 0.5% in California, 1.9% in Turkey, and prevalence in the United States. According to the Ministry of Health of the Republic of Indonesia in 2015, research results in Indonesia showed that pregnant women with nausea and vomiting reached 14.8% of all pregnancies. Medan City Health Service Report In 2018, there were 206 first trimester pregnant women who experienced nausea and vomiting out of the total number of first trimester pregnant women, namely 465 people. Based on the 2013 North Sumatra Provincial Health Service Profile report, it explains that more than 80% of pregnant women experience nausea and vomiting. This can cause mothers to avoid certain foods and usually carry risks to the fetus (I. D. Sari et al., 2023).

Vomiting is initially preceded by nausea, which is characterized by a pale face, sweating, excessive salivation, tachycardia, irregular breathing. Nausea and vomiting in pregnancy are usually mild and are conditions that can be controlled according to the condition of the pregnant woman. The impact of nausea, vomiting or emesis gravidarum in pregnant women can cause nutritional disorders, dehydration, weakness, weight loss, and electrolyte imbalance. If not treated, this nausea and vomiting will worsen into hyperemesis gravidarum. Hyperemesis gravidarum is defined as vomiting that occurs continuously in large amounts and is associated with weight loss during pregnancy of more than 5%, dehydration, and electrolyte imbalance that requires medical treatment. This can have bad consequences for the fetus, such as abortion, premature parturition, low birth weight (LBW) (Susanti & Taqiyah, 2021).

Pharmacological therapy is taking drugs such as B6 and antihistamines, for example Dimenhydrinate or dimenhydrinate. Providing non-pharmacological therapy is effective in reducing nausea and vomiting, including replacing lost body fluids using warm water or electrolyte solutions (ORS), avoiding stress, aromatherapy, acupressure therapy and consuming ginger. Ginger is effective and provides a refreshing and comfortable effect that can reduce nausea and vomiting. Ginger has anti-vomiting properties and can be used by pregnant women to reduce emesis gravidarum. Research shows that ginger is very effective in reducing the compound metlocopamide which induces nausea and vomiting. Ginger contains two important digestive enzymes that help the body digest and absorb food (Erbangga & Pascawati, 2022).

Not all pregnant women can undergo therapy using drugs, there are some mothers who do not like having to take drugs, so non-pharmacological therapy is needed here. It would be better if pregnant women were able to overcome the problem of nausea and vomiting in early pregnancy by using non-pharmacological and complementary therapies first. The use of non-pharmacological complementary therapy is non-instructive, non-invasive, cheap, simple, effective, and has no adverse side effects for the mother. pregnant. There are impacts caused by emesis gravidarum so treatment is needed to overcome them. Treatment of nausea and vomiting during pregnancy can be done through pharmacological and non-pharmacological measures. Pharmacological therapy such as administering antiemetics, antihistamines, anticholinergics and corticosteroids. Generally, pregnant women overcome nausea and vomiting by taking anti-nausea drugs given to pregnant women, namely vitamin B6, but in several reports this drug has side effects such as headaches, diarrhea and drowsiness in pregnant women. There is no research gap because one of the non-pharmacological treatments for hyperemesis is ginger tea. One of the most frequently used cooking spices, ginger has long been known as a medicine natural with several advantages. Because it is easy to obtain and can be done with conventional herbal plants such as ginger, health experts often recommend consuming ginger in the form of ginger tea or hot ginger drinks to relieve nausea and vomiting. Curcuma rhizome has several uses, including as a flavoring drinks, cooking spices and sweeteners. It is also used as a conventional herbal medicine. Gingerol, curcumin, flandrene, bisabilene, zingiberene (zingirona), zingiberol, and gingerol essential oils can

inhibit the neurotransmitter serotonin. Ginger is a fragrance-based aromatherapy oil used for natural treatment. Because it provides a sensation of calm in the stomach, serotoninergic neurons produced by enterochromaffin cells and the central nervous system in the digestive tract are believed to reduce nausea and vomiting. After drinking ginger tea, the patient's complaints of nausea and vomiting changed from 10 times a day to only once. According to research, ginger tea is effective and safe in reducing nausea and vomiting when consumed every day in the form of large amounts of water and 1 gram of ginger.

The content of ginger is found in the essential oil Zingiberena (zingirona), zingiberol, bisa bilena, curcumin, gingerol, flandera, vitamin A and bitter resin which can block serotonin, which is a neurotransmitter that is synthesized in serotoninergic neurons in the central nervous system and enterochromaffin cells. in the digestive tract, so as a provider comfortable feeling in the stomach, so it is believed to give a comfortable feeling in the stomach (Afriyanti, 2017).

The results of Afriyanti D's research with the title "Effectiveness of Ginger Wedang and Mint Leaves to Reduce Nausea and Vomiting in Pregnant Women in PMB YF Bukit Tinggi City in 2017". The results of the study showed that the average frequency of vomiting for pregnant women in the first trimester before consuming ginger drink was 5.86 times a day and the standard deviation was 1.345 with the lowest frequency of nausea and vomiting being 4 and the highest 7. However, after being given ginger drink the average frequency of vomiting was 3. 71 times a day with a standard deviation of 0.951. The lowest frequency is 2 and the highest is 5. The research design used is quasi-experimental with a two group design approach. The population used in this study were all pregnant women with emesis gravidarum with a total sample of 21 people, of which 7 people were given ginger tea and 7 people were given mint leaves. Data collection using observation sheets with data analysis using the t-test (Afriyanti, 2017).

The results of the study showed that there was a decrease in the average frequency of nausea and vomiting after being given ginger tea by 2.45. A decrease in the frequency of nausea and vomiting occurred from day 3 to day 4 with an average decrease of 2.20. Meanwhile, the decrease before the ginger drink intervention was carried out and after it was given until the 4th day, showed a significant decrease with an average of 4.80. It can be concluded that giving ginger tea can reduce the frequency of nausea and vomiting in first trimester pregnant women who experience emesis gravidarum. The method in this research is Quasi Experiment with a One Group Pre test - Post test design (Harahap et al., 2020).

The results of research by Winda Larasati et al, with the title "Application of Ginger Wedang Decoction to Mrs. "E With mother Hyperemesis Gravidarum in Sumbergede Village in 2021." This type of research is a description of analysis in the form of a case study. A case study is a research design that includes an intensive study of a research unit, for example a client, family, group, community or institution. The research subject in this case study is Mrs. E patient with hyperemesis gravidarum on first trimester in Sumbergede Village. Researchers intervened with clients for 5 days. After applying the ginger tea decoction and evaluating it for 5 days, there were changes, namely the nausea and vomiting felt by Mrs. E has decreased (Larasati et al., 2022).

The length of pregnancy from the beginning of conception until the baby is born 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 from 7 months to 9 months (Dartiwen et al., 2019). Each trimester is divided into 13 weeks. The first trimester is the mother's adjustment to the fetus she is carrying. The second trimester is the stage when the mother accepts her pregnancy so that she feels comfortable. Next, in the third trimester, we enter the waiting stage which is full of vigilance (Latifah & Setiawati, 2017). Emesis gravidarum is a normal early symptom or is often found in the first trimester of pregnancy. The cause of emesis gravidarum is currently not clearly known, but nausea and vomiting are considered to be a ultifactorial problem. Related theories are hormonal, vestibular system, digestive, psychological, hyperolfaction and genetic factors. Pregnant women who experience nausea and vomiting, the results show that the risk of nausea and vomiting increases in

primigravida, women who have less education, smoke, are overweight or obese, have a history of nausea. and vomiting in previous pregnancies (Miratu Megasari et al., 2015).

Most health workers try to treat the early symptoms of nausea and vomiting in pregnancy so that it is useful to treat the emergence of more severe symptoms. Because nausea and vomiting are highly subjective, consistency in assessment is necessary. Initially, a scoring system was used to assess nausea and vomiting in patients undergoing chemotherapy, measuring physical and psychological symptoms as well as visible stress due to chemotherapy. A more concise guide was developed by researchers from the Motherisk NVP helpline in Canada to streamline the assessment and correct some issues related to the use of Rhodesindex. The Pregnancy Unique Qualification of Emesis/nausa (PUQE) index is based on only three questions (13).

The study considered the psychological impact of the intervention that the participants in this study provided stimulus by the counselor, namely the participant's view of changes in his physiology, self-concept, function and role in the environment, and participant relationships with people nearest. Intervention is carried out by bringing counselors and participants together the beginning of the research to carry out an initial assessment and establish trust, next The counselor will contact participants via telephone to follow-up on nausea the participant's vomiting and the participant's views on the 4 things above. Results This research is a reduction in the duration of nausea and vomiting in the mild to moderate category in pregnant women, but counseling is less effective in reducing nausea and vomiting in the category heavy. Another study using counseling methods for first trimester pregnant women is research conducted in Norway, namely Community Pharmacist Counselling in Early Pregnancy – Results from the SafeStart Feasibility Study by Truong, et al. This research actually discusses pharmacology consultations on Early pregnancy, one of the problems is nausea and vomiting. Intervention What is done is by holding consultation sessions via direct or virtual between participants and the pharmaceutical effectiveness of ginger in pregnant women overcome emesis gravidarum, that administration intervention in the group given tablets Ginger generally reduces nausea vomiting compared to the given group placebo tablets. Chew ginger or drink ginger tea is the easiest way to deal with nausea. Both nausea due to angina and the consequences cancer treatment. Pregnant woman who You can also experience morning sickness using ginger to relieve nausea and vomit safely. Nausea and vomiting are reactions Physiology of pregnancy due to hormonal influences pregnancy such as progesterone, H C G, etc. Nauseous and heavy diarrhea (Hyperemesis Gravidarum) can be a symptom of several health problems such as hydatidiform mole, hyperthyroidism, vitamin B complex deficiency or severe stress The cause of nausea and vomiting in pregnant women is still not known with certainty but there are various things which are predisposing factors such as factors psychological and hormonal changes. Pregnant women with a hysterical personality type and excessive dependence on the mother tend to experience nausea and vomiting. Factor Another influence is hormones progesterone and H C G which causes increased gastric motility and acidity stomach causing a nausea and vomiting reaction.

The urgency of the research is physiologically consuming ginger Warm can reduce nausea and vomiting early pregnancy because ginger is pregnant essential oils that have influence refreshes and blocks reflexes vomiting, other ingredients in ginger is gingerol which plays a role in improve blood flow as well improves the functioning of the nervous system and has a fragrant aroma of ginger while it contains oleoresin resulting in a spicy taste warm the body. Therapeutic benefits of deep warm ginger Reduces nausea and vomiting during pregnancy the first trimester in nausea and vomiting already proven through several studies such as research said that there is a difference in reduces nausea and vomiting in pregnancy first trimester after administration warm ginger drink. Before it is done respondent-homogeneous intervention experience frequent nausea and vomiting 13 times a day, meanwhile after being given ginger drink intervention warm, average frequency of nausea and vomiting decreased to three times a day.

In line with the objectives of this research, it is hoped that the benefits obtained from this research can increase insight and knowledge and theoretically the information obtained from this research can be used as material to increase knowledge for health workers and pregnant women regarding the benefits of giving warm ginger in reducing the frequency of vomiting in mothers with

emesis gravidarum and midwives are expected to pay more attention to mothers with emesis gravidarum and can develop complementary therapy in mothers with emesis gravidarum is expected to provide information and input for future researchers.

2. Methods

The research used was pre-experimental with a one group pretest-posttest approach. Where in this study there was a group of pregnant women in the 1st trimester with a pretest before being given treatment or ginger tea. Then, after being given the action, the experimental group will be given a test in the form of a posttest, which aims to determine the condition of the experimental group after being given the action or administering ginger drink to pregnant women in the 1st trimester at the Fina Sembiring Clinic in Medan in 2023. This research was conducted at the Fina Sembiring Clinic, Jln Love Work No. 60, Sari Rejo, Medan Polonia District, Medan City, this research started from May-August 2023. The population in this study included 10 pregnant women who experienced nausea and vomiting in the first trimester. The sample in this research was taken by purposive sampling, namely purposively based on certain considerations made by the researcher himself by identifying all the characteristics of the population. There are two variables in this research, namely the independent variable is in the form of wedang ginger. The type of ginger used is ginger as much white/small yellow/emprit ginger 2.5 grams sliced and brewed in 250 hot water ml plus 1 tablespoon sugar (10 grams) taken 2x1 a day for 4 days. and the dependent variable is decline What is the frequency of emesis gravidarum? times a day frequency of emesis gravidarum experienced by pregnant women. Data collection using questionnaire to measure frequency deeply felt emesis gravidarum 24 hours. Measurements are carried out 1x24 hours before treatment is given and measured return 1x24 hours later after given treatment for 4 consecutive days join in. The variables studied are presented in tabular form and data analysis was carried out analytically and descriptively. Technique The data analysis used is independent t test and paired t test. There are two variables in this research, namely the independent variable is in the form of wedang ginger. The type of ginger used is ginger as much white/small yellow/emprit ginger 2.5 grams, sliced and brewed in 250 hot water ml plus 1 tablespoon sugar (10 grams) taken 2x1 a day for 4 days. and the dependent variable is decline What is the frequency of emesis gravidarum? times a day frequency of emesis gravidarum experienced by pregnant women. Data collection using questionnaire to measure frequency deeply felt emesis gravidarum 24 hours. Measurements are carried out 1x24 hours before treatment is given and measured return 1x24 hours later after given treatment for 4 consecutive days join in. The variables studied are presented in tabular form and data analysis was carried out analytically and descriptively. Technique The data analysis used is independent t test and paired t test pvalue = 0.000 < (α = 0.05), this shows that there is a difference in the frequency of emesis gravidarum of pregnant women before and after being given ginger tea in the experimental group. The instruments used are questionnaires and observations and have been validated. To obtain data characteristics (general data) of pregnant women in the first trimester, the researcher compiled a questionnaire in the form 3 open questions includes age, ethnicity and gravida. Collection data that researchers use to find out the intensity of nausea and vomiting is sheet observation using structured interview techniques. Interviews are carried out by asking clients about the frequency of nausea and vomiting he felt in 24 hours. Measurements were carried out in 24 hours before the action is given, and measured return in the next 24 hours with administration intervention for 4 days. After getting respondents who fit the inclusion criteria, the researcher then carried out data collection consisting of a pre-test and post-test, after the data was collected checked for completeness, then carried out data analysis.

3. Results and Discussion

Used to describe the data carried out on each variable from the research results. The collected data is presented in the form of a frequency distribution table Characteristics of Respondents Based on Age, Number of Children, Employment and Education.

Table 1.
Quantification of emesis scale (PUQE-24) based on respondent characteristics. According to age at Fina Sembiring Clinic Medan in 2023

Variable	Frequency	Persentase (%)
Age		
19-24 years old	4	40.0
25-29 years old	3	30.0
30-35 years old	3	30.0
Gravida		
Primigravida	7	70.0
Multigravida	3	30.0
Total	10	100.0

Looking at the data in table 1 above, it can be seen that the quantification of the emesis scale (PUEQ-24) is based on the age of 10 respondents (100%), mostly in the age group 19-24 years 4 respondents (40%), aged 25-29 years 3 respondents (30%), and aged 30-35 years 3 respondents (30%). Looking at the data above, it can be seen that the quantification of the emesis scale (PUEQ -24) based on the gravida of 10 respondents (100%), was more common in the primigravida group, 7 respondents (70%) and in the multigravida group, 3 respondents (30%).

Table 2.
Quantification of Emesis Scale (PUQE-24) Before Giving Ginger Wedang to Reduce Emesis Gravidarum in Pregnant Women in the 1st Trimester at the Fina Sembiring Clinic, Medan, 2023

Variable	Frequency	Persentase (%)
Before Giving Ginger Wedang To Reduce Emesis Gravidarum		
Light	1	10%
Curently	8	80%
Heavy	1	10%
Total	10	100

Looking at the data in table 2 above, it can be seen that the quantification of the emesis scale (PUQE-24) before being given ginger tea to reduce Emesis Gravidarum can be seen from 10 respondents (100%). It was more common among mothers in the moderate emesis garvidarum group with 8 respondents (80%), in the group of mothers with mild emesis 1 respondent (10%) and in the group of mothers with severe emesis 1 respondent (10%).

Table 3.
Quantification of Emesis Scale (PUQE-24) After Giving Ginger Wedang to Reduce Emesis Gravidarum in Pregnant Women in the 1st Trimester at the Fina Sembiring Clinic, Medan, 2023

Variable	Frequency	Persentase (%)
After Giving Ginger Wedang To Reduce Emesis Gravidarum		
No emesis	1	10%
Light	7	70%
Curently	2	20%
Total	10	100

Looking at the data in table 3. above, it can be seen that the quantification of the emesis scale (PUQE-24) after being given ginger tea to reduce Emesis Gravidarum can be seen from 10 respondents (100%). It was more common among mothers in the mild emesis group with 7 respondents (70%), in the group of mothers with moderate emesis 2 respondents (20%) and in the group of mothers with no emesis 1 respondent (10%).

Bivariate Analysis

The data is not normally distributed, the test used for hypothesis generation is non-parametric statistical calculations, namely the Wilcoxon test as a substitute for the parametric statistical T sample test.

Table 4.
Shapiro-Wilk Normality Test for Ginger Wedang Consumption to Reduce Emesis Gravidarum in Pregnant Women in the 1st Trimester at the Fina Sembiring Clinic, Medan, 2023

Reduces emesis gravidarum	Shapiro-Wilk		
	Statistic	F	Sig.
Pre test (before consuming ginger drink)	.658	10	.000
Post test (after consuming ginger drink)	.752	10	.004

Looking at the data in table 5 above, it is known that the results of the normality test were significant, the results of the Shapiro-Wilk test calculation = 0.004 < 0.05 (the data values were not normally distributed). Because the data is not normally distributed, the test used for hypothesis generation is non-parametric statistical calculations, namely the Wilcoxon test as a substitute for the parametric statistical T sample test.

Non-Parametric Test (Wilcoxon Test) and the Effect of Consuming Ginger Wedang to Reduce Emesis Gravidarum in Pregnant Women in the 1st Trimester at the Fina Sembiring Clinic, Medan, 2023.

Table 5.
Quantification of the Emesis Scale (PUQE-24) through the administration of ginger tea to reduce emesis gravidarum in 1st trimester pregnant women at the Fina Sembiring Clinic, Medan, 2023.

Ranks				
		N	Mean rank	Sum of rank
pretest-posttest	Negative rank	9[a]	5.00	45.00
	Positif rank	0[b]	.00	.00
	Ties	1[c]		
	Total	10		

Looking at the data in table 5. above, it can be seen that at the negative rank value it is known that out of 10 respondents 9 (9[a]) of them experienced a decrease in emesis gravidarum, at the positive rank value of the 10 respondents it is known that of the 10 (0[b]) respondents none experienced an increase in emesis gravidarum and in the tie value of the 10 respondents, 1 (1[c]) of them did not experience a decrease in emesis gravidarum. After studying it, the results showed that 1 respondent studied did not experience a decrease in emesis gravidarum due to having gastritis.

Tabel 6.
Significant level of Posttest and Pretest scores

Test Statistics[a]	
Z	Posttest-pretest
Asymp.Sig.(2-tailed)	-3.000[b]
	.003
a.Based on negativ rank	
b.Wilcoxon signed ranks test	

Looking at the data in table 6 above, the results of the Wilcoxon rank test show a significant value (α), namely 0.003, where <0.05 indicates that Ho will be rejected and Ha will be accepted. Finally, from the Wilcoxon results, it can be seen that the post-test results of the respondents were greater

than the pre-test scores. Based on this analysis, it can be confirmed that ginger drink can reduce emesis gravidarum in pregnant women in the first trimester.

Discussion

Quantification of Emesis Scale (PUQE-24) Before Giving Ginger Wedang to Pregnant Women in the 1st Trimester at the Fina Sembiring Clinic, Medan, 2023. From the results of this research, it is known that before giving ginger tea to 10 respondents (100%) at the Fina Sembiring Clinic in Medan, it was discovered that there were more mothers with moderate emesis gravidarum, 8 respondents (80.0%), 1 respondent (10.0%) in the group of mothers with mild emesis. and in the group of mothers with severe emesis 1 respondent (10.0%). From previous research conducted by Yulina Dwi Hastuty with the title "Lemon Aromatherapy and Ginger Wedang Can Reduce Nausea, Vomiting In Pregnant Women in Medan City". The design of this research is pre-experimental with pretest post test group design, with a sample of 79 people divided into 2 treatment groups. Sampling was taken using a simple random sampling technique according to the inclusion criteria. Nausea and vomiting were measured using the PUQE questionnaire. Data analysis used the Wilcoxon test α=0.05. The results of the study stated that before being given the intervention, the average respondent experienced nausea and vomiting 13 times a day (Yulviana & Utari, 2019). From previous research conducted by Dhita Ayu Puspita et al, entitled "The Effect of Ginger Stewed Water (Zingiber Officinale) on Reducing Nausea and Vomiting in First Trimester Pregnant Women". With a pre-experiment research design and a one group pre post test design, the population in this study were 15 pregnant women who experienced nausea and vomiting in the first trimester. Data analysis using statistical tests, found that the average frequency of nausea and vomiting before being given ginger brewed water was 7.13 (medium category) (Puspita et al., 2022). Emesis gravidarum is nausea and vomiting that appears in the first four weeks of pregnancy and slowly disappears at twelve weeks of pregnancy. Nausea is defined as the tendency to vomit something, or a sensation that appears in the throat or epigastric area without being followed by vomiting, while vomiting is defined as the expulsion of stomach contents through the mouth, and is generally accompanied by strong urges that occur in pregnancy (Pebrianthy & Sitonga, 2021).

Ginger wedang is a processed drink that comes from ginger and is a ginger drink. Ginger wedang is a traditional drink that is fresh and healthy for the body. Ginger wedang is also a drink that has been passed down from our ancestors from generation to generation a simply prepared dish that is generally served hot or warm (Rufaridah et al., 2019). Many instruments are available and have been used to measure various aspects of nausea, but they are not yet sufficiently valid and standardized; the frequency, intensity and duration of nausea are the most important characteristics that can be measured in clinical trials. Frequency measurements can be carried out based on yes or no answers to specific questions from respondents related to the occurrence of nausea and vomiting. Measuring nausea and vomiting can be done using a score. The frequency of nausea is a subjective complaint in the form of a feeling of discomfort in the digestive tract which can be calculated using the Pregnancy-Unique Quantification of Emesis and Nause (PUQE-24) chair (Indrayani et al., 2018).

According to the researcher's assumptions, it can be seen that from the 10 respondents, the majority of respondents were in the 19-24 year age group with 4 respondents (40.0%), 3 respondents in the 25-29 year age group (30.0%) and 3 respondents in the 30-35 year age group. respondents (30.0%). Based on age groups, it is known that the majority of pregnant women in the first trimester, aged 19-29 years, on average are 7 respondents (70.0%) and in the 30-35 year age group, the average pregnant women are multigravida mothers, namely 3 respondents (30.0%). Quantification of Emesis Scale (PUQE-24) After Giving Ginger Wedang to Pregnant Women in the 1st Trimester at the Fina Sembiring Clinic, Medan, 2023. From the results of this research, it is known that after giving ginger tea to 10 respondents (100%) at the Fina Sembiring Clinic in Medan, it was discovered that there were more mothers in the mild emesis gravidarum group, 7 respondents (70.0%), in the group of mothers with moderate emesis, 2 respondents (20.0%) and in the group of mothers without emesis 1 respondent (10.0%). From previous research conducted by Yulina Dwi Hastuty with the title "Lemon Aromatherapy and Ginger Wedang Can Reduce Nausea, Vomiting In Pregnant Women in Medan City". The design of this research is pre-experimental with pretest post test group design, with a sample of 79 people divided into 2 treatment

groups, sampling using a simple random sampling technique according to inclusion criteria, measuring nausea and vomiting using the PUQE questionnaire. Data analysis used the Wilcoxon test α=0.05. After being given the warm ginger drink intervention, the average frequency of nausea and vomiting decreased to 3.18 times a day with a p value = 0.000. The results of this study can be concluded that both clinically and statistically, warm ginger drinks have an effect on reducing the frequency of nausea and vomiting in first trimester pregnant women (Hastuty, 2021). From previous research conducted by Dhita Ayu Puspita et al, entitled "The Effect of Ginger Stewed Water (Zingiber Officinale) on Reducing Nausea and Vomiting in First Trimester Pregnant Women". With a pre-experiment research design and a one group pre post test design, the population in this study were 15 pregnant women who experienced nausea and vomiting in the first trimester. Data analysis using statistical tests showed that the average frequency of emesis gravidarum after being given ginger brewed water was 5.40 (mild category) (Dartiwen et al., 2019). Emesis gravidarum is a normal symptom and is often found in the first trimester of pregnancy. Nausea is an unpleasant taste or sensation that occurs in the back of the throat and epigastrium which may or may not cause vomiting. Vomiting can also be influenced by the afferent fibers of the gastrointestinal system. Nausea is often accompanied by vasomotor symptoms of autonomic stimulation such as increased salivation, sweating, fainting, vertigo, tachycardia. Vomiting is defined as the forced expulsion of the contents of the stomach and intestines through the mouth. Emesis gravidarum can get worse and become hyperemesis gravidarum which can cause the mother to vomit continuously every time she eats or drinks, as a result the mother's body becomes increasingly weak, pale and the frequency of urination decreases drastically so that body fluids decrease and the blood becomes thick (hemoconcentration) which results in poor blood circulation. slows down so that it can cause tissue damage which can endanger the health of the mother and the development of the fetus in her womb (S. I. P. Sari & Hindratni, 2022). Wedang is the term for a drink in Javanese and is generally made from boiled water with spices, sugar and coffee/tea. Ginger drink can be trusted to keep our body's immunity stable so that we don't get sick easily. The Prenancy-Unique Quantification of Emesis and Nause (PUQE) scoring system instrument is a research instrument developed by Koren et al. (2002) and has been validated by Koren et al. (2005) was then used for several studies. PUQE-24 is a scoring system to measure the severity of nausea and vomiting of pregnancy within 24 hours (PUSTIKASARI, 2020). The PUQE score for each patient was calculated using three criteria to assess the severity of nausea and vomiting during pregnancy (number of hours of feeling nauseous, number of vomiting episodes, and number of episodes of dry vomiting in the last 24 hours) (AULIA et al., 2022).

According to researchers' assumptions, there is a decrease in nausea and vomiting in pregnant women in the first trimester after consuming ginger wedang. Ginger Wedang is a processed drink made from ginger and in the form of a ginger drink, made from 2.5g elephant ginger, 250ml water and 1 tbsp honey. Which is consumed for 1 week in a row and consumed twice a day in the morning and evening after eating. The researcher gave ginger drink to respondents on the first day of the research. The researcher explained the benefits of consuming ginger drink which can reduce nausea and vomiting, explained the ingredients contained in ginger, namely essential oils, zingiberena (zingirona), zingiberol, bisa bilena, curkumen, gingerol, flandrena, vitamin A and bitter resin which can provide a comfortable feeling in the stomach and reduce nausea and vomiting and explain how to make ginger drink which is consumed by pregnant women in the 1st trimester and on the first day the researchers asked about the condition of pregnant women using the PUQE-24 chair to 10 respondents who experienced nausea and vomiting and Record the results on an observation sheet to determine changes after consuming ginger tea for 1 week. The Effect of Giving Ginger Wedang to Reduce Emesis Gravidarum in Pregnant Women in the 1st Trimester at the Fina Sembiring Clinic, Medan, 2023. From the results of the Wilcoxon test, the significant value (α) is 0.003, where <0.05 indicates that Ho will be rejected and Ha will be accepted. Finally, from the Wilcoxon results, it can be seen that the post-test results of the respondents are greater than the pre-test values. Based on the analysis, it can be concluded that drinking ginger drink can reduce emesis gravidarum in pregnant women in the first trimester.

The negative rank value obtained from the 10 respondents is known. 9 (9^a) of them experienced a decrease in emesis gravidarum, on the positive rank value of 10 respondents it was found

that of the 10 (0^b) respondents none experienced an increase in emesis gravidarum and on the tie value of 10 respondents 1 (1^c) of them did not experience a decrease in emesis gravidarum. From previous research conducted by Yulina Dwi Hastuty with the title "Lemon Aromatherapy and Ginger Wedang Can Reduce Nausea, Vomiting in Pregnant Women in Medan City". The design of this research is pre-experimental with pretest post test group design, with a sample of 79 people divided into 2 treatment groups. Sampling was taken using a simple random sampling technique according to the inclusion criteria, nausea and vomiting were measured using the PUQE questionnaire. Data analysis used the Wilcoxon test α=0.05. In general, the mean score for nausea and vomiting in pregnant women decreased after being given treatment with lemon aromatherapy and ginger tea. Giving lemon aromatherapy and giving ginger tea had an effect on reducing nausea and vomiting in pregnant women with a significance value for each treatment group of p= 0.001 (Putri et al., 2022) . From previous research conducted by Dhita Ayu Puspita et al, entitled "The Effect of Ginger Stewed Water (Zingiber Officinale) on Reducing Nausea and Vomiting in First Trimester Pregnant Women". With a pre-experiment research design and a one group pre post test design, the population in this study were 15 pregnant women who experienced nausea and vomiting in the first trimester. Data analysis used statistical tests. The results of the study showed that The average level of nausea and vomiting in first trimester pregnant women in the first measurement was 7.13 in the moderate category. In the last measurement, the average level of nausea and vomiting in pregnant women was 5.40 in the mild category. The statistical test results obtained a p value of 0.000, so it can be concluded that there is a significant difference between giving ginger brewed water for nausea and vomiting in pregnant women who were given it and those who were given it before (Syavira et al., 2023).

According to the World Health Organization (WHO) in 2015, the incidence of emesis gravidarum was at least 15% of all pregnant women. Emesis gravidarum occurs throughout the world with varying incidence rates, namely 0.9% in Sweden, 0.5% in California, 1.9% in Turkey, and prevalence in the United States. According to the Ministry of Health of the Republic of Indonesia in 2015, research results in Indonesia showed that pregnant women with nausea and vomiting reached 14.8% of all pregnancies. Medan City Health Service Report In 2018, there were 206 first trimester pregnant women who experienced nausea and vomiting out of the total number of first trimester pregnant women, namely 465 people. Based on the 2013 North Sumatra Provincial Health Service Profile report, it explains that more than 80% of pregnant women experience nausea and vomiting. This can cause mothers to avoid certain foods and usually carries risks for the fetus (Putri et al., 2022). By giving ginger tea for 1 week in a row 2 times a day in the morning and evening after eating. By giving 250ml in one drink. By making 2.5 grams of elephant ginger, 250 ml of water and 1 tablespoon of honey, it was given to 10 respondents in this study. PUQE-24 is a scoring system to measure the severity of nausea and vomiting within 24 hours. The PUQE score for each patient was calculated using three criteria to assess the severity of nausea and vomiting during pregnancy. The PUQE score is calculated by adding the values of each criterion, and can range from a minimum of 1 to a maximum of 15 (Sasela, n.d.).

According to the researcher's assumptions, with the results of the Wilcoxon test research, a significant value (α) was obtained, namely 0.003, where <0.05 indicates that Ho will be rejected and Ha will be accepted. Finally, from the Wilcoxon results, it can be seen that the post-test results of the respondents were greater than the pre-test scores. Based on the analysis, it can be concluded that drinking ginger drink can reduce emesis gravidarum in pregnant women in the first trimester.

4. Conclusion

After the research was carried out, a conclusion can be drawn, namely the Quantification of the emesis scale (PUQE-24) before giving ginger drink to pregnant women in the 1st trimester, namely in the pregnant women with moderate emesis garvidarum group with 8 respondents (80%), the group of pregnant women with mild emesis 1 respondents (10%) and the group of pregnant women with severe emesis 1 respondent (10.0%). Quantification of emesis scale (PUQE-24) after being given ginger tea to pregnant women in the 1st trimester, namely to pregnant women with mild emesis group with 7 respondents (70%), pregnant women with moderate emesis group with 2 respondents (20%) and pregnant women group with no emesis 1 respondent (10%). There is an effect after consuming ginger

drink to reduce emesis gravidarum in pregnant women in the 1st trimester at the Fina Sembiring Clinic, Medan. This is the same as the results of the statistical test (Wilcoxon) with the measurement model before and after the ginger drink intervention was given, the Asymp value was obtained. Sig(2-tailed) 0.003, this value is smaller than the alpha (a) value of 0.05. So it can be concluded that there is a significant effect before and after consuming ginger drink to reduce emesis gravidarum in pregnant women in the first trimester. The implication of this research is that this literature review has implications for reducing the incidence of nausea and vomiting experienced by pregnant women in the first trimester of their pregnancy which is realized through the role of health workers, especially midwives. Midwives can provide promotive and preventive-based care to provide information and educate mothers regarding the effect of ginger as a herbal medicine in reducing the frequency of nausea and vomiting in first trimester pregnant women. Theoretical implications for health workers, especially midwives, to be able to provide information, education and holistic care for pregnant women to be able to use ginger to reduce nausea and vomiting in first trimester pregnant women while still paying attention to the dosage and contraindications. The community, especially pregnant women in the first trimester, is expected to take advantage of herbal medicine, namely ginger as one alternative non-pharmacological therapy to prevent and treat nausea and vomiting in pregnancy. With consumption not exceeding 4 grams per day, pay attention to contraindications and avoid factors that trigger nausea and vomiting. In this research, this is a limitation in conducting research namely, the distance between each respondent's house and the researcher was far so it took quite a long time to administer ginger aromatherapy. It is hoped that practical recommendations from this research can be used as additional study material implementation insights related to the Effects of Ginger Drinks To Reduce Emesis Gravidarum Trimester Pregnant Women and expected results for health workers especially midwives so they can apply the results of this research to mothers pregnant women who experience nausea and vomiting. Respondents and their families can apply herbal treatment suitable for symptoms of nausea, vomiting, one of them such as ginger drink to reduce it symptoms of nausea and vomiting. Future researchers will be able to continue this research with methods which is more applicable and the type of ginger preparation which is used like ginger candy or ginger powder so that ginger can become alternative to reduce symptoms of nausea vomiting with various types of preparations. In this research it is limitations in conducting research are pregnant women's refusal to intervene given because of concerns about the intervention can endanger the safety of the fetus. Researchers also experience difficulties in find the address of pregnant women in the 1st trimester because Community Health Centers and Midwife Practices are not include complete data. Besides Therefore, the first trimester of pregnancy is still not visible as a pregnant woman due to physical changes It's not that big of a deal. Researchers cannot saw that all respondents drank ginger regularly direct. Some respondents were difficult to find because of work reasons so they drink ginger earlier than the specified time set. Another problem is that respondents do not cooperative and feel uncomfortable with time research that tends to be long.

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