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EFFECTIVENESS OF GIVING GINGER CANDY TO PREGNANT WOMEN WITH HYPEREMESIS GRAVIDARUM IN THE FIRST TRIMESTER AT THE BONTONOMPO II GOWA COMMUNITY HEALTH CENTER

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Abstract
Background: Excessive nausea and vomiting during pregnancy is known as hyperemesis gravidarum. Because the intensity of the vomiting is higher than that of morning sickness, which happens early in pregnancy, this nausea and vomiting can be harmful for expectant mothers. Early pregnancy symptoms like nausea and vomiting are normal, but if they worsen, they can lead to hyperemesis gravidarum, which can result in acidoketosis and dehydration. An herbal remedy for nausea and vomiting has long been recognized to be ginger. Giving pregnant women ginger candies helps lower their incidence of nausea and vomiting throughout the first trimester of their pregnancy. **Objective:** to determine whether ginger candies can effectively prevent nausea and vomiting in expectant mothers who suffer from hyperemesis gravidarum. **Methods**: One Group Pretest Posttest design using the quasi-experimental research approach was employed in this study. Thirty pregnant women experiencing nausea and vomiting in the first trimester (0–12 weeks) made up the study's sample. **Result**: The average value before receiving ginger candy was 15.50, whereas the average value after receiving the medication was 0.00, according to the study's findings. As a result, pregnant women experiencing hyperemesis gravidarum in the first trimester find that administering ginger candies helps a lot. **Conclusion**: it is quite effective to provide ginger candies to pregnant women who have hyperemesis gravidarum in the first trimester

Introduction

The beginnings of “hyperemesis gravidarum” are hard to track down because, during the course of medical history, both the term and our understanding of the illness process have undergone significant change. Although reports of maternal deaths from symptoms now thought to be caused by hyperemesis date back as far as religious documentation, historical medical literature credits Antoine Dubois, a consultant surgeon and head

obstetrician to Napoleon Bonaparte and his second wife Empress Marie Louise, as the physician who first identified the condition in 1852. It's said Dubois first brought up the sickness during his address to the French Academy of Medicine, where he talked about the finding of "pernicious vomiting of pregnancy" (1).

Seventy to eighty percent of pregnant women experience nausea and vomiting at some point throughout their pregnancy. While the majority of women who have nausea and vomiting during pregnancy (NVP) only experience symptoms during the first trimester, a tiny minority experience symptoms that last until delivery. Hyperemesis Gravidarum (HG), a condition different from NVP that can result in significant morbidity to the two of them mother and the developing embryo if treatment is not received, is a possibility for pregnant women experiencing extreme nausea and vomiting (2). Non-pharmacological or complementary therapies, such as the use of readily available herbal or traditional plants like ginger, peppermint leaves, lemon, etc., can be used to treat nausea and vomiting.

Giving pregnant women ginger candies helps lower their incidence Experiencing vomiting and nausea during the first trimester of their pregnancy. In addition to endangering the lives of expectant mothers, the causes of nausea and vomiting in excess pregnancy, also known as hyperemesis gravidarum, can have negative effects on the fetus, including abortion, low birth weight babies, early birth, and malphorasis in newborns. Throughout her pregnancy, the mother will go through physiological and psychological changes that are largely caused by the action of hormones, namely an increase in the hormones progesterone and estrogen. Pregnant women will experience a range of physiological (3). This study aims to determine whether delivering ginger candies to pregnant patients at the Bontonompo II Gowa Community Health Center in 2021 who have hyperemesis gravidarum in the first trimester is useful.

Materials and Methods

This study used a quasi-experimental approach with a pretest-posttest design for a single group. In this design, the sample is given an initial pretest (also known as an initial test) prior to receiving the treatment, and a posttest (also known as a final test) following the trial. Thirty first-trimester pregnant women, or all those who satisfied the requirements to be a respondent, were included in the samples. These women had normal (+) nausea and vomiting (less than ten times per day) and were not on anti-inflammatory medication. vomiting, no history of abortion, no problems. To analyze the data, the t-dependent statistical test was used (4).

The process of choosing a population to be able to represent the population is known as the sampling technique. Purposive sampling, a method for selecting samples with specific considerations or special selection, is the sampling methodology used in this study. The obtained samples satisfied the inclusion and exclusion requirements (5).

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An observation sheet for giving ginger candy and a Pregnancy Unique Quantification of Emesis and Nausea (PUQE-24) questionnaire sheet, which is a scoring system for gauging the severity of pregnancy nausea and vomiting in 24 hours, are the measuring tools/instruments used in this study as one method of gathering data. The PUQE-24 score was assessed twice: four days after ingesting ginger candy and before to providing it (6).

Results

Experimental study was conducted from May 18, 2022, until July 17, 2022. Thirty persons made up the sample for this study, which included all pregnant women in the Bontonompo II Gowa Community Health Center Working Area who had Hyperemesis Gravidarum. One intervention group was employed in this investigation. Ginger candies were used as an intervention. Using an observation sheet, research on the frequency of nausea and vomiting was conducted both before (pretest) and after (posttest) the intervention.

Table 1. Characteristics of Respondent

Characteristics	n	%
Age		
19 – 25 years	15	50.0
26 – 30 years	15	50.0
Education		
SD	2	6.7
SMP	4	13.3
SMA	16	53.3
D3	8	26.7
Job		
Housewives	21	70.0
Honorary	9	30.0
Total	**30**	**100.0**

Table 1 shows that most of the samples had the highest level of education, namely high school as many as 16 samples (53.3%) and the lowest education was elementary school as many as 2 samples (6.7%). The job characteristics of the majority as housewives are 21 samples (70%)

Table 2. Effect Giving Ginger Candy to Pregnant Women with Hyperemesis Gravidarum First Trimester in the Bontonompo II Gowa Health Center Area

Variable	N	Mean Rank	Sig (p)	Nilai α
Pre-Test	30	15.50	0.000	≤ 0,05
Post-Test		0.00		

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Table 2 demonstrates that the average value was 0.00 following therapy, compared to 15.50 prior to treatment. It is clear from these findings that the average value following therapy is lower than the average value prior to treatment. Based on the Wilcoxon test results, it was determined that the value $\rho = 0.000 < \alpha = 0.05$. Based on these findings, H0 was rejected, indicating that there was a reduction in emesis both before and after pregnant women with hyperemesis gravidarum in the first trimester were given ginger candy.

DISCUSSION

Given that ginger has the side effect of reducing nausea and vomiting, the research findings indicate that there was a decrease in hyperemesis following the administration of ginger candies. The rhizome of ginger contains oleoresin and 1%–4% essential oil (7). Zingiber officinale Roscoe, or ginger, is a widely used and ubiquitous spice. Among other chemical components, it is rich in phenolic compounds, terpenes, polysaccharides, lipids, organic acids, and unprocessed fibers. The health advantages of ginger are mostly attributed to the phenolic compounds, or gingerols and shogaols, that are present in it. Studies have indicated that ginger possesses a range of biological characteristics, including anti-inflammatory (8). Antiemetic can reduce morning sickness which can remove gas from the stomach so that it can relieve flatulence. Therefore, the compounds contained in ginger have been proven to have effective anti-vomiting activity so that pregnant women do not need to worry about endangering their pregnancy and fetus.

Based on the researchers' observations in the field of 30 respondents, 12 respondents didn't go through a significant decrease in the frequency of nausea and vomiting or were in the moderate hyperemesis gravidarum category. This is because the mother consumes too many foods that trigger nausea and vomiting such as cabbage, cucumber, jackfruit and foods that smell strong, are oily and contain coconut milk. The mother reasoned that she consumed this food because her cravings were too excessive so she couldn't avoid it despite the constant nausea and vomiting and lack of rest. These types of foods that produce gas in the stomach should be avoided by pregnant women. Because in pregnant women, stomach movements slow down to form gas, causing the stomach to feel bloated and irritate the stomach

This study is consistent with Anita et al.'s research (2020) According to the findings, all groups—consisting of 17 individuals—experienced vomiting three to five times a day before to the intervention. The ginger candy, placebo, and vitamin B6 groups did not differ from one another; however, following the intervention, there was a variation in the frequency of vomiting: 4 individuals in the ginger candy group (23.6%) experienced vomiting three to five times per day, whereas 16 individuals (94.1%) in the vitamin B6 group continued to experience vomiting. All participants in the placebo group, which consisted of 17 individuals (100%), continued to throw up five to three times a day (9). Three prospective clinical

studies and a total of 15 investigations were examined in terms of efficacy and safety. The results revealed a significant reduction in nausea and vomiting for 1 g of fresh ginger per day for 4 days, with no risk to the woman or her unborn child (10)

Conclusion

The study's findings indicate that the average value was 15.50 before ginger candy was provided, and it was 0.00 after the treatment. Given the effectiveness of administering ginger candy to expectant mothers experiencing hyperemesis gravidarum in the first trimester, it can be inferred that the average value following therapy is lower than the average value prior to treatment.

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