

The Effect of Consumption of Kepok Banana (*Musa Paradisiaca Formatipya*) on Reducing the Intensity of Nausea, Vomiting in 1st Trimester Gravida Women

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ABSTRACT

Background: Nausea and vomiting in early pregnancy is something that is normal for all pregnant women to experience as long as the intensity is not excessive. This has an impact on pregnant women and also the fetus, causing fluid, nutrition and weight loss.

Purpose: The aim of this study was to determine the effect of consuming Kepok bananas (*Musa Paradisiaca Formatipya*) on reducing the intensity of nausea and vomiting in women in first trimester gravida.

Methods: This study used a pre-experiment design with one group pre-post test in which pregnant women were given boiled kepok bananas for 40 minutes 3 times a day for 7 days. The population in this study was pregnant women in the first trimester who experienced nausea and vomiting. The sample size was 36 respondents. . The sampling technique uses random sampling. The independent variable is consumption of kepok bananas while the dependent variable is intensity of nausea and vomiting. This research uses a questionnaire with Wilcoxon test data analysis

Result: The results of the research showed that before being given Kepok bananas, the majority (75.0%) experienced moderate nausea and vomiting, as many as 27 respondents. After being given Banana Kepok, most of the 18 respondents (50.0%) did not experience nausea and vomiting. Based on the results of statistical tests, it is known that the p value is 0.000. Because the value of 0.000 is smaller than <0.05, it can be concluded that the "hypothesis is accepted" that there is an effect of giving Kepok bananas (*Musa Paradisiaca F*) on the intensity of nausea and vomiting in Gravida mothers in the first trimester.

Conclusion: Boiled kepok bananas have the highest vitamin B6 content, namely kepok bananas that are boiled for 40 minutes with vitamin levels (0.3646), so that vitamin B6 levels will reduce the intensity of nausea and vomiting.

Keywords: banana kapok, gravida, nausea and vomiting

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BACKGROUND

Pregnancy is a natural process, starting from the union of the egg and sperm cells until the fetus develops in the uterus (Paninsari et al., 2020). Pregnancy causes many changes in the mother's body, most of which are caused by hormonal influences, namely increased estrogen and progesterone hormones, which cause various discomforts in pregnant women, one of which is nausea, vomiting, or emesis gravidarum (Ratih & Qomariah, 2017).

Most pregnant women who experience nausea and vomiting only understand that it can only be managed with medication. Pregnant women who experience nausea and vomiting tend to avoid consuming fruit because they think it will worsen their nausea and vomiting. However, consuming fruit can be an alternative for managing nausea and vomiting in pregnant women. One recommended fruit is the kepok banana (Miftakhur Rohmah et al., 2017).

The World Health Organization (WHO) reports that the incidence of emesis gravidarum is at least 15% of all pregnant women in Indonesia. Emesis gravidarum occurs throughout the world with varying incidence rates, namely 1-3% of all Indonesian pregnancies, although the main factor causing maternal death in Indonesia is not emesis gravidarum but the incidence of emesis gravidarum is quite large (60-80%), in primigravida and (40-60%) in multigravida and one in 1000 pregnancies experiences more severe symptoms. Therefore, it is important for pregnant women to have antenatal visits during pregnancy to prevent pregnancy complications (Wiknjosastro, 2016). The percentage of high risk pregnant women with severe emesis gravidarum who were referred and received further health services was 20.44%. The province with the highest percentage was East Java province 96.53% (East Java Health Office 2020).

Based on preliminary data studies carried out on May 5 2023 at Posyandu, Gelaman village, Arjasa sub-district, Sumenep district, the results showed that 12 of the pregnant women had nausea and vomiting in the first trimester of gravida. Based on the results of the interview, it was found that 10 pregnant women experienced nausea, vomiting and only consume watermelon to overcome nausea and vomiting and they do not know the efforts made by mothers to overcome nausea and vomiting by using kepok bananas, usually they massage the neck when nausea and vomiting appear and kepok bananas are the newest method for prevents nausea and vomiting. Meanwhile, 3 people already know how to deal with nausea and vomiting by using kepok bananas.

Nausea This dangerous vomiting is differentiated from normal morning sickness which is commonly experienced by pregnant women because its intensity exceeds normal vomiting and lasts during the first trimester of pregnancy. Due to ketonemia, weight loss and lack of fluids in the body, excessive nausea and vomiting can occur every trimester, usually begins in the first trimester and persists throughout pregnancy with varying degrees of severity. The main cause is not yet known but is likely a combination of hormonal changes and psychological factors (Khairani & Putri, 2022).

PURPOSE

The general aim of this research is to determine the effect of consuming kepok bananas (*Musa paradisiaca formatipyca*) on reducing the intensity of nausea and vomiting in 1st trimester gravida mothers in Sumenep Regency.

METHODS

The research design used in this study was a pre-experimental design with a one-group pre-post test approach. The population in this study were all first-trimester gravid mothers who experienced nausea and vomiting with a sample size of 36 respondents. The sampling technique used was simple random sampling. The dependent variable in this study was the intensity of nausea and vomiting. Meanwhile, the independent variable in this study was the consumption of

Kepok bananas, given three times a day for 7 days in the form of a decoction for 40 minutes.

Measurements of nausea and vomiting before and after being given Kapok bananas using the Pregnancy Unique Quantification of Emesis and Nausea (PUQE) sheet were carried out daily. Before being implemented, this research had undergone ethical clearance testing and was declared appropriate by the health research ethics committee.

RESULTS

Table 1. Respondent Characteristics

Research Results	Frequency	Percent (%)
Age		
<20 years	3	8,3
20-35 years old	33	91,7
Education		
SD	5	13.9
SMP	11	30.6
SMA	14	38.9
College	6	16.7
work		
Private	1	2.8
wiraswasta	6	16.7
Housewives	29	80.6
History of Hamialan		
primigravida	23	63.9
multigravida	13	36.1

Table 2. Characteristics of variables before consuming Kepok bananas

Intensity of nausea and vomiting	Frequency	Percent
Light	6	16,7%
currently	27	75,0%
Heavy	3	8,3%
Total	36	100%

Based on table 2 interpreted that the majority (75.0%) experienced moderate nausea and vomiting, namely 27 respondents out of 36 respondents.

Table 3. Characteristics of variables after consuming Kepok bananas

Intensity of nausea and vomiting	Frequency	Percent
Normal	18	50.0%
Light	16	44.4%

currently	2	5.6%
Total	36	100%

Based on table 3, it is interpreted that the majority (50%) do not experience nausea and vomiting, namely 18 respondents out of 36 respondents.

Table 4. Cross Tabulation Between Variables

		after				Total
		normal	light	currently		
after	light	Count	5	1	0	6
		% of Total	13.9%	2.8%	.0%	16.7%
	currentl y	Count	11	15	1	27
		% of Total	30.6%	41.7%	2.8%	75.0%
	Heavy	Count	2	0	1	3
		% of Total	5.6%	.0%	2.8%	8.3%
Total	Count	18	16	2	36	
	% of Total	50.0%	44.4%	5.6%	100.0%	

Based on table 4, it can be explained that pregnant women in the first trimester before being given Banana Kepok experienced severe nausea and vomiting in 3 respondents (8.3%) and moderate nausea and vomiting in 27 respondents (75.0%) and mild nausea and vomiting in 6 respondents (16.7%) and after being given Banana Kepok most of the 18 respondents (50.0%) had no nausea and vomiting and mild nausea and vomiting were 16 respondents (44.4%) and moderate nausea and vomiting were 2 respondents (5.6%).

RESULTS

Table 5. Statistical test

Statistical Test	BEFORE-AFTER
Z	-5.258A
Asymp. Sig. (2-tailed)	.000

Based on the results of statistical tests using the Wilcoxon test, it is interpreted that the p-value < 0.000 < 0.05 so that H0 is rejected and H1 is accepted, meaning that there is a significant reduction in nausea and vomiting between before and after being given Kepok bananas. This can be concluded. that there is an effect of giving kepok bananas (*Musa Paradisiaca* Formatypica) on reducing the intensity of nausea and vomiting in gravida mothers.

DISCUSSION**Intensity of Nausea and Vomiting Before Being Given Banana Kepok (*Musa Paradisiaca* *Formatypica*) in Gravida mothers in the first trimester**

Nausea and vomiting in pregnancy, or what is often referred to as morning sickness, is a common condition experienced by many pregnant women, especially in the first trimester. Pregnant women with severe nausea: a very severe condition where pregnant women experience prolonged nausea and vomiting and may experience difficulties. eating and drinking, and experiencing weight loss, dehydration and electrolyte balance. Pregnant Women with Moderate Nausea: May feel nauseous all day with occasional vomiting, but can still consume limited amounts of food and fluids, Pregnant Women with Mild Nausea: Feel a little nauseous but can still carry out normal activities and consume food and drinks as usual.

The results of this research were carried out in Gelaman Village regarding nausea and vomiting in first trimester Gravida mothers, as many as 27 respondents (75.0%) before being given Banana Kepok experienced nausea and vomiting. Moderate conditions may feel nauseous all day with occasional vomiting, but can still consume food and fluid in limited quantities. Based on research(Dewi, 2020)Nausea, vomiting is one of the earliest, most common and most stressful symptoms associated with pregnancy. Most pregnant women who experience nausea and vomiting will experience changes in the hormones progesterone and estrogen in the body which increase. that's what causes morning sickness in the first trimester of pregnancy.

In research (Ratih, 2018)regarding the vitamin B6 content in kepok bananas, an alternative for treating nausea and vomiting in pregnant women, it shows that kepok bananas boiled for 40 minutes contain vitamin B6 of 0.3646 mg/ml which can be recommended to reduce nausea and vomiting in pregnant women.

In research (Rosmadewi & RudiYanti, 2019)nausea and vomiting in pregnancy is generally called emesis gravidarum, experienced by around 70-80% of pregnant women and is a phenomenon that often occurs at 5-12 weeks of gestation. As many as 66% of pregnant women in the first trimester experience nausea and symptoms that often occur in 60-80% of primigravidas and 40-60% of multigravidas, but around 12% of pregnant women still experience nausea and vomiting up to nine months of pregnancy, 50-90% of women Pregnant women experience nausea in the first trimester and around 25% of pregnant women experience nausea and vomiting problems and need time to rest from work.

The research results based on age were found to be (92%) aged 20-35 years, namely 33 respondents out of 36 respondents. Age is the length of time lived or existed (since birth or birth). In the healthy reproductive period, it is known that the safe age for pregnancy and childbirth is 20 years to 35 years.

The research results based on education showed that (45%) had secondary or high school education, namely 14 respondents out of 36 respondents. This is because the majority of respondents have a housewife background, education provides certain values for humans in opening their minds to accept new things and think naturally. (Rosmadewi & RudiYanti, 2019) The research results based on occupation found that (73%) were housewives, namely 29 respondents out of 36 respondents. work, namely the respondent carries out activities at home or elsewhere on a regular or periodic basis with the aim of earning money. In connection with the condition of pregnancy in women who work, it is not recommended if the physical load of the work is quite heavy, as well as if the effects of stress due to the workload are also not recommended.

The research results based on pregnancy history were obtained (64%) with a history of pregnancy with primigravida, namely 23 respondents out of 36 respondents. Primigravida mothers have not been able to adapt to changes in chorionic gonadotropin, this causes mothers who are pregnant for the first time to experience hyperemesis gravidarum more often (Qonita

Fauziah et al., 2019).

According to the researcher's opinion, the results of the study can be concluded that before being given Kepok bananas, the majority of respondents, 27 (75.0%) experienced moderate nausea and vomiting with the condition that they may feel nauseous throughout the day with occasional vomiting, but can still consume limited amounts of food and fluids. And according to researchers, all characteristics of respondents do not influence the intensity of nausea and vomiting in pregnant women in the first trimester.

Intensity of Nausea and Vomiting After Being Given Banana Kepok (*Musa Paradisiaca* Formatypica) to Gravida Mothers in the first trimester

At the stages and process of the research journey, the researcher looked for respondents, then researched the purpose and method of consuming Kepok bananas and asked for the respondent's consent. Then, the pre-test was measured using the PUQE questionnaire, then respondents consumed kepok bananas that had been boiled for 40 minutes 3 times a day. The next day the post-test was measured again until day 7.

The results of the research above show that 27 (75.0%) of pregnant women (50.0%) experienced moderate nausea and vomiting before being given kepok bananas, but 18 respondents (50.0%) after being given kepok bananas were able to carry out normal activities and eat food. as well as drinks as usual. Based on this research, consuming kepok bananas has the power to reduce the intensity of nausea and vomiting.

Emesis gravidarum or morning sickness is a term used in the medical world which means nausea and vomiting. Factors that cause emesis gravidarum include hormonal changes in the body during pregnancy, namely increased estrogen and hCG (human chorionic gonadotrophin). hCG is a hormone produced by the placenta during pregnancy in the body of pregnant women, apart from psychological factors such as feelings of anxiety, guilt, including the support given by the husband to the mother, social environmental factors, culture and economic conditions (Rinata & Ardillah, 2017).

Consuming kepok bananas which contain flavonoids and vitamin B6 which can treat pregnancy nausea and vomiting, vitamin B6 or folic acid which is soluble in water. The pyrodoxine or B6 content can neutralize nausea and vomiting because it converts protein into amino acids needed by the body besides bananas as a source of energy because the perodox content in bananas converts carbohydrates into energy, B6 in bananas can neutralize stomach acid and improve and improve the digestive system.

(Ratih, 2018) This research is the same, namely regarding the effectiveness of consuming kepok bananas against first trimester emesis gravidarum in Kampar Regency, showing a value of $p=0.04$, which is a smaller result than ($\alpha=0.05$), thus it can be concluded that there is a significant effect From the consumption of kepok bananas to emesis gravidarum in the first trimester in Kampar Regency, the average reduction in emesis gravidarum before was 0.50 and after 0.23 after consuming.

According to the researcher's opinion, the results of this study, the intervention provided by the researcher was the consumption of kepok bananas (*Musa paradisiaca* Formatypica), namely by using a pre-test-post test, pregnant women were given boiled kepok bananas for 40 minutes, consumed 3 times a day for 7 days. After being given Kepok bananas, respondents were assessed the next day and reported a decrease in the intensity of normal nausea and vomiting. So the researchers think that after being given Kepok bananas, the intensity of moderate nausea and vomiting can be reduced to normal nausea and vomiting.

The effect of giving kepok bananas (*Musa Paradisiaca* Formatypica) on reducing the intensity of nausea and vomiting in gravida mothers in the first trimester

At the stages and process of the research journey, the researcher looked for respondents, then researched the purpose and method of consuming Kepok bananas and asked for the

respondent's consent. Then, the pre-test was measured using the PUQE questionnaire, then respondents consumed kepok bananas that had been boiled for 40 minutes 3 times a day. The next day the post-test was measured again until day 7 based on the results of this research regarding the effect of giving kepok bananas (*Musa Paradisiaca Formatypica*) on reducing the intensity of nausea and vomiting in gravida mothers in the first trimester in Gelaman Village, Arjasa District, Sumenep Regency, based on the results of statistical tests using the Wilcoxon test, it was found that the $p\text{-value} < 0.000 < 0.05$ so H_0 is rejected and H_1 is accepted, meaning there is a significant reduction in nausea and vomiting between before and after being given Kepok bananas.

The results of this research are in line with research conducted by (Paninsari et al., 2020) namely the results of the Wilcoxon test before (pre test) and after (post test) giving kepok bananas to all respondents with a Z value = -5.477^b and p-value = 0.000 indicates that in pregnant women who experience nausea and vomiting, giving Kepok bananas is 100% effective in reducing nausea and vomiting in pregnant women.

According to (Mathematics, 2016) the tolerance of consuming kepok bananas as an alternative in reducing the frequency of emesis gravidarum is around 30-60 minutes, but it is better to consume them on time even though it does not affect the process of decreasing the frequency of emesis gravidarum. In fact, bananas have many benefits and are good for health, apart from being cheap and what we often encounter, it turns out that the carbohydrate content of Kepok bananas is a medium level complex carbohydrate which is available gradually so that it can provide energy in a short time (Ratih, 2018).

In this study, the number of samples in this study was 36 pregnant women in the first trimester in Gelaman village, Arjasa subdistrict, Sumenep district. It was also found that most of the intensity of nausea and vomiting after consuming Kepok bananas decreased. Before consuming Kepok bananas, there were 27 respondents who experienced moderate nausea and vomiting, but after being given Kepok bananas, moderate nausea and vomiting decreased to 18 respondents experiencing normal nausea and vomiting.

In the opinion of researchers, there is an influence of consumption of kepok bananas (*Musa paradisiaca formatypica*) on reducing nausea and vomiting in first trimester gravid mothers in Gelaman village, Arjasa subdistrict, Sumenep district. In this study, the consumption of kepok bananas by pregnant women is true among pregnant women. In our study, giving kepok bananas to first trimester pregnant women who experienced nausea and vomiting showed significant results in reducing the intensity. Vitamin B6 contained in kepok bananas plays an important role in reducing nausea, while potassium and fiber help improve fluid balance and digestive health.

This makes kepok bananas an effective and safe natural alternative for treating nausea and vomiting in early pregnancy.

CONCLUSION

1. Intensity of nausea and vomiting before being given Kepok banana (*Musa Paradisiaca Formatypica*) to 1st trimester Gravida mothers in Gelaman Village, Arjasa District, Sumenep Regency. The majority (75.0%) experienced moderate nausea and vomiting, namely 27 respondents.
2. Intensity of nausea and vomiting after being given Kepok bananas (*Musa Paradisiaca Formatypica*) to Gravida mothers in the 1st trimester in Gelaman Village, Arjasa District, Sumenep Regency. The majority (50%) did not experience nausea and vomiting, namely 18 respondents out of 36 respondents.
3. There is an effect of consuming Kepok bananas (*Musa Paradisiaca Formatypica*) on reducing the intensity of nausea and vomiting for pregnant women in the first trimester in Gelaman Village, Arjasa District, Sumenep Regency.

REFERENCES

- Dewi, R. (2020). Efektivitas pemberian pisang kepok (*Musa paradisiaca formatipyca*) dan vitamin B 6 dalam menurunkan intensitas emesis gravidarum pada ibu hamil Effectiveness the giving of Kepok banana (*Musa paradisiaca formatipyca*) and vitamin B6 in reducing the intensity. *Jurnal Sago Gizi Dan Kesehatan*, 1, 180–184. <http://dx.doi.org/10.30867/sago.v1i2.413>.
- Khairani, & Putri, M. (2022). Efektivitas Pemberian Pisang Ambon (*Musa Paradisiacal*) Dengan Vitamin B6 Dalam Menurunkan Intensitas Mual Muntah Pada Ibu Hamil Tm 1 Di Klinik Lina Hinai Kiri Kec. Secanggang. *Jurnal Ilmiah Kebidanan Imelda*, 8(2), 61–65. <https://doi.org/10.52943/jikebi.v8i2.1096>.
- Mathematics, A. (2016). *Penatalaksanaan Penunjang Vomitus*. 1–23.
- Miftakhur Rohmah dkk. (2017). pengaruh konsumsi pisang ambon (*musa paradisiaca.l*) terhadap penurunan intensitas mual muntah pada ibu hamil trimester I. <https://Media.Neliti.Com/Media/Publications/268133-the-Influence-of-Consumption-of-Ambon-Ba-E30850fb.Pdf>.
- Paninsari, D., Buulolo, K., Lubis, L. M., Riskawati, M., & Panjiatan, M. B. (2020). Efektivitas Pisang Kepok Terhadap Emesis Gravidarum Trimester I. *Jurnal Penelitian Perawat Profesional*, 2(4), 393–398. <http://jurnal.globalhealthsciencegroup.com/index.php/JPPP/article/download/83/65>.
- Qonita Fauziah, Puji Astuti Wiratmo, & Aan Sutandi. (2019). Hubungan Status Gravida Terhadap Tingkat Keparahan Mual Dan Muntah Pada Ibu Hamil. *Binawan Student Journal*, 1(3), 160–166. <https://doi.org/10.54771/bsj.v1i3.81>.
- Ratih, R. H. (2018). The Vitamin B6 Content of Kepok Banana: an Alternative to Overcome Nausea for Pregnant Women. *Jurnal Kesehatan Komunitas*, 3(5), 193–195. <https://doi.org/10.25311/keskom.vol3.iss5.166>.
- Ratih, R. H., & Qomariah, S. (2017). Terhadap Emesis Gravidarum Trimester I. *Lp2M- Umri*, 2, 31–34.
- Rinata, E., & Ardillah, F. R. (2017). Penanganan Emesis Gravidarum pada Ibu Hamil di BPM Nunik Kustantinna Tulangan-Sidoarjo. *Program Studi Diploma III Kebidanan, Fakultas Ilmu Kesehatan*, 1–8. <http://eprints.umsida.ac.id/265/>.
- Rosmadewi, & RudiYanti, N. (2019). Hubungan Usia, Paritas, Pekerjaan dan Stress Dengan Emesis Gravidarum Di Kota Bandar Lampung. *Jurnal Ilmiah Keperawatan Sai Betik*, 15(1), 7–18.
- Wiknjosastro, H. (2016). *Ilmu Kebidanan* (4th ed.). PT. Bina Pustaka Sarwono Prawirohardjo.