



The Effect of Giving Salak Fruit Powder Brewing (*Salacca duma-trana*) to Reduce Nausea and Vomiting in Pregnant Women

Izmi Fadhilah Nasution^{1*}, Hafni Nur Insan¹, Rini Amalia Batubara¹

¹Universitas Aupa Royhan, Indonesia

Abstract

Nausea and vomiting in pregnancy is a common condition in pregnancy, 80% of pregnant women experience symptoms of nausea and vomiting ranging from mild to severe. This study aims to determine how to overcome nausea and vomiting non-pharmacologically by using the local wisdom of Padangsidempuan City, consuming snake fruit. Snake fruit also contains flavonoids which are useful for increasing bile production and neutralizing digestive fluids which can reduce nausea and vomiting in pregnant women. The quantitative research design uses the paired sample test. Sampling with a total sampling technique of 50. The study was conducted at the Sadabuan Health Center, Padangsidempuan City in 2024. The results of the study showed that there was no difference in the average nausea in pregnant women for the pre-test control group with the post-test control group. There was no difference in the average vomiting in pregnant women for the pre-test control group with the post-test control group ($p = 0.627 > 0.005$). There was a difference in the average nausea in pregnant women for the pre-test experimental group with the post-test experimental group ($p = 0.000 < 0.005$). There was a difference in the average vomiting in pregnant women for the pre-test experimental group with the post-test experimental group ($p = 0.000 < 0.005$). The conclusion is that there is an effect of giving snake fruit powder in reducing nausea and vomiting in the experimental group.

Keywords

salak fruit powder; nausea, vomiting; pregnant women

***Corresponding Author:** Izmi Fadhilah Nasution (E-mail: nasutionizmi@gmail.com)

Introduction

If nausea and vomiting occur Keep going continuously can cause dehydration and hypokalemia consequence vomiting and excretion the next excess increase frequency vomiting and damaging liver, membrane mucus stomach, so that can happen bleeding channel digestion (Čepková, 2021). Hyperemesis gravidarum requires take care stay, okay with category mild, moderate, severe (Beirne, 2023). Nausea vomiting in pregnancy influence quality life Mother pregnant , if No handled can cause significant morbidity to the mother and fetus (Schmatz, 2020).

Method

Approach study This with design method quantitative , using design quasi pre-post experiment with control design. In this research This writer use total sampling technique that uses all over member its population Because member population relatively small (Heckathorn, 2022). Sample size determined based on objective research , type measurement of data that will be processed in the analysis. Data collection : Using Instrument Pregnancy Unique-Quantification of Emesis (PUQE) questionnaire (Ellilä, 2020). Data analysis in study This done with do analysis univariate For know distribution frequency sample and bivariate analysis for see connection between variables , using the paired sample test is used For know whether there is the difference in the average of two paired samples , is a parametric test with conditions for normally distributed data.

Results and Discussion

Result data study obtained No There is difference average nausea in mother pregnant for group pre-test control with post test group control ($p=0.083>0.005$). There is no difference average vomiting in mother pregnant for group pre-test control with post test group control ($p=0.627>0.005$). There is a dif-

ference average nausea in mother pregnant for group pre-test experiment with post test group experiment ($p=0.000<0.005$). There is a difference average vomiting in mother pregnant for group pre-test experiment with post test group experiment ($p=0.000<0.005$).

Univariate Analysis

Univariate analysis is an analysis that aims to explain or describe the characteristics of each research variable.

Table 1. Characteristics of Research Samples Based on Age

Age (Years)	f	%
<20 and >35 years (risky)	18	36
20-35 years (no risk)	32	64
Total	50	100

Based on table 1 can known that almost all over age from sample are in the 20-35 year range that is as many as 32 people (64%).

Table 2. Characteristics of Research Samples Based on Employment Status

Employment Status	f	%
Work	24	48
Doesn't work	26	52
Total	50	100

Based on employment status Respondent part big Respondent No Work as many as 26 people (52%).

Bivariate Analysis

Using the paired sample test is used For know whether there is the difference in the average of two paired samples, is a parametric test with normally distributed data requirements. Based on the Kolmogorov-Smirnov normality test on 50 samples study known that Frequency Nausea and Vomiting in mothers pregnant For control group and group experiment normally distributed with

Table 3. Average Nausea and Vomiting in the Control Group and Experimental Group

Measurement	n	Mean ± SD
Nausea Pre-Test Control- Post-Test Control Nausea	25	8.56 ± 1.938 8.32 ± 1.865
Vomiting Pre-Test Control- Post-Test Control Vomiting	25	3.80 ± 1,000 3.88 ± 0.781
Nausea Pre-Test Experiment- Post-Test Experiment Nausea	25	8.00 ± 1.826 6.36 ± 1.800
Vomiting Pre-Test Experiment- Vomiting Pre-Test Experiment	25	3.80 ± 0.913 2.88 ± 0.927

Table 4. Differences in nausea and vomiting scores in pregnant women in the control group and experimental group

Measurement	F (n=25)	Nausea and Vom- iting Score		t	p
		Average	SD		
Nausea Pre-Test Control- Post-Test Control Nausea	25	0.24	0.663	1,809	0.083
Vomiting Pre-Test Control- Post-Test Control Vomiting	25	-0.080	0.812	-0.492	0.627
Nausea Pre-Test Experiment- Post-Test Experiment Nausea	25	1,640	1.221	6,718	0.000
Vomiting Pre-Test Experiment- Vomiting Pre-Test Experiment	25	0.9200.	0.759	6,0580,083	0.000

mark $p > 0.05$.

Result data research in table 4 obtained No There is difference average nausea in mother pregnant for group pre-test control with post test group control ($p = 0.083 > 0.005$). There is no difference average vomiting in mother pregnant for group pre-test control with post test group control ($p = 0.627 > 0.005$). There is a difference average nausea in mother pregnant for group pre-test experiment with post test group experiment ($p = 0.000 < 0.005$). There is a difference average vomiting in mother pregnant for group pre-test experiment with post test group experiment ($p = 0.000 < 0.005$).

Conclusion

Result data study obtained No There is difference average nausea in mother pregnant for group pre-test control with post test group

control ($p = 0.083 > 0.005$). There is no difference average vomiting in mother pregnant for group pre-test control with post test group control ($p = 0.627 > 0.005$). There is a difference average nausea in mother pregnant for group pre-test experiment with post test group experiment ($p = 0.000 < 0.005$). There is a difference average vomiting in mother pregnant for group pre-test experiment with post test group experiment ($p = 0.000 < 0.005$). Conclusion there is influence giving powder snakefruit in reduce nausea and vomiting in groups experiment .

References

Beirne, E. R., Andrews, L. B., Murtagh, L. P., Browne, S., Curran, S. B., & O'Brien, E. C. (2023). The far-reaching burden of Hyperemesis Gravidarum—an exploration of women's experiences and perceptions of healthcare support. *Wom-*

- en & Health*, 63(7), 485-494.
- Čepková, P. H., Jágr, M., Janovská, D., Dvořáček, V., Kozak, A. K., & Viehmannová, I. (2021). Comprehensive mass spectrometric analysis of snake fruit: Salak (*salacca zalacca*). *Journal of Food Quality*, 2021. <https://doi.org/10.1155/2021/6621811>
- Čepková, P. H., Jágr, M., Janovská, D., Dvořáček, V., Kozak, A. K., & Viehmannová, I. (2021). Comprehensive mass spectrometric analysis of snake fruit: Salak (*salacca zalacca*). *Journal of Food Quality*, 2021. <https://doi.org/10.1155/2021/6621811>
- Ellilä, P., Laitinen, L., Nurmi, M., Rautava, P., Koivisto, M., & Polo-Kantola, P. (2020). Nausea and vomiting of pregnancy: A study with pregnancy-unique quantification of emesis questionnaire. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 230, 60-67.
- Fauziah, N. A., Komalasari, K., & Sari, D. N. (2022). Faktor–Faktor yang Mempengaruhi Emesis Gravidarum pada Ibu Hamil Trimester I. *Majalah Kesehatan Indonesia*, 3(1), 13–18. <https://doi.org/10.47679/makein.202227>
- Fejzo, M. S., Trovik, J., Grooten, I. J., Sridharan, K., Roseboom, T. J., Vikanes, Å., Painter, R. C., & Mullin, P. M. (2019). Nausea and vomiting of pregnancy and hyperemesis gravidarum. *Nature Reviews Disease Primers*, 5(1). <https://doi.org/10.1038/s41572-019-0110-3>
- Gissane, C. (2022). Is the data normally distributed?. *Physiotherapy Practice and Research*, 37(1), 57-60.
- Heckroth, M., Lockett, R. T., Moser, C., Parajuli, D., & Abell, T. L. (2021). Nausea and Vomiting in 2021: A Comprehensive Update. In *Journal of Clinical Gastroenterology* (Vol. 55, Issue 4, pp. 279–299). Lippincott Williams and Wilkins. <https://doi.org/10.1097/MCG.0000000000001485>
- Heckathorn, D. D. (2022). Respondent-driven sampling II: deriving valid population estimates from chain-referral samples of hidden populations. *Social problems*, 49(1), 11-34.
- Le Roux, I. M., Tomlinson, M., Harwood, J. M., O'Connor, M. J., Worthman, C. M., Mbewu, N., ... & Rotheram-Borus, M. J. (2013). Outcomes of home visits for pregnant mothers and their infants: a cluster randomized controlled trial. *Aids*, 27(9), 1461-1471.
- Lidwina Trieleventa Lumruan Sihombing. (2023). *lidwina.Vol.1,No.3,1–11*. <https://doi.org/DOI:https://doi.org/10.9841/jumkes.v1i3.31>
- Vita RudiYanti*, R. (2019). HUBUNGAN USIA. In *Jurnal Ilmiah Keperawatan Sai Betik* (Vol. 15, Issue1). <https://doi.org/DOI:10.26630/jkep.v15i1.1253>
- Nur Fajri, U., Nirmala Sari, D., Raya Kenteng Madukara, J. K., Banjarnegara, K., & Tengah, J. (n.d.). *Zalacca fruit consumption to reduce nausea and vomiting in trimester I pregnant women in Banjarnegara District*. [https://doi.org/10.21927/jnki.2020.9\(1\).11-15](https://doi.org/10.21927/jnki.2020.9(1).11-15)
- Paunno, M., Amiruddin, R., Masni, M., Ahmad, M., & Que, B. J. (2024). The Effect of “Moi Kintal”-Based Counselling on Husbands’ Knowledge and Actions, and Birth Outcomes: A Quasi-Experiment in Ambon, Indonesia. *Africa Journal of Nursing and Midwifery*, 26(2), 14-pages.
- Rahmawati, M., Sukarsih2, I., Mudlikah3, S., Rachmawati, A., & Kebidanan, P. (n.d.). Faktor Tingkat Pendidikan, Usia, Paritas, Status Pekerjaan dan Riwayat Emesis Gravidarum Mempengaruhi Terjadinya Emesis Gravidarum Pada Ibu Hamil Trimester I. *Indonesian Journal of Midwifery Today*, 2022(1). <https://doi.org/10.30587/ijmt.v2i1.4006>
- Regodón Wallin, A., Tielsch, J. M., Khatry, S. K., Mullany, L. C., Englund, J. A., Chu, H., Leclercq, S. C., & Katz, J. (2020). Nausea, vomiting and poor appetite during pregnancy and adverse birth outcomes in rural Nepal: An observational cohort study. *BMC Pregnancy*

- and Childbirth*, 20(1).
<https://doi.org/10.1186/s12884-020-03141-1>
- Reni, T. O. (2023). HUBUNGAN USIA IBU. In *JAIA* (Vol. 8, Issue 1). <https://doi.org/https://doi.org/10.33867/jaia.v8i1.381>
- Schmatz, M., Madan, J., Marino, T., & Davis, J. (2020). Maternal obesity: the interplay between inflammation, mother and fetus. *Journal of Perinatology*, 30(7), 441-446.
- Sefriani, R., Sepriana, R., Wijaya, I., & Radyuli, P. (2021). Blended Learning with Edmodo: The Effectiveness of Statistical Learning during the COVID-19 Pandemic. *International Journal of Evaluation and Research in Education*, 10(1), 293-299.