

## The Relationship Of Pregnant Women's Knowledge And The Incident Of Hyperemesis Gravidarum In The Atikah Sipolu-Polu Midwifery Clinic

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### ABSTRACT

Hyperemesis Gravidarum is one of the complications that often occurs in pregnancy. Hyperemesis Gravidarum in 2016 is 1.5-3% of all pregnant women. Most of the causes of maternal death are bleeding, 70-80% of pregnant women experience morning sickness and as many as (25.2%), infection (11.1%), sepsis (15%), hypertension in pregnancy (12%) and also other causes. (8%), for example anemia, malaria, heart disease, diabetes and hyperemesis gravidarum in 2016. The aim of this research is to analyze the relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum. This type of research is an analytical survey with a cross sectional approach. The sampling technique used Accidental Sampling, namely a sampling technique based on chance and 37 people were sampled. The tool used was a questionnaire with 20 statements. The variables used in this research are independent and dependent variables. The independent variables in this research are knowledge, age, occupation, parity, source of information and the dependent variable in this research is hyperemesis gravidarum. Data processing was done by editing, coding, tabulating, then tested using the Chi-Squer test. The data analysis used was univariate analysis of knowledge of pregnant women with the majority of hyperemesis gravidarum incidents being in the good category as many as respondents (18). The results of the Chi-Squer test showed a p-value of  $0.020 < 0.20$  so that  $H_0$  was rejected and  $H_a$  was accepted. This research shows the relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum at the Atikah midwife clinic, Panyabungan District, Mandailing Natal Regency.



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## INTRODUCTION

World Health Organization (WHO) the incidence of Hyperemesis Gravidarum is at least 15% of all pregnant women. Hyperemesis Gravidarum occurs throughout the world with an incidence of 1-3% of all pregnancies (WHO, 2016). Based on data from ASEAN (Association of South East Asia Nations) in 2017, it shows that maternal mortality in Indonesia still reached 305 per 100 thousand. This figure is three times higher than Indonesia's MDGs target, namely 102 per 100 thousand. This figure places Indonesia as the country with the highest death rate in Southeast Asia. For the first time in Laos with a death rate of 357 per 100 thousand (ASEAN, 2017).

Based on research results in Indonesia, the incidence of Hyperemesis Gravidarum in 2016 was 1.5-3% of all pregnant women. Most of the causes of maternal death are bleeding, 70-80% of pregnant women experience morning sickness and as many as (25.2%), infection (11.1%), sepsis (15%), hypertension in pregnancy (12%) and also other causes. (8%), for example Anemia, Malaria, Heart Disease, Diabetes and Hyperemesis Gravidarum, (Indonesian Health Profile 2016). In North Sumatra Province, K1 and K4 coverage in 2016 reached 90.57% and K4 coverage was 84.78%, while in 2015 K4 coverage in North Sumatra Province reached 75.50%. This means that there was an increase in K4

coverage in North Sumatra province in 2016 compared to 2015 (North Sumatra Health Profile, 2016). Pregnant women said that during this pregnancy they did not receive support from their husbands or in-laws because they already had more than 2 children, so this pregnancy was considered by their family to be normal because they had been pregnant before. 3 pregnant women said that this pregnancy was an unplanned pregnancy so they were not prepared to face this pregnancy. So I also faced this hyperemesis, and my husband and other families considered the problem of Hyperemesis Gravidarum to be a problem commonly faced by pregnant women.

## METHODS

### Research Techniques

This type of research uses an analytical survey method with a cross sectional approach regarding the relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum. This research was conducted in December 2021-February 2022. The population in this study was all pregnant women who experienced hyperemesis gravidarum at the Atikah Midwife Clinic from December to March 2022, totaling 37 people.

## RESULTS AND DISCUSSION

### Discussion of results

#### Univariate Analysis Results

This univariate analysis aims to describe each relationship between the variables studied. Namely looking at the relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum. Categorical data is Knowledge, Age, Parity, Occupation, Source of Information. Numerical data is looked for for the mean, median and standard deviation, namely:

**Table 1.** Frequency Distribution of Respondents Based on Knowledge about Hyperemesis Gravidarum at the Atikah Sipolu-polu Midwife Clinic, Panyabungan District, Mandailing Regency City, Natal 2022.

No	Knowledge	Frequency	Percentage (%)
1	Good	18	48.6
2	Enough	11	29.7
3	Not enough	8	21.6
	<b>Amount</b>	<b>37</b>	<b>100</b>

Based on table 1. the results of statistical tests show that the majority have Good Knowledge, 18 people (50.0%), while the minority is Poor Knowledge, 8 people (21.6%).

**Table 2.** Frequency Distribution of Respondents Based on Age at the Atikah Sipolu-polu Midwife Clinic, Panyabungan District, Mandailing Natal Regency, 2022.

No	Age	Frequency	Percentage (%)
1	Age < 20 Years	10	27.0
2	Age 21-35 Years	15	40.5
3	Age < 36 Years	12	32.4
	<b>Amount</b>	<b>37</b>	<b>100</b>

Based on table 2. above, from the results of statistical tests data is obtained that the majority are aged 21-35 years as many as 15 people (40.5%), while the minority is aged < 20 years, as many as 10 people (27.0%).

**Table 3.** Frequency Distribution of Respondents Based on Occupation at the Atikah Sipolu-polu Midwife Clinic, Panyabungan District, Mandailing Regency City, Christmas 2022

No	Work	Frequency	Percentage (%)
1	IRT	11	29.7
2	FARMER	19	51.4
3	Civil servants	7	18.9
<b>Amount</b>		<b>37</b>	<b>100</b>

Based on table 3. above, from the results of statistical tests, the data shows that the majority are 19 people (51.4%) as farmers, while the minority are 7 people (18.9%) as civil servants.

**Table 4.** Frequency Distribution of Respondents Based on Mother's Parity at the Atikah Sipolu-polu Bidaan Clinic, Panyabungan District, Mandailing City Natal District, 2022.

No	Parity	Frequency	Percentage (%)
1	Primipara	9	24.3
2	Multiparous	17	45.9
3	Scundipara	8	21.6
4	Grande multiparous	3	8.1
<b>Amount</b>		<b>37</b>	<b>100</b>

(Source: Primary Data, 2022)

Based on table 4. above, the results of statistical tests show that the majority of mothers are Multipara as many as 17 people (45.9%), while the minority are Grandemultipara as many as 3 people (8.1%).

**Table 5.** Frequency Distribution of Respondents Based on Information Sources About Hyperemesis Gravidarum, Panyabungan District, Mandailing Natal Regency, 2022.

No	Resources	Frequency	Percentage (%)
1	Mass media	5	13.5
2	Electronic	12	32.4
3	Health workers	15	40.5
4	Neighbor	5	13.5
<b>Amount</b>		<b>37</b>	<b>100</b>

(Source: Primary Data, 2022)

Based on table 5. above, the results of statistical tests show that the majority of information sources are based on health workers, 15 people (40.5%), while the minority is based on neighbors, 5 people (13.5%).

### Bivariate Analysis

This analysis was used to test whether there was a correlation or relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum at the Atikah Sipolu-polu Midwifery Clinic, Panyabungan District, Mandailing Natal Regency in 2022.

**Table 6.** Cross Tabulation of Knowledge of Pregnant Women with the Incident of Hyperemesis Gravidarum at the Atikah Sipolu-polu Midwife Clinic, Panyabungan District, Mandailing Natal Regency, 2022

		Knowledge of pregnant women regarding the incidence of hyperemesis Gravidarum								p-value
		Good		Enough		Not enough		Total		
		F	%	F	%	F	%	F	%	0.967
Age	< 20 Years	4	10.8	4	10.8	2	5.4	10	27.0	
	20-35 Years	12	32.4	1	2.7	2	5.4	15	40.5	
	>35 Years	2	5.4	6	16.2	4	10.8	12	32.4	
	Total	18	48.6	11	29.7	8	21.6	37	100	
Work	IRT	2	5.4	6	16.2	3	5.9	11	29.7	
	Farmer	14	37.8	3	8.1	2	5.4	19	51.4	
	Civil servants	5	5.4	2	5.4	3	8.1	7	18.9	
	Total	18	48.6	11	29.7	8	21.6	37	100	
Parity	Primipara	2	5.4	6	16.2	1	2.7	9	24.3	
	Multiparous	10	27.0	5	13.5	2	5.4	17	45.9	
	Scundipara	5	13.5	0	0.0	3	8.1	8	21.6	
	Grandemultiparous	1	2.7	0	0.0	2	5.4	3	8.1	
	Total	18	48.6	11	29.7	8	21.6	37	100	
Source Information	Mass media	3	24.3	1	2.7	1	2.7	5	13.5	
	Media electronic	9	5.9	1	2.7	2	5.4	12	32.4	
	Power health	3	8.1	9	2.7	3	8.1	15	40.5	
	Neighbors/people other	3	8.1	0	0.0	2	5.4	5	13.5	
	Total	18	48.6	11	29.7	8	21.6	37	100	

(Source: Primary Data, 2022)

Based on the results of data analysis using the chi-square test, a significance value of 0.020 was obtained. Based on this value, because the p value < 0.20, then  $0.000 < 0.967$ , it can be concluded that "Knowledge of Pregnant Women is Associated with the Incident of Hyperemesis Gravidarum"

Based on the research results, it was found that the incidence of Hyperemesis Gravidarum at the Atikah Sipolu-polu Midwife Clinic of 37 respondents had the highest result of having good knowledge of the incidence of Hyperemesis Gravidarum with a total of 18 people (48.6%). Meanwhile, the minority is less knowledgeable, as many as 8 people (21.6%). The knowledge covered in the cognitive domain has levels, namely knowing, understanding, application, analysis, synthesis and evaluation (Notoatmojo, 2017). From the research results, pregnant women's knowledge about

Hyperemesis Gravidarum is in the fourth level cognitive domain, so that maximizing knowledge requires the participation of health workers (doctors, midwives, nurses) in providing knowledge about Hyperemesis Gravidarum.

Hyperemesis Gravidarum is a symptom that often occurs in pregnancy, nausea usually occurs in the morning, but some occur at any time and at night. In this situation, sufferers suffer from nausea and vomiting more than 10 times in 24 hours, so that their daily work is disrupted and their general condition becomes worse. In general, Hyperemesis Gravidarum occurs in the 6-12th week of pregnancy, which can continue until the 16-20th week of the first trimester of pregnancy.

The results of research regarding the relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum at the Atikah Sipolu-polu Midwife Clinic with good knowledge were 18 people (48.6%), 11 people (29.7%) had sufficient knowledge. And 8 people (21.6%) lacked knowledge. One of the factors that caused this was 15 people aged 21-35 years (40.5%), 12 people aged <36 years (32.4%). And aged < 20 years were 10 people (27.0%). The literature states that mothers aged less than 20 years or more than 35 years more often experience Hyperemesis Gravidarum, where mothers aged less than 20 years are not yet mentally and psychologically ready to undergo pregnancy and aged more than 35 years is a risky age for pregnant women. The results of the correlation between the knowledge of pregnant women and the incidence of hyperemesis gravidarum using the chi square test show that there is a relationship between the knowledge of pregnant women and the incidence of hyperemesis gravidarum. The result is  $p\text{ value} = 0.967 < \alpha = 0.020$  with the conclusion that  $H_a$  is accepted and  $H_o$  is rejected, which means there is maternal knowledge. pregnant with the incidence of hyperemesis gravidarum at the Atikah Sipolu-polu Midwife Clinic, Panyabungan District, Mandailing Natal Regency, 2022. The results of this study are in line with the conclusions of Wa Janaria Rumbia's research (2017), namely that there is a relationship between pregnant women's knowledge of the incidence of hyperemesis gravidarum in the Puuwatu Kota Public Health Center Kendari in 2017.

## CONCLUSION

Based on the results and analysis of research on the relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum at the Atikah Si Polu-polu Midwife Clinic, Panyabungan District, Mandailing Natal Regency in 2022, conclusions can be drawn from the results of research on 37 respondents based on Knowledge at the Atikah Sipolu-polu Midwife Clinic. Panyabungan District, City of Mandailing Regency, Christmas in 2022, the majority are well knowledgeable, namely 18 people (48.6%). From the results of research on 37 respondents, a  $p\text{ value}$  of 0.967 with  $\alpha = 0.20$  was obtained, it can be concluded that there is a significant relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum.  $H_o$  is rejected and  $H_a$  is accepted, meaning there is a relationship between knowledge of pregnant women and the incidence of hyperemesis gravidarum at the Atikah Midwife Clinic, Sipoli-polu in 2022

## REFERENCE

- Anita, Magrifah. 2017. History of Hyperemesis Gravidarum on the Risk of Low Birth Weight Babies in Banda Aceh. *Idea Nursing Journal*. Date 12 October 2017. at 21.00 WIB.
- Choiriyah, Zumrotul., and Anggun Trisnasari. Effectiveness of Extract Consumption [pusnwu.web.id/karyailmiah/documents/165.pdf](http://pusnwu.web.id/karyailmiah/documents/165.pdf) (citation 20 November 2017 Ginger with Frequency of Nausea and Vomiting in Pregnant Women in the Working Area of the Ngaran Public Health Center in 2016 /<http://per>).
- JChittuma, yuyun. 2015. *Midwifery Care I Pregnancy*, Yogyakarta : Trans Media. Donsu, JDT (2017). *Nursing Research Methodology*, Yogyakarta; New library Press.
- Darniati 2017. The relationship between gravity and nutritional status with hyperemesis gravidarum in pregnant women at the Central Mawasangka Community Health Center, Central Mawasangka District, Central Buton Regency, Southeast Sulawesi Province, 2015 to 2016. Department of Midwifery. Kendari Health Polytechnic. Kendari 17.50 WIB
- Daianty, et al. 2014, *Pathological Midwifery Care*, Yogyakarta: Binarupa Literacy Ministry of Health of the Republic of Indonesia. Indonesian Health Profile 2015. Jakarta: Indonesian Ministry of Health; 2015.

North Sumatra Provincial Health Service. North Sumatra Health Profile 2015.

North Sumatra Provincial Health Service; 2016.

Evi, Firdayanti, Nadyah 2019. Management of Antenatal Care Midwifery Care for Mrs "S" with Level II Hyoperemesis Gravidarum at the TNI Hospital

*In Mrs "S" with Grade II Hyoperemesis Gravidarumat* the Jala Ammari Navy Hospital on May 27 - July 2018. Midwifery Journal.Vol 1 No 2 of 2019.

Elisabeth, et al. 2017, Midwifery Care I Pregnancy, Yogjakarta : Trans InfoMedia.

Fauziyatun, Siska 2019. Factors Associated with Hyperemesis Gravidarum in Pregnant Women at RB Zakat Surabaya. Midwifery Journal Embryo. Vol XI No. November 2, 2019.

Notoadmodjo.(2016). Health Research Methodology. Jakarta; PT. Rineka CiptaMedika.

Nugroho, et al. (2017). Care in Pregnancy .Yogyakarta; Nuha Medika

Triyana H 2018. Factors Associated with the Incident of Hyperemesis Gravidarum at Dr. Hospital. Drajat Prawiranegara Serang Regency 2017. Husada Karya Jaya Nursing Academy Journal, Volume 4, Number 1, March 2018. ISSN 2442- 501X Y

Wirawan. (2017). The Relationship between Pregnant Women's Attitudes towards Medium Level Hyperemesis Gravidarum in the Cassowary Room at Anutapura Hospital, Palu. Health Journal.Vol1,Np .

World Health Organization (WHO), (2019). Maternal mortality. Who