



The Relationship of Hyperemesis Gravidarum with Anemia in First Trimester Pregnant Women at the Midwife Clinic Yani Delitua in 2022

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ABSTRACT

Hyperemesis gravidarum is a complaint of nausea and vomiting that is categorized as severe if pregnant women always vomit every time they drink or eat. As a result, the body is very weak, the face is pale, and the frequency of urination decreases drastically, daily activities are disrupted and the general condition decreases. The purpose of this study was to determine Hyperemesis Gravidarum with Anemia in First Trimester Pregnant Women at the Midwifery Clinic Yani Delitua in 2022. This study is an analytical survey using an analytical approach. This research was cross sectional. This study was conducted at the Midwifery Clinic Yani Delitua in 2022 starting from January-May 2022. The population in this study were all pregnant women with TM I in April-May 2022 as many as 31 people. The sampling technique in this study was carried out by using the total population technique. The research sample was 31 people. The results were analyzed using univariate and bivariate analysis with the chi-square test. %) Anemia dari 31 respondents pregnant women with hyperemesis as many as 16 respondents (51.6%) and pregnant women with emesis as many as 15 respondents (15%)

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1. INTRODUCTION

Hyperemesis Gravidarum is excessive nausea and vomiting in pregnant women. Mothers with hyperemesis gravidarum will interfere with daily activities. Hyperemesis gravidarum can cause anemia in pregnancy due to lack of fluids. Anemia in pregnancy can cause bleeding.

According to 2015 World Health Organization (WHO) data, it is estimated that the Maternal Mortality Rate (MMR) due to complications during pregnancy decreased by almost 5% from an estimated 523,000 in 1990 to 289,000 in 2013. (AKI) is still said to be high because it is far below the achievement of the 2015 Millennium Development Goals (MDGs) (5.5%).

Nearly all of these deaths (99%) occurred in developing countries. The lowest maternal mortality rate is in Belarus at 1 per 100,000 live births while the highest death rate is in Sierra Leone at 1,100 per 100,000 live births.¹

In Indonesia, the mortality and morbidity rate in pregnant women is a big problem in developing countries such as Indonesia. It is estimated that 15% of pregnancies can experience high risk conditions and obstetric complications that can endanger the lives of the mother and fetus if not treated immediately.

According to the 2012 Indonesian Health Demographic Survey (IDHS), the MMR in Indonesia is still quite high, reaching 200 per 100,000 live births, while the target to be achieved in 2015 is 102 people per year to achieve this. The Ministry of Health (MOH) has developed a making pregnancy safer (MPS) program with planning, delivery and complication prevention programs.²

Based on the report from the Profile of the Health Office of North Sumatra Province in 2013 explained that more than 80% of pregnant women experience nausea and vomiting, while for pregnant women who experience hyperemesis gravidarum, about 5 out of 1000 pregnant women. This can cause women to avoid certain foods and usually carries risks to the fetus.⁴

Based on the Aceh Health Profile Data that the author obtained regarding IMR in Aceh Province, it is still high, reaching 30/1,000 live births (KH). For this reason, the Aceh Government continues to carry out efforts to reduce the number of Human Development Index (HDI) in the health sector.

This figure is actually much lower than the AKI, where based on the latest data in 2016, the number of MMR in Aceh is around 190/100,000 live births, and the number of maternal mothers is 100,486 people.

Hyperemesis gravidarum is a complaint of nausea and vomiting that is categorized as severe if pregnant women always vomit every time they drink or eat. As a result, the body is very weak, the face is pale, and the frequency of urination decreases drastically, daily activities are disrupted and the general condition decreases.

Excessive nausea and vomiting cause body fluids to decrease, so that the blood becomes thick and blood circulation to the tissues is delayed. If this happens, the consumption of O₂ and tissue food is also reduced. Lack of food and tissue O₂ will cause tissue damage that can affect the health of the mother and the development of the fetus she contains

The results of research by Octaviani Wiwik about the relationship between hyperemesis gravidarum and anemia in pregnancy in the first trimester regarding hyperemesis gravidarum based on work can be seen that the distribution of hyperemesis gravidarum in Muna District Hospital for the period of August - September 2013.

The majority of those who do not work are 21 respondents (70%) with less knowledge as many as 9 respondents and sufficient knowledge is 6 respondents (20%) with good knowledge 6 respondents (20%) and a minority of working mothers as much as 1 respondent (3.33%) with less knowledge. Based on the results of this study, it shows that there is a relationship between hyperemesis gravidarum and anemia in pregnancy

Based on Hertj Salome Umboh's research on the knowledge of pregnant women with hyperemesis gravidarum at the Ratna Medan clinic in 2012 as many as 30 respondents, namely the majority of them lacked knowledge as many as 19 respondents (63.3%), good knowledge as many as 8 respondents (26.7%), and minority knowledge enough as many as 3 respondents (10%).

The results of this study indicate that there are still (63.3%) mothers who have less knowledge about complications of hyperemesis gravidarum.⁷ What is the relationship between hyperemesis gravidarumanemia in first trimester pregnant women.

2. RESEARCH METHODE

This study is an analytical study and the research design used a cross sectional research design. This research was conducted at the Yani Delitua Midwife Clinic in 2022 in January-May 2022. The population in this study were all pregnant women with TM I in April-May at the Midwife Clinic Yani Delitua in 2022. The sampling technique used was a total sampling technique, so that in the sampling technique, the researchers took 31 respondents.

The data analysis carried out in this study was univariate and bivariate analysis. To prove a significant relationship between the relationship between hyperemesis gravidarum and anemia in pregnant women in the first trimester at the Midwifery Clinic Yani Delitua, Chi-square analysis was used.

3. RESULT AND ANALYSIS

Based on research that has been conducted regarding the relationship between hyperemesis gravidarum and anemia in pregnant women in the first trimester at the Yani Delitua Midwife Clinic in 2022, the following results were obtained:

Table 1. Distribution of Age Characteristics of Respondents at the Midwife Clinic Yani Delitua in 2022

No	Age	Total	Percentage
1	<20	12	38.7
2	20-36	8	25.8
3	>36	11	35.4
	Total	31	100

From table 1 it can be seen that of the 31 respondents, 12 respondents (38.7%) aged 20-36, 8 (25.8%) and > 36 respondents (35.4%).

Table 2. Distribution of Respondents' Educational Characteristics at the Midwife Clinic Yani Delitua Year

No	Education	Total	Percentage
1	SD	5	16.1
2	SMP	12	38.7
3	SMA	10	32.3
4	PT	4	12.9
	Total	31	100

From table 2 above it can be seen that of the 31 respondents whose last education was elementary school graduates (16.1%), the last education was junior high school graduates (38.7%), the last education was high school graduates as many as 10 respondents (32.3%) and the last education graduated from PT as many as 4 respondents (12.9%).

Table 3. Frequency Distribution of Hyperemesis Gravidarum in the Midwife Clinic Yani Delitua Year

No	Hyperemesis	Total	Percentage
1	Hyperemesis	16	51.6
2	Emesis	15	48.3
	Total	31	100

From table 3 it can be seen that from 31 respondents pregnant women with hyperemesis were 16 respondents (51.6%) and pregnant women with emesis were 15 respondents (48.3%).

Table 4. Distribution of Anemia Frequency in First Trimester Pregnant Women at the Midwifery Clinic Yani Delitua in 2022

No	Anemia	Total	Percentage
1	Anemia	16	51.6
2	Tidak Anemia	15	48.4
	Total	31	100

From table 4 above, it can be seen that of the 31 respondents who were anemic pregnant women were 16 respondents (51.6%), and 15 respondents were not anemic (48.4%).

Table 5. Cross-tabulation of the relationship between hyperemesis gravidarum and anemia in first trimester pregnant women at the Midwifery Clinic Yani Delitua in 2022

Hyperemesis	Anemia				Total		Sig p
	Anemia		Tidak Anemia				
	f	%	f	%	F	%	
Hyperemesis	13	41.9	3	9.7	16	51.6	0,001
Emesis	3	9.7	12	38.7	15	48.4	
Total	16	100	15	100	31	100	

From cross tabulation table 5, it can be seen that of the 16 respondents with hyperemesis the majority experienced anemia as many as 13 respondents (41.9%), and of the 15 respondents who experienced emesis the majority were not anemic as many as 12 respondents (38.7%). Furthermore, from the results of the chi-square analysis in the attachment of the chi-square test table between the relationship between hyperemesis gravidarum and anemia in first trimester pregnant women at the Yani Delitua Midwife Clinic in 2022, it is known that the probability value is (0.001) <sig_α=0.05.

The results of this analysis meet the criteria for the relationship hypothesis, so it can be concluded that Hyperemesis Gravidarum has a significant relationship with anemia in pregnant women in the first trimester at the Midwifery Clinic Yani Delitua in 2022.

DISCUSSION

Hyperemesis Gravidarum at the Midwife Clinic Yani Delitua in 2022

From table 3 it can be seen that of the 31 respondents pregnant women with hyperemesis were 16 respondents (51.6%) and 15 respondents were pregnant women with emesis (15%). Hyperemesis Gravidarum is vomiting that occurs until 20 weeks of gestation, vomiting is so severe that everything that is eaten and drunk is vomited up, affecting general conditions and daily work, weight loss, dehydration, and getting acetone in the urine not because of disease and so on.

The results of research by Octaviani Wiwik about the relationship between hyperemesis gravidarum and anemia in pregnancy in the first trimester regarding hyperemesis gravidarum based on work can be seen that the distribution of hyperemesis gravidarum in Muna District Hospital for the period of August - September 2013.

The majority of those who do not work are 21 respondents (70%) with less knowledge as many as 9 respondents and sufficient knowledge is 6 respondents (20%) with good knowledge 6 respondents (20%) and a minority of working mothers as much as 1 respondent (3.33%) with less knowledge. Based on the results of this study, it shows that there is a relationship between hyperemesis gravidarum and anemia in pregnancy

According to the researcher's assumption from the results of this study, the majority of pregnant women at the Bumi clinic experienced hyperemesis, which means that the majority of pregnant women experienced complaints of nausea and vomiting.

Anemia in First Trimester Pregnant Women at the Midwife Clinic Yani Delitua in 2022

From table 4, it can be seen that of the 31 respondents who were anemic pregnant women were 16 respondents (51.6%), and 15 respondents were not anemic (48.4%). Anemia is a condition of the mother with hemoglobin (Hb) levels in her blood less than 12 g% (Octaviani Wiwik). While anemia in pregnancy is the condition of the mother with hemoglobin levels below 11 g% in the first and third trimesters or levels <10.5 g% in the second trimester (Saifuddin, 2002). Midwife Prada: Scientific Journal of Midwifery. 6

Based on Hertj Salome Umboh's research on the knowledge of pregnant women with hyperemesis gravidarum at the Ratna Medan clinic in 2012 as many as 30 respondents, namely the majority of them lacked knowledge as many as 19 respondents (63.3%), good knowledge as many as 8 respondents (26.7%), and minority knowledge enough as many as 3 respondents (10%). The results of the study showed that there were still (63.3%) mothers who had less knowledge about complications of hyperemesis gravidarum. 7

According to the researcher's assumption, that the majority of pregnant women at the Bumi clinic are healthy, Tiga has anemia, which is indicated by HB <11, meaning that the majority of pregnant women complain and experience signs of anemia.

The Relationship between Hyperemesis Gravidarum and Anemia in First Trimester Pregnant Women at the Midwifery Clinic Yani Delitua in 2022

From cross tabulation table 5, it can be seen that of the 16 respondents with hyperemesis the majority experienced anemia as many as 13 respondents (41.9%), and of the 15 respondents who experienced emesis the majority were not anemic as many as 12 respondents (38.7%). Furthermore, from the results of the chi-square analysis in the attachment of the chi-square test table between the relationship between hyperemesis gravidarum and anemia in first trimester pregnant women at the Yani Delitua Midwife Clinic in 2022, it is known that the probability value (0.001) <sig_α=0.05.

The results of this analysis meet the criteria for the relationship hypothesis, so it can be concluded that Hyperemesis Gravidarum has a significant relationship with anemia in pregnant women in the first trimester at the Midwifery Clinic Yani Delitua in 2022. Hyperemesis gravidarum is a complaint of nausea and vomiting that is categorized as severe if pregnant women always vomit every time they drink or eat. As a result, the body is very weak, the face is pale, and the frequency of urination decreases drastically, daily activities are disrupted and the general condition decreases.

Excessive nausea and vomiting causes decreased body fluids, so the blood becomes thick and blood circulation to the tissues is delayed. If this happens, the consumption of O₂ and tissue food is also reduced. Lack of food and tissue O₂ will cause tissue damage that can affect the health of the mother and the development of the fetus she contains

Based on research by Nugroho Taufan in 2012 about several determinants of the causes of hyperemesis gravidarum at Ananda Puwokerto General Hospital in 2012. The results of the study revealed that maternal age had a significant relationship with the incidence of hyperemesis gravidarum. Maternal age <20 years and >35 years are more at risk for the incidence of hyperemesis gravidarum compared to those aged 20-35 years.⁹

Based on the results of this study, it shows that the more pregnant women experience complaints of hyperemesis, the more mothers will experience anemia, meaning that pregnant women who complain of conditions or symptoms of hyperemesis can be suspected that the mother will experience anemia, and there is a significant relationship between pregnant women who hyperemesis with anemic pregnant women.

4. CONCLUSION

Based on the results and discussion of the research entitled "The Relationship between Hyperemesis Gravidarum and Anemia in First Trimester Pregnant Women at the Midwifery Clinic Yani Delitua in 2022" it can be concluded that hyperemesis of 31 pregnant women with hyperemesis was 16 respondents (51.6%) and 15 pregnant women had emesis. respondents (15%).

Anemia of 31 respondents pregnant women with hyperemesis as many as 16 respondents (51.6%) and pregnant women with emesis as many as 15 respondents (15%). the probability is 0.001 or <0.05.

Yani Delitua Midwife Clinic, it is hoped that health workers will provide more in-depth health education to pregnant women regarding the danger signs of first trimester pregnant women. For further researchers, it is hoped that further research can complete the results of this study for perfection.

References

- [1] Sutanto VA. *Kebutuhan Dasar Manusia. Pertama*. Yogyakarta: Pustaka Baru Press; 2017.
- [2] Saraswati A. Hubungan Pendampingan Suami Dengan Intensitas Nyeri Persalinan Kala I Di RS PKU Muhammadiyah Yogyakarta. 5 No. Juni 2014:1-12.
- [3] Rukiyah AY. *Asuhan kebidanan II (Persalinan)*. Kedua. Jakarta: Trans Info Media; 2011.
- [4] Ayu Ratu, dkk F. Dukungan Suami Dan Depresi Pasca Melahirkan. 8 No. 2 Mei 2015.
- [5] Ranti,dkk M. Pengaruh Suami Dalam Proses Persalinan Dengan Penurunan Rasa Nyeri Persalinan. 4 No. 5 Maret 2014.
- [6] WHO. *Data Ibu Bersalin Di Dunia* [Internet]. 2014 [dikutip 14 Juli 2017]. Tersedia pada: WWW.WHO.go.id
- [7] Harahap D. Pengaruh Teknik Relaksasi Hipnosis Diri Terhadap Tingkat Nyeri Dan Lama Persalinan Ibu Primipara Di RS Ananda Bekasi. [Depok]: Universitas Indonesia

(UI); 2013.

- [8] Mujahidah K. Keterampilan Dasar Praktik klinik kebidanan. Pertama. Yogyakarta: Pustaka Belajar; 2012.
- [9] Lailia, dkk I. Pendampingan Suami Terhadap Kelancaran Proses Persalinan Di BPM Arifin Surabaya. 5 No. 4 Juli 2015.