

## The Correlation Of Parity And Nutritional Status With The Incident Of Hyperemesis Gravidarum In The Pratama Dendang Tirta Clinic, Stabat District, Langkat District, 2023

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### ABSTRACT

*Hyperemesis gravidarum occurs more frequently in multiple pregnancies and hydatidiform moles than in pregnancies without other complications. Hyperemesis gravidarum is a symptom of excessive vomiting in pregnant women which causes weight loss (more than 5% of initial body weight), dehydration, ketosis, and abnormal electrolyte levels. This study aims to analyze the Correlation between parity and nutritional status with the incidence of hyperemesis gravidarum at the Dendang Tirta Pratama Clinic, Stabat District, Langkat Regency in 2023. The type of research used in the research is a cross-sectional design. The research sample was 35 pregnant women at the Pratama Dendang Tirta Clinic, Stabat District, Langkat Regency using total sampling techniques. Data were analyzed by conducting a Chi-square analysis test. The results of the research were statistical tests using the Chi-Square test with the test results used being the Fisher Exact Test with a value of  $p = 0.012$ . Thus the  $p$  value  $< \alpha$  5%,  $0.012 < 0.05$ . This researcher stated that there was a Correlation between parity and nutritional status with the incidence of hyperemesis gravidarum. It is recommended that mothers always seek information about hyperemesis gravidarum and risk factors for hyperemesis gravidarum, so that during pregnancy mothers can consume nutritious food for the health of their fetus during pregnancy.*

**Keywords:** Parity, nutritional status, hyperemesis gravidarum



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## INTRODUCTION

Pregnancy is a natural and normal condition, however, physiological changes can occur in pregnant women, in some cases of pregnancy in women there can be changes that have an impact on the pregnant woman's physical condition, physiological changes that can cause nausea and vomiting. Excessive nausea and vomiting experienced by pregnant women will have an impact on the baby and mother which is often called hyperemesis gravidarum. Hyperemesis gravidarum occurs due to the mother's unpreparedness for early pregnancy.<sup>1-2</sup>

Hyperemesis gravidarum (HG) is severe vomiting that causes weight loss, dehydration, and alkalosis due to the release of hydrochloric acid, and hypokalemia. Nausea and vomiting are the most common disorders in the first trimester of pregnancy. Excessive nausea and vomiting is a pregnancy complication that affects the mother's health status and fetal growth and development. This quite severe vomiting occurs in early pregnancy up to 20 weeks of gestation and affects > 50% of pregnancies. The prevalence of HG cases is 0.8% to 3.2% of all pregnancies or around 8 to 32 cases per 1000 pregnancies.<sup>3-4</sup>

Pregnancy with hyperemesis gravidarum (HG) according to the World Health Organization (WHO) reaches 12.5% of all pregnancies in the world with varying incidence rates, starting from 0.3% in Sweden, 0.5% in California, 0.8 % in Canada, 10.8% in China, 0.9% in Norway, 2.2% in Pakistan, and 1.9% in Turkey (World Health Organization, 2018). Incidents depicting nausea and vomiting as common medical disorders during pregnancy. nausea rates are between 70% and 85% with about half of this percentage experiencing vomiting. The very pathological condition of Hyperemesis Gravidarum is much less common than logical nausea and vomiting. Meanwhile, the incidence of HG in Indonesia starts from 1-3% of all pregnancies.<sup>5-6</sup>

Factors that can cause problems in the severity of hyperemesis gravidarum patients include predisposing factors, namely parity, maternal age, hydatidiform mole, multiple pregnancies; organic factors, namely allergies, metabolic changes due to pregnancy and decreased maternal resistance; Psychological factors, namely broken households, job loss, fear of pregnancy and childbirth.<sup>7</sup>

Parity is a woman who has given birth to a viable baby. Parity classification can be divided into 3, namely primipara, multipara, grandemultipara. Hyperemesis gravidarum occurs more often

in primigravidas because they have not been able to adapt to increased hormones, lack of physical, mental and social function maturity.<sup>8</sup>

Pregnancy causes hormonal changes in women, resulting in an increase in the hormones estrogen, progesterone, and the release of HCG (human chorionic gonadotropine) by the placenta. HCG (Human Chorionic Gonadotrophin) is produced by the corpus luteum which functions to prevent menstruation and increase progesterone levels. High HCG levels in the first three months are thought to be the cause of morning sickness (Maulana, 2015). Every pregnant woman will experience different discomforts including varying degrees of nausea and vomiting, some don't feel anything, but there are also those who feel nauseous and some even feel so nauseous that they vomit and require treatment.<sup>9</sup>

Of the 10 mothers interviewed, 7 (70%) pregnant women experienced hyperemesis gravidarum due to lack of nutrition consumed and increased body temperature. Meanwhile, 3 (30%) pregnant women were strong and did not experience hyperemesis gravidarum because they had adequate nutrition. Based on the background and description above, the author wants to know the Correlation between parity and nutritional status and the incidence of hyperemesis gravidarum at the Pratma Dendang Tirta Clinic, Stabat District, Langkat Regency in 2023.

## MATERIAL AND METHOD

This research was quantitative. This research used correlational research. Population is the subject of research. This research was carried out at the Dendang Tirta Pratama Clinic, Stabat District, Langkat Regency in 2023.<sup>10</sup> The population in this study was all 35 pregnant women at the Dendang Tirta Pratama Clinic, Stabat District, Langkat Regency, 2023. The entire population was sampled, namely 35 people. Bivariate analysis was carried out on two variables that were thought to be related (Notoatmodjo, 2012). The statistical tests used in this research are the Chi Square test ( $\chi^2$ ) and the Fisher's Exact Test. This test is used because the data to be analyzed is categorical data. To see the significance of the statistical calculation results, a significance limit of  $\alpha=0.05$  is used so that if statistical analysis results are found with a p value  $<0.05$ , the Correlation between the two variables is declared meaningful or significant.

## RESULT

The results of research conducted by researchers regarding the Correlation between parity and nutritional status with the incidence of hyperemesis gravidarum at the Pratama Dendang Tirta Clinic, Stabat District, Langkat Regency in 2023, there were 35 respondents.

**Table 1. Distribution of Respondent Characteristics. Correlation between Parity and Nutritional Status with the Incident of Hyperemesis Gravidarum in Dendang Tirta Pratama Clinic , Stabat District , Langkat Regency in 2023**

	Variable	n	%
<b>Educational</b>	Junior High School	2	5.7
	Senior High School	26	74.3
	College	7	20.0
	Total	35	100.0
<b>For work</b>	Housewife	18	51.4
	Self-employed	14	40.0
	civil servants	3	8.6
	Total	35	100.0
<b>Age</b>	<20 Years	2	5.7
	21-35 Years	30	85.7
	>35 Years	3	8.6
	Total	35	100
<b>Parity</b>	Primigravida	19	54.3
	>2-4 children	16	45.7
	Total	35	100.0
<b>Hyperemesis</b>	Hyperemesis	22	62.9
	No Hyperemesis	13	37.1
	Total	35	100.0
<b>Nutritional status</b>	Normal	17	48.6
	Unusual	18	51.4
	Total	35	100.0

Based on table 1 above, it is known that there are several characteristics of respondents, namely based on education, occupation, age, parity, nutritional status and the incidence of hyperemesis gravidarum. Pregnant women as research respondents. It is known that of the 35 respondents who had a high school education, there were 26 respondents (74.3%), while in terms of work there were 18 respondents (51.4%) who worked as housewives. Apart from that, based on the characteristics of the mother's age, namely 21-35 years old, there were 30 respondents (85.7%). Meanwhile, based on parity, 19 respondents (54.3%), 18 respondents (51.4%) had abnormal nutritional status and 22 respondents (62.9%) experienced hyperemesis.

**Table 2. Frequency distribution of the Correlation between parity and the incidence of hyperemesis gravidarum in Dendang Tirta Pratama Clinic , Stabat District, Langkat Regency , 2023**

Regimen, 2010							
	Hyperemesis				Amount		<i>p-Value</i>
	Hyperemesis		No Hyperemesis				
	n	%	n	%	n	%	
<b>Parity</b>							
Primigravida	17	48.58	2	5.72	19	54.3	0.001
>2-4 children	5	14.29	11	31.41	16	45.7	
Amount	22	62.87	13	37.13	35	100.0	

Based on table 2 above, it is known that of the 35 primigravida parity respondents, 19 respondents did not experience hyperemesis gravidarum, namely 2 people (5.72%) and 17 people (48.58%) experienced hyperemesis gravidarum. Apart from that, it was also known that 16 respondents (45.7%) had children with parity >2-4, of which 11 respondents (31.41%) did not experience hyperemesis gravidarum and 5 respondents (14.29%) experienced hyperemesis gravidarum. Based on statistical tests using the Chi-Square test, the test results used were the Fisher Excat Test with a value of  $p = 0.001$ . Thus, the  $p$  value is  $< \alpha 5\%$ , namely  $0.001 < 0.05$ , so it can be seen that there is a Correlation between parity and the incidence of hyperemesis gravidarum at the Primary Health Center . Dandang Tirta Clinic, Stabat District in 2023.

**Table.3 Frequency Distribution of the Correlation between Nutritional Status and the Incident of Hyperemesis Gravidarum in Dendang Tirta Pratama Clinic , Stabat District , Langkat Regency in 2023**

District , Bangkai Regency in 2023							
	Hyperemesis						<i>p-Value</i>
	Hyperemesis		No Hyperemesis		Amount		
	n	%	n	%	n	%	
<b>Nutritional status</b>							
Normal	7	20.00	10	28.60	17	48.60	0.012
Unusual	15	42.86	3	8.54	18	51.40	
Amount	22	62.86	13	37.14	35	100.0	

Based on table 3 above, it is known that of the 35 respondents with normal nutritional status, 17 respondents did not experience hyperemesis gravidarum, namely 10 (28.60%) and 7 (20.00%) who experienced hyperemesis gravidarum. Apart from that, it was also known that the nutritional status was abnormal as many as 18 respondents (51.40%), of which 3 respondents (8.54%) and 15 respondents (42.86%) did not experience hyperemesis gravidarum.

Based on statistical tests using the Chi-Square test, the test results used were the Fisher Exact Test with a value of  $p = 0.001$ . Thus, the  $p$  value is  $< \alpha 5\%$ , namely  $0.001 < 0.05$ , so it can be seen that there is a Correlation between nutritional status and the incidence of hyperemesis gravidarum at the Prima.

## DISCUSSION

Based on the results of research conducted on the Correlation between parity and nutritional status with the incidence of hyperemesis gravidarum at the Pratama Dendang Tirta Clinic, Stabat District in 2023, it can be concluded that: Respondents with primigravida parity were 19 respondents with 2 (5.72%) who did not experience hyperemesis gravidarum and 17 (48.58%) who experienced hyperemesis gravidarum. Respondents with normal nutritional status were 17 respondents, with 10 (28.60%) not experiencing hyperemesis gravidarum and 7 (20.00%) experiencing hyperemesis gravidarum. As input, pregnant women are expected to always seek information about

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hyperemesis gravidarum and risk factors for hyperemesis gravidarum. As input for health workers, especially midwives who work at the Pratama Dendang Tirta Clinic, Stabat.

Hyperemesis gravidarum occurs more often in multiple pregnancies and hydatidiform moles than in pregnancies without other complications (Runiari: 2014). Hyperemesis gravidarum is a symptom of excessive vomiting in pregnant women which causes weight loss (more than 5% of initial body weight), dehydration, ketosis, and abnormal electrolyte levels. Hyperemesis gravidarum can begin to occur in the fourth to tenth week and then generally improves at twenty weeks of gestation. Physiologically on the lives of women and their fetuses, hyperemesis gravidarum has a psychological impact, causing anxiety, guilt, stress and anger.<sup>10-11</sup>

Social impacts such as changes in social contact with other people can lead to feelings of isolation and loneliness. Spiritual impacts such as feeling helpless. During pregnancy, the need for nutrients increases to meet the needs of fetal growth and development, maintain maternal health, and prepare for lactation for both mother and fetus. Lack of nutrition can cause anemia, abortion, premature parturition, uterine inertia, postpartum hemorrhage, vaginal sepsis, etc. Prevention of hyperemesis gravidarum can be prevented by explaining to pregnant women that nausea and vomiting are physiological symptoms in early pregnancy and will disappear after 4 months of pregnancy. Encourage small but frequent meals, serve food preferably warm, avoid oily and fatty foods, and encourage mothers not to get out of bed immediately when they wake up in the morning but try to eat dry bread or biscuits and warm tea first.<sup>12</sup>

## CONCLUSION

District, to carry out promotional actions such as counseling, which contains health sciences, health education or Educational Information Communication (KIE) for pregnant women. By carrying out this research, it is hoped that it can become a source of knowledge, especially for the development of knowledge about the Correlation between parity and nutritional status and the incidence of hyperemesis gravidarum, as an additional source of information and references to enrich knowledge in educational institutions, especially in the library sector.

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