



## Factors Related to the Incident Emesis Gravidarum in Pregnancy in the Region Work of Limboto Health Center

Lyssa Khairunnisa Nuwa<sup>1\*</sup>, Ika Wulansari<sup>2</sup>, Andi Mursyidah<sup>3</sup>

<sup>1</sup>Mahasiswa Program Studi Ilmu Keperawatan UNG

<sup>2,3</sup>Dosen Program Studi Ilmu Keperawatan UNG

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### ABSTRACT

Pregnancy is a condition where a woman has a fetus that is growing in the womb. In pregnancy, nausea and vomiting is called emesis gravidarum, which is a condition that occurs due to an increase in the hormones estrogen and progesterone. If not treated, this emesis gravidarum will increase to hyperemesis gravidarum. This study aims to determine the factors related to the incidence of emesis gravidarum in pregnancy in the working area of the Limboto Health Center. The research design used in this study is to use quantitative research with a cross sectional approach. The sample in this study was 35 respondents using the total sampling technique. The results of this study using the Fisher Exact Test were obtained at the age variables p-value 0.039 (<0.05), work p-value 0.029 (<0.05), psychological p-value 0.020 (<0.05), family support p-value 0.043 (<0.05) which means that there is a significant relationship between age, work, psychology, and family support with the incidence of emesis gravidarum in pregnancy. The suggestion from this study is that it can be used in increasing knowledge about knowing the factors related to the incidence of emesis gravidarum in pregnancy in the working area of the Limboto Health Center.

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### Corresponding Author:

Lyssa Khairunnisa Nuwa

Mahasiswa Program Studi Ilmu Keperawatan UNG

Email : [yssa.khairunnisa@gmail.com](mailto:yssa.khairunnisa@gmail.com)

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## INTRODUCTION

Pregnancy is a condition where a woman has a fetus that is growing in the womb. Pregnancy, which includes conception to childbirth, lasts for 280 days or 40 weeks, starting from the first day of the last menstruation. Pregnancy is divided into three parts which are the first trimester, which lasts from conception to three months, the second trimester, lasts from four to six months, and the third trimester, lasts from seven to nine months (Pratiwi et al., 2024).

Pregnant women usually experience feelings of nausea, back pain, fatigue, mood swings, leg cramps, and difficulty urinating or BAK. In pregnancy, nausea and vomiting is called emesis gravidarum. Emesis gravidarum is a condition that occurs due to an increase in the hormones estrogen and progesterone, causing pregnant women to experience discomfort and changes in the body, mind, and hormones in pregnant women. Emesis gravidarum is a physiological complaint that can develop into pathological if not treated promptly. (Pratiwi & Fatimah, 2019) (São Paulo, Sã & Amriani, 2021) (Sari et al., 2023)

According to data obtained from the World Health Organization (WHO), the incidence rate of emesis gravidarum is at least 15% of all pregnant women. The incidence of emesis gravidarum in the world is 70-80% of the number of pregnant women. A study conducted by Tinti (2023) in Italy using PUQE-24 (Pregnancy Unique Quantification of Emesis and Nausea) showed that in 2023 as many as 54% of pregnant women experienced emesis gravidarum. Meanwhile, the incidence of emesis gravidarum in Indonesia itself is recorded as 50%-75% of pregnant women. This occurs in 60%-80% primigravida and 40%-60% multigravida.

Based on data obtained at the Gorontalo Provincial Health Office, the incidence rate of emesis gravidarum is currently recorded at 27% of pregnancies in June 2024.

Symptoms of emesis gravidarum occur in pregnant women to varying degrees. This is a hormonal change that occurs in the body of pregnant women. Pregnant women need to be careful with this disorder because it can cause malnutrition in both the mother and the fetus. So that there is a risk that babies are born with low body weight and are affected by various diseases when they grow up. In addition, other impacts that will occur if the emesis is not handled properly will be hypoglycemia (lack of glucose in the blood), muscle weakness, electrocardiographic disorders and psychological disorders. As well as life-threatening things, namely oesophageal rupture (rupture of the esophagus wall due to vomiting), kidney damage, growth retardation in the womb to fetal death. (Indiarti, 2015) (Gunawan et al., 2024)

There are many factors that cause emesis gravidarum. According to Bahrah (2022), the factors that trigger the occurrence of emesis gravidarum include parity factors, employment factors, psychological factors, family support factors, educational factors, socio-cultural factors, environmental factors, maternal disease history, pregnancy history, and age factors.

Based on the researchers' initial observations, data on pregnant women from the Gorontalo Provincial Health Office in 2024 amounted to 22,258 pregnant women. The highest data on pregnant women is in Gorontalo Regency with a total of 6,828 pregnant women, followed by Gorontalo City, Pohuwato Regency, Boalemo Regency, North Gorontalo Regency, and Bone Bolango Regency. The highest number of pregnant women in Gorontalo Regency is at the Limboto Health Center, which is 87 people.

Based on the results of the researcher's initial interviews with 5 primigravida pregnant women in the Limboto Health Center area, 4 primigravida pregnant women said they experienced emesis gravidarum, 3 of them were mothers aged <25 years and 1 other mother was 33 years old, 2 pregnant women were working mothers and 2 other pregnant women did not work, 4 pregnant women said they often felt anxious, restless, and stressed, and 4 pregnant women who experienced emesis gravidarum said they received support from their families. Meanwhile, 1 other primigravida pregnant woman said she did not experience emesis gravidarum, was 25 years old and did not work, pregnant women said they felt anxious and anxious, and mothers said they received support from their families.

Based on the above phenomenon, the researcher is interested in identifying factors related to the incidence of emesis gravidarum in pregnancy in the working area of the Limboto Health Center.

## RESEARCH METHODS

This research was carried out in the working area of the Limboto Health Center on December 19-December 30, 2024. This research is a quantitative research. The research design used was correlative analytics with the Cross Sectional approach. The sample used in this study amounted to 35 samples using the total sampling technique. The instruments used in this study were the respondent characteristics sheet, the DASS-21 (Depression, Anxiety, Stress Scale-21) questionnaire, the Pregnancy Unique Quantification of Emesis and Nausea (PUQE)-24 scoring system questionnaire and the family support questionnaire.

## RESEARCH RESULTS

### Univariate Analysis

Table 1 Frequency Distribution Based on Respondent Characteristics in the working area of the Limboto Health Center

Characteristic	(f)	(%)
<b>Final Education</b>		
SD	3	8,6
JUNIOR	3	8,6
High School/Vocational School	18	51,4
BACHELOR	11	31,4
<b>Family Income</b>		
< Rp. 3,025,100	16	45,8
≥ Rp. 3,025,100	19	54,2
<b>Number of ANC Visits</b>		
< 4 times	14	40,0
≥ 4 times	21	60,0
<b>Gestational Age</b>		
Trimester I	7	20,0
Trimester II	15	42,9
Trimester III	13	37,1

Source: Primary Data, 2024

Based on table 1 above, it can be concluded that the majority of respondents have a high school education, namely 18 respondents, most of the respondents have family income above the UMP of Gorontalo Regency, which is as many as 19 respondents, most of the respondents have 4 ANC visits,  $\geq$ namely 21 respondents, and most of the respondents are pregnant women in the second trimester, which is as many as 15 respondents.

Table 2 Frequency Distribution by Age of Pregnant Women

No.	Age	(f)	(%)
1.	Risky	16	45,7
2.	No Risk	19	54,3
	<b>Total</b>	35	100

Source: Primary Data, 2024

Based on table 2, the results were obtained that respondents in the working area of the Limboto Health Center were dominated by pregnant women aged 20-35 years (age not at risk), namely 19 respondents.

Table 3 Frequency Distribution by Occupation

No.	Work	(f)	(%)
1.	Work	20	57,1
2.	Not Working	15	42,9
	<b>Total</b>	35	100

Source: Primary Data, 2024

Based on table 3, the results were obtained that the respondents in the working area of the Limboto Health Center were mostly working mothers as many as 20 respondents.

Table 4 Frequency Distribution Based on Psychology

No.	Psychological	(f)	(%)
1.	Light	14	40,0
2.	Heavy	21	60,0
	<b>Total</b>	35	100

Source: Primary Data, 2024

Based on table 4, the results were obtained that the majority of respondents in the work area of the Limboto Health Center experienced severe psychological disorders, namely 21 respondents.

Table 5 Frequency Distribution by Family Support

No.	Psychological	(f)	(%)
1.	Support	24	68,6
2.	Not Supported	11	31,4
	<b>Total</b>	35	100

Source: Primary Data, 2024

Based on table 5, the results were obtained that the majority of respondents in the work area of the Limboto Health Center had family support, namely 24 respondents.

Table 6 Frequency Distribution Based on Psychology

No.	Emesis Gravidarum	(f)	(%)
1.	Light	10	28,6
2.	Keep	11	31,4
3.	Heavy	14	40,0
	<b>Total</b>	35	100

Source: Primary Data, 2024

Based on table 6, the results were obtained that respondents in the working area of the Limboto Health Center were dominated by mothers who experienced severe emesis gravidarum, namely as many as 14 respondents.

### Bivariate analysis

Table 7 Factors Related to the Incidence of Emesis Gravidarum in Pregnancy in the Working Area of the Limboto Health Center

Emesis Gravidarum									
Variable	Occurrence of Emesis Gravidarum						Total		p-value
	Light		Keep		Heavy				
	n	%	n	%	n	%	n	%	
<b>Age</b>									
Risky	2	5,7	4	11,4	10	28,6	16	45,7	0,039
No Risk	8	22,9	7	20,0	4	11,4	19	54,3	
<b>Work</b>									
Work	2	5,7	8	22,9	10	28,6	20	57,1	0,029
Not Working	8	22,9	3	8,6	4	11,4	15	42,9	
<b>Psychological</b>									
Light	7	20,0	5	14,3	2	5,7	14	45,7	0,020
Heavy	3	8,6	6	17,1	12	34,3	21	54,3	
<b>Family Support</b>									
Support	5	14,3	6	17,1	13	37,1	24	68,6	0,043
Not Supported	5	14,3	5	14,3	1	2,9	11	31,4	

Source: Primary Data, 2024

Based on table 7 above, the results were obtained that of the 16 respondents who had age in the risk category, there were 2 respondents (5.7%) who experienced mild emesis gravidarum, 4 respondents (11.4%) who experienced moderate emesis gravidarum and 10 respondents (28.6%) who experienced severe emesis gravidarum. Meanwhile, of the 19 respondents who had age in the non-risk category, there were 8 respondents (22.9%) who experienced mild emesis gravidarum, 7 respondents (20%) who experienced moderate emesis gravidarum and 4 respondents (11.4%) who experienced severe emesis gravidarum.

In the work variable, the results were obtained that out of 20 respondents who worked, there were 2 respondents (5.7%) who experienced mild emesis gravidarum, 8 respondents (22.9%) who experienced moderate emesis gravidarum and 10 respondents (28.6%) who experienced severe emesis gravidarum. Meanwhile, of the 15 respondents who did not work, there were 8 respondents (22.9%) who experienced mild emesis gravidarum, 3 respondents (8.6%) who experienced moderate emesis gravidarum and 4 respondents (11.4%) who experienced severe emesis gravidarum.

In the psychological variables, the results were obtained that of the 14 respondents with mild psychological categories, as many as 7 respondents (20%) experienced mild emesis gravidarum, 5 respondents (14.3%) experienced moderate emesis gravidarum and 2 respondents (5.7%) experienced severe emesis gravidarum. Meanwhile, of the 21 respondents with severe psychological categories, as many as 3 respondents (8.6%) experienced mild emesis gravidarum, 6 respondents (17.1%) experienced moderate emesis gravidarum and 12 respondents (34.3%) experienced severe emesis gravidarum.

In the family support variable, the results were obtained that as many as 5 respondents who received family support (14.3%) experienced mild emesis gravidarum, 6 respondents who received family support (17.1%) experienced moderate emesis gravidarum and 13 respondents who received family support (37.1%) experienced severe emesis gravidarum. Meanwhile, 5 respondents who did not receive family support (14.3%) experienced mild emesis gravidarum, 3 respondents who did not receive family support (14.3%) experienced moderate emesis gravidarum and 1 respondent who did not receive family support (2.9%) experienced severe emesis gravidarum.

## DISCUSSION

### Factors Related to the Occurrence of Emesis Gravidarum in Pregnancy

Based on the age factor, the results of the study were obtained that there were 16 respondents who had an age in the risk category (<20 years old or >35 years). Women who are <20 years old or >35 years old are the age that has a high risk of pregnancy. In this study, mothers who were <20 years old tended to experience high stress disorders. Pregnancy at the age of <20 years also causes the mother to experience complications such as anemia, bleeding, eclampsia, postpartum endometritis and systemic infections. While babies are at risk of developing BBLR, premature birth, and neonatal infections. (Tempali et al., 2024)

Meanwhile, mothers aged >35 years have worse health. At this age the uterine organs age, which means there is a greater risk of birth defects, prolonged labor, and bleeding. Other problems that can occur during the fertilization process are misplacement, placenta previa, dystosia, and long partus. The quality of eggs has also decreased compared to the healthy reproductive age, which is 20-35 years (Riyanti et al., 2021).

This is in line with research from those who say that a mother's age has something to do with women's reproductive organs. Women who are too young should not get pregnant because their reproductive system is not perfect, which can lead to problems in pregnancy. Meanwhile, in pregnant women who are too old, problems in pregnancy are caused by psychological factors, namely a situation in which the mother is not ready to get pregnant which makes her depressed and stressed. ( Retnoningtyas & Dewi, 2021)

Respondents with the non-risk category (20-35 years) amounted to 19 respondents. This shows that most of the respondents are not at risk (20-35 years old). Age is one of the factors studied in this study. The safe and healthy age for a woman to get pregnant is between 20-35 years old. This is because at this age, the mother is in good physical condition, the uterus can maintain the pregnancy, and she is mentally ready to handle the pregnancy and the problems that arise during pregnancy. ( Ratnaningtyas & Indrawati , 2023)

The next factor is the work factor, based on the results of the study showing that pregnant women who do not work are as many as 15 respondents (42.9%), while pregnant women who work are as many as 20 respondents (57.1%), so that most of the respondents in this study are mothers who work outside the home.

Pregnant women who work should not be forced to work, because mothers must get enough rest. It is not uncommon for problems to occur at work, either with colleagues or with superiors so that it can drain the mother's time and mind, which has an impact on the mother's psychological problems in the form of stress. ( Nurhasanah et al., 2022)

This is in line with research conducted by stating ( Sriadnyani et al., 2022) that women who work are not recommended if the physical burden of the job is heavy enough. Pregnant women are also not advised to experience the effects of stress caused by workload. The hormones estrogen and progesterone are hormones that play a role in pregnancy, and this is because the burden of the mother's mind and work during pregnancy will affect the balance of the hormone's expenditure.

The types of work done by respondents are private employees, sales, traders. Some of these types of work have a heavy burden. If the mother experiences a lot of mental stress during pregnancy, it will have an impact on the balance of hormone production so that there will be disorders in pregnancy, such as feeling tired easily, dizziness, nausea, or indigestion ( Rudiyaniti & Rosmadewi , 2019).

The results of the next study were psychological factors which showed that the majority of pregnant women experienced psychological disorders with severe categories, namely as many as 21 respondents (60%).

The psychological conditions experienced by the mother during pregnancy can cause stress, which can lead to an increase in heart rate and blood pressure, resulting in an increase in the hormone human chorionic gonadotropin (HCG), which is a hormone produced during pregnancy. During times of stress, there is an increase in the hormone cortisol which can increase the hormone progesterone. These physiological processes can have an impact on the mother's daily behavior. Pregnant women will often be angry and offended, restless, unable to focus, indecisive and even want to run away from reality. Stress is more common in primigravida pregnant women, because the mother has never experienced a pregnancy before (Susanti et al., 2021) .

This is in line with research conducted by the depressive disorder is one that is often found in pregnant women. In addition, other psychological problems that pregnant women often experience are anxiety and stress that can trigger or worsen depression. ( Squirt et al., 2019)

Meanwhile, from the results of the study on family support factors, it was found that pregnant women who did not receive family support were as many as 11 respondents (31.4%). This can be seen based on the respondents' answers on the family support questionnaire sheet that the average respondent answered that they did not get support either emotionally, instrumentally, information and assessment from their husbands and other family members such as mothers, fathers, siblings and others. In this factor, pregnant women who received family support were 24 respondents (68.6%). This can be seen based on the respondents' answers on the family support questionnaire that on average the respondents answered receiving attention and assistance from both husbands and other family members.

This is in line with research conducted by stating ( Soelistiawaty , 2022) that there are several types of family support that can be provided to pregnant women, such as informational support, where the family acts as a provider of advice and useful information for pregnant women. Award support, where families help pregnant women solve their problems and families can help pregnant women become more confident in dealing with pregnancy disorders. Instrumental support where the family serves as a source of help and emotional support, when a pregnant woman experiences a pregnancy related disorder, emotional support from the family is needed, to avoid anxiety and sadness.

### **Incidence of Emesis Gravidarum in Pregnancy**

As a result of this study, data was obtained that pregnant women who experienced mild emesis gravidarum were 10 respondents (28.6%). From the results of the respondents' answers on the questionnaire sheet, they did not feel nausea or vomiting and did not feel pain in the abdomen in the last 12 and 24 hours.

In this study, respondents with mild emesis gravidarum were dominated by 6 pregnant women with primigravida in the third trimester. Then followed by 3 pregnant women in the second trimester and 1 person in the first trimester pregnant women.

Furthermore, pregnant women who experienced moderate emesis gravidarum were 11 respondents (31.4%). This can be seen from the answers on the questionnaire sheet where several respondents answered in the last 24 hours and 12 hours experiencing nausea, vomiting and pain in the abdomen. In this study, respondents with emesis gravidarum were dominated by 5 pregnant women with primigravida in the second trimester. Then followed by 3 pregnant women in the first trimester and 3 women in the third trimester and 3 pregnant women.

Furthermore, data was obtained that most of the respondents experienced severe emesis gravidarum, namely as many as 14 respondents (40%). In this study, respondents with severe emesis gravidarum were dominated by 7 pregnant women with primigravida in the second trimester. Then followed by 4 third trimester pregnant women and 3 first trimester pregnant women.

One of the factors that affect emesis gravidarum in pregnant women is the status of gravida, the amount of status of gravida can affect psychological conditions which include readiness to face pregnancy, and adaptation in physiological changes that occur. This causes the status of gravida to be one of the factors for the occurrence of prolonged emesis gravidarum during pregnancy.

This is in line with research conducted by stating (Krisniyawati et al., 2023) that one of the physiological changes that occur that makes pregnant women feel uncomfortable due to the appearance of emesis gravidarum, especially in primigravida mothers. Primigravida mothers have not been able to adapt to the increase in estrogen hormones and human chorionic gonadotropin, which leads to an increase in stomach acid, which leads to complaints of emesis gravidarum.

### **Relationship of Age to the Incidence of Emesis Gravidarum**

Based on the research, the Fisher Exact statistical test value was 0.039. This shows that there is a significant relationship between the age category and the incidence of emesis gravidarum in the work area of the Limboto Health Center.

The results showed that out of 16 respondents (45.7%) mothers of at-risk age (<20 years and >35 years), there were 10 respondents who experienced severe emesis gravidarum, of which 5 respondents were <20 years old. In this study, the 10 respondents had a low number of ANC visits. According to a pregnancy check-up, it is one of the important things that pregnant women must do to ensure that their pregnancy is healthy. The more regularly you visit ANC, the less likely it is to have complications in pregnancy, including emesis gravidarum. (Susnaningtyas & Lisca, 2024)

Then there were 5 respondents who experienced severe emesis gravidarum aged >35 years. In this study, the 5 respondents were primigravida pregnant women. According to gravida, it is one of the factors that can affect emesis gravidarum, usually in primigravida, which indicates a lack of knowledge, information, and poor communication of pregnant women, which also affects the way the mother sees the symptoms. (Fauziah et al., 2019)

In addition, there were 4 respondents with risk ages (<20 years and >35 years) experienced moderate emesis gravidarum, of which 3 respondents were <20 years old. In this study, the 3 respondents were primigravida pregnant women. According to several factors such as a first-time pregnancy also affects the severity of emesis gravidarum. (Hendriani & Sugiharti, 2024)

Then 1 other respondent was >35 years old. In this study, 1 respondent was a primigravida pregnant woman. According to primigravida mothers, psychological factors are very important during pregnancy. Fear of pregnancy as well as the responsibilities of a mother can lead to mental conflicts that can lead to emesis gravidarum. (Sriadnyani et al., 2022)

Then there were 2 respondents with a risk age (<20 years and >35 years) experienced mild emesis gravidarum, both respondents were under 20 years old. In this study, the two respondents had junior and high school education. According to mothers with low education, such as junior high school, are most likely not to get good information. In addition, mothers who do not have the desire to learn also have lower levels of knowledge. It is possible that mothers with a high school education level can also get enough information, communication between pregnant women affects the information that will be received. (Maridanti et al., 2024)

This is in line with research that states that there is a relationship between age factors and emesis gravidarum in pregnant women where the ages of <20 years and >35 years are at risk of experiencing emesis gravidarum. (Azizah et al., 2023)

The results of the study further showed that out of 19 respondents (54.3%) who had a non-risk age (20-35 years), there were 7 respondents who experienced moderate emesis gravidarum. In this study, the 7 respondents were primigravida mothers. According to this, it is caused by a first pregnancy that triggers emesis gravidarum. (Damayanti et al., 2020)

Then followed by 4 respondents who had a non-risk age (20-35 years), who experienced severe emesis gravidarum. In this study, the 4 respondents were primigravida mothers. According to hyperemesis gravidarum is more common in primigravida mothers because they have not been able to adapt to chorionic changes of gonadotropin. (Fauziah et al., 2019)

Meanwhile, there were 8 respondents who had a non-risk age (20-35 years) who experienced mild emesis gravidarum. In this study, 8 respondents were primigravida mothers, 2 of whom had an elementary education level. According to knowledge, it can be obtained from various sources including mass media, education, health workers and experience. Primigravida mothers do not yet have experience in how to deal with emesis in early pregnancy. ( Sriadnyani et al., 2022)

This is in line with research conducted by primigravida pregnant women more often than multigravida pregnant women. Because most pregnant women have not been able to adjust to the presence of estrogen and (Munir et al., 2022) human chorionic gonadotropin. In addition, due to the level of stress experienced by pregnant women during the first pregnancy and the increase in hormones that cause an increase in stomach acid, thus triggering the occurrence of emesis gravidarum.

The age of the respondents is 20-35 years old and is the reproductive age of pregnant women where this age is considered mature for women both physically and mentally. Based on the results of the study, the age between 20 and 35 years is considered safe for pregnancy because it is in healthy reproductive conditions, so it can be concluded that the majority of respondents based on age are in the safe category for pregnancy. ( Krisniyawati et al., 2023)

### **Relationship between work and the occurrence of emesis gravidarum**

Based on the research, the Fisher Exact statistical test value was 0.029. This shows that there is a significant relationship between work and the incidence of emesis gravidarum in the work area of the Limboto Health Center.

The results showed that there were 20 respondents (57.1%) who worked, of which 10 respondents experienced severe emesis gravidarum. In this study, most respondents said they had jobs as employees and sales. According to the influence of work on the incidence of emesis gravidarum, it can be seen from the work carried out by the respondents. The high demands of the job can increase stress, which has the potential to worsen the symptoms of emesis gravidarum. ( Pure , et al., 2024)

Then followed by 8 respondents who worked experienced moderate emesis gravidarum. In this study, some respondents said they had less rest time due to jobs that had erratic working hours. According to this, due to heavy work and limited rest time, it can interfere with eating and sleeping, which affects the symptoms of emesis gravidarum. (Bakay et al., 2023)

In addition, there were 2 other working respondents who experienced mild emesis gravidarum. In the study, both respondents were primigravida mothers. According to ( Krisniyawati et al., 2023) the mother primigravida has not been able to adapt to the increase in the hormones estrogen and HCG, which leads to an increase in stomach acid, which leads to emesis gravidarum.

This is in line with research from which there is a relationship between work factors and emesis gravidarum in pregnant women. (Sari et al., 2024)

The results of the study further showed that as many as 15 respondents (42.9%) were not working, there were 8 respondents who experienced mild emesis gravidarum. In this study, there were 2 respondents who were elementary school educated and 1 respondent who had a junior high school education. According to education can affect a person's knowledge, the higher a person's education, the easier it is to receive information about emesis gravidarum, so the better his knowledge about emesis gravidarum. (Revelation & Spirituality, 2025)

Then 3 respondents who did not work experienced moderate emesis gravidarum. In this study, the 3 respondents had a family income and a low number of ANC visits. According to socioeconomic and occupational factors, it affects activities and stress levels experienced by pregnant women. Moms who don't work or IRT don't have as many social connections, less information gathered, and fewer friends to socialize with. As a result, they are unable to deal with the problems associated with pregnancy, which can lead to emesis gravidarum. ( Maridanti et al., 2024)

In addition, there were 4 respondents who did not work experiencing severe emesis gravidarum. In this study, the 4 respondents had a low level of education. According to often, lack of knowledge causes the desire to utilize health facilities and services to be reduced as well. (Utami et al., 2023)

The results of this study are in line with the research conducted by those who stated that there is a relationship between maternal work and the incidence of nausea and vomiting in the Work Area of the Payung Sekaki Health Center. (Juwita et al., 2024)

### **Psychological Relationship to the Occurrence of Emesis Gravidarum**

Based on the research, the Fisher Exact statistical value was 0.020. This shows that there is a significant relationship between psychology and the incidence of emesis gravidarum in the working area of

the Limboto Health Center.

The results showed that of the 21 respondents who had psychological with severe categories, there were 12 respondents who experienced severe emesis gravidarum. In this study, the respondent was a primigravida mother. According to primigravida mothers, psychological factors are very important for emesis gravidarum. Fear of pregnancy and the responsibilities of a mother, as well as other fears, can lead to mental conflicts, which can exacerbate the emesis gravidarum. (Rudiyanti & Rosmadewi, 2019)

In addition, there were 6 respondents who had a psychological with a severe category experiencing moderate emesis gravidarum. In this study, the respondent was a primigravida mother. From the results of the respondents' answers on the questionnaire sheet, most of the respondents answered that it was easy to feel anxious and angry. According to psychologically, emesis gravidarum during pregnancy can cause anxiety, guilt, and anger as the symptoms of emesis gravidarum worsen. (Lestari et al., 2021)

Then 3 people who have psychological with the severe category experience mild emesis gravidarum. In this study, the 3 respondents had a low number of ANC visits. According to the (Susnaningtyas & Lisca, 2024) more frequent visits of ANC, the less likely there are pregnancy complications, so that the condition of emesis gravidarum can be treated early. Mothers who rarely check their pregnancy will more easily experience stress due to ignorance about the problems in their pregnancy.

This is in line with research that states that there is a relationship between psychological factors and emesis gravidarum. (Squirt et al., 2019)

Based on other data, it shows that out of 14 respondents who have psychological with a mild category, there are 7 respondents who experience mild emesis gravidarum. In this study, the respondent was a primigravida mother. According to parity, it is a factor that can affect stress until emesis gravidarum occurs, primigravida mothers often experience emesis gravidarum because they do not have experience in dealing with psychological changes during pregnancy. (Fauziah et al., 2022)

In addition, there were 5 respondents who had a psychological with a mild category experiencing moderate emesis gravidarum. In this study, the respondent was a primigravida mother. According to primigravida mothers, psychological factors play an important role, fear of pregnancy, childbirth, a mother's responsibilities which result in mental conflicts and the emergence of emesis gravidarum. (Lestari et al., 2021)

Then, there were 2 respondents who had a psychological with a mild category of experiencing severe emesis gravidarum. According to (Pure, et al., 2024) certain stress, it is normal, but continuous stress can have a bad effect on health. In pregnant women, stress can worsen the occurrence of emesis gravidarum.

The results of this study are in line with research conducted by (Rahmawati et al., 2024) those who stated that there is a relationship between maternal psychological factors (depression, stress, anxiety) and emesis gravidarum.

Psychological problems in pregnant women in each trimester are different. Pregnant women in the first and third trimesters tend to experience psychological changes related to pregnancy, such as anxiety. However, pregnant women in the second trimester tend to show acceptance of their pregnancy. The anxiety experienced by pregnant women in the first and third trimesters is usually different. The anxiety shown by pregnant women in the first trimester is usually related to the condition of their pregnancy. Meanwhile, in the third trimester of pregnancy, most pregnant women experience new levels of anxiety. Usually, this anxiety is caused by the responsibility of taking care of the baby she is about to give birth to and facing childbirth. (Mardiana et al., 2022)

### **The Relationship of Family Support to the Occurrence of Emesis Gravidarum**

Based on the research, the Fisher Exact statistical test value was 0.043. This shows that there is a significant relationship between family support and the incidence of emesis gravidarum in the working area of the Limboto Health Center.

The results showed that mothers who did not receive family support were as many as 11 respondents (31.4%), of which there were 5 respondents who experienced moderate emesis gravidarum. In this study, some mothers said they felt uncomfortable with some family members who were at home. According to the mother, if the mother feels uncomfortable and safe from family support during pregnancy, it can make the mother experience an emotional increase which also increases the estrogen hormone that triggers the emesis gravidarum. Therefore, family support is necessary for the well-being of the mother during pregnancy both physically and psychologically. (Prihatini et al., 2024)

In addition, there were 5 respondents who did not receive family support experiencing mild emesis gravidarum. According to the (Stuart Stuart et al., 2024) lack of family support can increase stress and anxiety in pregnant women, potentially worsening symptoms of emesis gravidarum.

Then 1 respondent who did not receive family support experienced severe emesis gravidarum. In this study, the respondents had a low family income. According to the socioeconomic level in the family, it can affect the incidence of emesis gravidarum in pregnant women. This is due to the poor economic condition of the family, marked by the low family income received every month. (Sumardiani, 2020)



This is in line with research (Khalisah et al., 2023) that states that there is a relationship between family support and emesis gravidarum.

Family support for pregnant women can have a positive impact on the growth and development of the fetus, as well as the mother's physical and mental health. Family support is not only financial, but also related to affection, trust in pregnant women, care, and a caring attitude. Some mothers say that they always want to be close to family, especially during pregnancy. Primigravida pregnant women who receive strong emotional support will feel comfortable, loved, trusted, and attention-grabbing, which makes them feel more valuable. (Duncan et al., 2023)

The results of the study further showed that mothers who received family support were 24 respondents (68.6%), of which as many as 13 respondents experienced severe emesis gravidarum. In this study, the respondent was a primigravida mother. According to parity, there is a risk of aggravating nausea and vomiting is primigravida, because in primigravida there will be hormonal changes that have never occurred before. In addition, generally, primigravida will experience fear or anxiety due to the lack of knowledge they have and also the situation that is experienced for the first time. (Gunawan et al., 2024)

Then followed by 6 respondents who received family support experienced moderate emesis gravidarum. In this study, some respondents had fewer ANC visits. According to family support and assistance from health workers, it is necessary so that the mother's psychological changes are not severe and hormone production can be balanced which ultimately does not trigger excessive emesis gravidarum. (Farlikhatun & Rofiqoh, 2025)

In addition, there were 5 respondents who received family support experiencing mild emesis gravidarum. In this first study, the respondent was a primigravida mother. According to parity, primigravida has a risk of aggravating the condition of emesis gravidarum, because in primigravida there will be hormonal changes that have never occurred before. In addition, generally Family support helps reduce anxiety and stress, but cannot change the levels of hormones that are the main cause of emesis gravidarum. (Yulianti, 2023)

This is in line with research conducted by the family that family support, especially the husband in the context of pregnancy is a very important aspect. (Limra et al., 2023)

According to the family, there are 4 types of support that can be provided by families to pregnant women, namely: emotional support where the family provides psychological support to pregnant women by showing concern and attention and being sensitive to all the needs and emotional changes of pregnant women, then instrumental support, which is support provided to meet the physical needs of pregnant women, besides that information support is also needed where the family provides information obtained about pregnancy and assessment support where the family makes the right decision for the mother's pregnancy care. (Enggar et al., 2014)

## CONCLUSION

From the results of this study, it was found that pregnant women who were not at risk (20-35 years) were 19 respondents (22.9%). In addition, pregnant women who work are 20 respondents (57.1%). Furthermore, pregnant women with severe psychological categories are 21 respondents (60%). Furthermore, pregnant women who have family support were 24 respondents (68.6%).

There was a relationship between age and the incidence of emesis gravidarum in pregnancy in the working area of the Limboto Health Center, the Fisher Exact statistical test value was 0.039.

There was a relationship between work and the incidence of emesis gravidarum in pregnancy in the working area of the Limboto Health Center, the Fisher Exact statistical test value was 0.029.

There was a relationship between psychology and the incidence of emesis gravidarum in pregnancy in the work area of the Limboto Health Center, the Fisher Exact statistical test value was obtained at 0.020.

There was a relationship between family support and the incidence of emesis gravidarum in pregnancy in the working area of the Limboto Health Center, the Fisher Exact statistical test value was 0.043.

## SUGGESTION

It is hoped that the results of this study can be used as additional information, knowledge and education about factors related to the occurrence of emesis gravidarum in pregnancy.

It is hoped that the results of this study can help the Limboto Health Center to find out the factors related to the incidence of emesis gravidarum in pregnancy.

The results of this study are expected to be used as a way to prevent the occurrence of emesis gravidarum in pregnancy.

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