#### JKM (Jurnal Kebidanan Malahayati),Vol 9, No. 2. April 2023, ISSN (Print) 2476-8944 ISSN (Online) 2579-762X, Hal 147-152

#### ANXIETY OF PREGNANT MOTHERS WITH AN EVENT OF NAUSEA AND VOMITING ON TRIMESTER I PREGNANT WOMENT AT TAMAN SARI PEKANBARU CLINIC

#### Findy Hindratni<sup>1</sup>, Septi Indah Permata Sari<sup>2\*</sup>

<sup>1,2</sup>Poltekkes Kemenkes Riau \*Korespondensi email: septiindahps07@gmail.com

### ABSTRAK : KECEMASAN IBU HAMIL DENGAN KEJADIAN MUAL DAN MUNTAH PADA IBU HAMIL TRIMESTER I DI KLINIK TAMAN SARI PEKANBARU

Latar Belakang: Kehamilan adalah proses alami dan normal. Mual dan muntah adalah salah satu gejala awal kehamilan yang paling awal dan paling umum. Selain pengaruh hormon kehamilan, masalah psikologis seperti kecemasan dapat menjadi predisposisi bagi sebagian wanita untuk mengalami mual dan muntah saat hamil. Di masa pandemi Covid-19 saat ini dapat meningkatkan kecemasan berbagai kalangan termasuk ibu hamil karena ibu dan janin merupakan kelompok yang rentan.

Tujuan : Untuk menganalisis derajat kecemasan ibu hamil dengan kejadian mual muntah trimester I di Klinik Taman Sari Pekanbaru..

Metode: Desain yang digunakan adalah Cross Sectional dengan pendekatan analitik. Populasi dalam penelitian ini adalah seluruh ibu hamil yang memeriksakan kehamilannya di Klinik Taman Sari Pekanbaru pada bulan Juni – September 2021 yang berjumlah 50 ibu hamil. Teknik pengambilan sampel dalam penelitian ini adalah consecutive sampling. Besar sampel dalam penelitian ini adalah 45 ibu hamil trimester pertama.

Hasil : Berdasarkan hasil penelitian didapatkan bahwa sebagian besar ibu hamil trimester I di Klinik Taman Sari mengalami kecemasan dan mengalami mual sedang sebanyak 27 orang (93,1%) dan mengalami muntah sedang sebanyak 22 orang (75,9%). Hasil uji statistik dengan menggunakan Chi Square diperoleh nilai P sebesar 0,000, artinya ada hubungan yang bermakna (signifikan) antara derajat kecemasan dengan derajat kecemasan.

Kesimpulan: Terdapat hubungan yang bermakna antara tingkat kecemasan dengan kejadian mual pada ibu hamil trimester I.

Saran : Diharapkan ibu hamil dapat mengatasi kecemasannya dengan baik agar dapat mengurangi rasa mual dan muntah selama kehamilan.

Kata Kunci : Aktivitas Fisik, Dismenorea, Fast Food, Status Gizi.

#### ABSTRACT

Background: Pregnancy is a natural and normal process. Nausea and vomiting are one of the earliest and most common symptoms of early pregnancy. In addition to the effects of pregnancy hormones, psychological problems such as anxiety can predispose some women to experience nausea and vomiting in pregnancy. During the current Covid-19 pandemic, it can increase the anxiety of various groups including pregnant women because mothers and fetuses are a vulnerable group.

Purpose: To analyze the degree of anxiety of pregnant women with the incidence of nausea and vomiting in the first trimester at the Taman Sari Pekanbaru Clinic.

Method: The design used is Cross Sectional using an analytical approach. The population in this study were all pregnant women who had their pregnancy checked at the Taman Sari Pekanbaru Clinic in June – September 2021, totaling 50 pregnant women. The sampling technique in this study is consecutive sampling. The sample size in this study was 45 first trimester pregnant women.

Results: Based on the results of the study, it was found that the majority of pregnant women in the first trimester at Taman Sari Clinic experienced anxiety and experienced moderate nausea as many as 27 people (93.1%) and experienced moderate vomiting as many as 22 people (75.9%). The results of statistical tests using Chi Square obtained a P value of 0.000, meaning that there is a significant (significant) relationship between the degree of anxiety and the degree of anxiety.

Conclusion: There is a significant relationship between the level of anxiety with the incidence of nausea in first trimester pregnant women..

Suggestions: It is hoped that pregnant women can coping with their anxiety well in order to reduce nausea and vomiting during pregnancy.

Keywords: anxiety, nausea, vimoting, pregnant women

#### INTRODUCTION

Pregnancy is a natural and normal process. This period is one of the phases in a woman's life in reproduction, a normal woman will experience once, twice, and even many times in her life. During pregnancy there is a series of symptoms experienced in general which are associated with the effects of pregnancy hormones. Nausea and vomiting are one of the earliest and most common symptoms of early pregnancy. Nausea and vomiting during pregnancy are usually caused by changes in the endocrine system that occur during pregnancy, mainly due to high fluctuations in HCG (Human Chorionic Gonadotrophin) levels. Nausea usually begins in the first weeks of pregnancy and ends in the fourth month, but about 12% of pregnant women still experience it up to 9 months (Beyazit & Sahin, 2018; Cui et al., 2021).

In addition to the effects of pregnancy hormones, psychological problems can predispose some women to experience nausea and vomiting in pregnancy, or exacerbate existing symptoms or reduce the ability to cope with normal symptoms Psychological imbalances of pregnant women such as anxiety, guilt, self-pity, wanting to deal with conflicts seriously, dependence or loss of control will aggravate the nausea and vomiting they experience so that they are more afraid that the nausea and vomiting will become worse, resulting in hyperemesis (Cui et al., 2021; Jahangiri et al., 2011; Wu et al., 2021)

Psychological imbalances such as anxiety are related to the woman's inability to care for herself, including participating in optimal antenatal care and good nutrition. According to Murkoff (2011) anxiety can trigger digestive disorders so it is not surprising that these symptoms of nausea tend to be more severe when experiencing anxiety. Physical and mental fatigue can also be a risk for morning sickness and worsen its symptoms (on the other hand, severe nausea can cause fatigue) (Tan et al., 2014; Wu et al., 2021)

During the current Covid-19 pandemic, it can increase the anxiety of various groups, including pregnant women, because mothers and fetuses are a vulnerable group. According to WHO and PHEOC data from the Ministry of Health until September 15, 2021, the total confirmed cases of COVID-19 in the world are 225,680,357 cases with 4,644,740 deaths (CFR 2.1%) in 204 infected countries and 151 community transmission countries. As of September

15, 2021, the Government of the Republic of Indonesia has reported that 4,178,164 people have been confirmed positive for COVID-19 and there have been 139,682 deaths (CFR: 3.3%) related to COVID-19 reported and 3,953,519 patients have recovered from the disease. In Riau Province, there were a total of 126,135 confirmed cases of Covid-19, with details of self-isolation 1.485 people, 273 people being treated at hospitals, 120,400 people recovered and 3.977 deaths (Task Force for the Acceleration of Handling Covid-19, 2020). Based on this description, the researcher is interested in researching "The Degree of Anxiety of Pregnant Women with the Incidence of First Trimester Nausea and Vomiting at the Taman Sari Clinic, Pekanbaru (Aksoy et al., 2015; Kinser et al., 2021).

#### RESEARCH METHODS

This research is a non-experimental research with a cross sectional approach. The population in this study were all pregnant women who had their pregnancy checked at the Taman Sari Pekanbaru Clinic in June – September 2021, totaling 50 pregnant women. The sampling technique in this study is consecutive sampling. The sample size in this study was 45 first trimester pregnant women. Then, data analysis using univariate analysis and bivariate analysis with Chi-Square.

#### **RESULT AND DISCUSSIONS**

Based on research conducted at the Taman Sari Clinic in Pekanbaru City on the Degree of Anxiety in Pregnant Women with Nausea and Vomiting Incidence in the First Trimester at the Taman Sari Clinic, Pekanbaru with a total sample of 45 pregnant women in the first trimester, it was found:

#### Univariate Analysis

Based on table 1, it can be seen that the majority of pregnant women in the first trimester at the Taman Sari Clinic Pekanbaru City in 2021 had anxiety as many as 29 people (64.4%).

Table 1Frequency Distribution of First TrimesterPregnant Women by Degree of Anxiety at the<br/>Taman Sari Clinic, Pekanbaru City in 2021

Degree of Anxiety Total Persentase (%)

#### JKM (Jurnal Kebidanan Malahayati),Vol 9, No. 2. April 2023, ISSN (Print) 2476-8944 ISSN (Online) 2579-762X, Hal 147-152

Not Anxiety	16	35,6%	
Anxiety	29	64,4%	

Table 2
Frequency Distribution of First Trimester
Pregnant Women by Degree of Nausea at Taman
Sari Clinic Pekanbaru City in 2021

Degree of Nausea	Total	Persentase (%)
Mild Nausea	12	26,7%
Moderate Nausea	33	73,3%
Severe Nausea	0	0%

Based on table 2, it can be seen that the first trimester pregnant women at the Taman Sari Clinic in Pekanbaru City in 2021 the majority had moderate degrees of nausea as many as 33 people (73.3%).

# Table 3Frequency Distribution of First TrimesterPregnant Women by Degree of Vomiting at the<br/>Taman Sari Clinic, Pekanbaru City in 2021

Vimoting Degree	Total	Persentase (%)
Mild Vimoting	21	46,7%
Moderate Vimoting	24	53,3%
Severe Vimoting	0	0%

Based on table 3, it can be seen that the majority of pregnant women in the first trimester at the Taman Sari Clinic Pekanbaru City in 2021 had moderate vomiting degrees as many as 24 people (53.3%).

## Table 4 Relationship of Anxiety Degrees with Degrees of Nausea in First Trimester Pregnant Women at Taman Sari Clinic Pekanbaru City in 2021

Degree of - Anxiety -	Degree Of Nausea					
	Mild Nausea		Moderate Nausea		Total	r Value
	n	%	Ν	%		value
Not Anxiety	10	62,5%	6	37,5 %	100%	0,000
Anxiety	2	6,9%	27	93,1 %	100%	0,000

Based on the results of the study, it was found that the majority of pregnant women in the first trimester at Taman Sari Clinic experienced anxiety and experienced moderate nausea as many as 27 people (93.1%). The results of statistical tests using Chi Square obtained a P value of 0.000, meaning that there is a significant relationship between the degree of anxiety and the degree of nausea in first trimester pregnant women at the Taman Sari Clinic, Pekanbaru City.

#### Table 5 Correlation between Degree of Anxiety and Degree of Vomiting in First Trimester Pregnant Women at Taman Sari Clinic Pekanbaru City in 2021

	Vimoting Degree					
Degree of Anxiety	Mild Vimoting		Moderate Vimoting		Total	P Value
	n	%	Ν	%	_	
Not Anxiety	14	87,5%	2	12,5 %	100%	0.000
Anxiety	7	24,1%	22	75,9 %	100%	0,000

Based on the results of the study, it was found that the majority of pregnant women in the first trimester at Taman Sari Clinic experienced anxiety and experienced moderate vomiting as many as 22 people (75.9%). The results of statistical tests using Chi Square obtained a P value of 0.000, meaning that there is a significant (significant) relationship between the degree of anxiety and the degree of vomiting in first trimester pregnant women at the Taman Sari Clinic, Pekanbaru City.

#### DISCUSSIONS

Coronavirus disease 2019 (Covid-19) is a new case found, including in Indonesia. The existence of this virus has changed human life in their activities. The use of social media is an alternative to pass the time. The significant impact of social media raises negative and positive stigma that causes mental health problems that are more likely to be experienced by women who have multiple roles. The news about the corona virus is a very scary thing (Kinser et al., 2021). The negative effect of using social media is mental health problems. The adaptation of new habits carried out in the midst of the covid-19 pandemic caused excessive fear, stress and anxiety. During the current Covid-19 pandemic can increase the anxiety of various groups including pregnant women because the mother and fetus are vulnerable groups (Aksoy et al., 2015; Cui et al., 2021; Kinser et al., 2021).

Psychological imbalances such as anxiety are related to the woman's inability to care for herself, including participating in optimal antenatal care and good nutrition. According to Murkoff (2011) anxiety can trigger digestive disorders so it is not surprising that these symptoms of nausea tend to be more severe when experiencing anxiety (Bazargani et al., 2021; Beyazit & Sahin, 2018). Physical and mental fatigue can also be a risk for morning sickness and worsen its symptoms (on the other hand, severe nausea can cause fatigue) (Lagadec et al., 2018; Tan et al., 2014).

During pregnancy there is a general set of symptoms experienced which are attributed to the effects of pregnancy hormones. Nausea and vomiting are one of the earliest and most common symptoms of early pregnancy . Nausea and vomiting during pregnancy are usually caused by changes in the endocrine system that occur during pregnancy, mainly due to high fluctuations in HCG (Human Chorionic Gonadotrophin) levels (Elmas et al., 2021; Jahangiri et al., 2011). Nausea usually starting in the first weeks of pregnancy and ending in the fourth month, but about 12% of pregnant women still experience it up to 9 months ((Jahangiri et al., 2011; Spiegel & Webb, 2012).

In addition to the effects of pregnancy hormones, psychological problems can predispose some women to experience nausea and vomiting in pregnancy, or exacerbate existing symptoms or reduce the ability to cope with normal symptoms. Psychological imbalances of pregnant women such as anxiety, guilt, self-pity, wanting to deal with conflict seriously, dependence or loss of control will aggravate the nausea and vomiting experienced by her so that it will be more difficult. It is feared that the nausea and vomiting will become worse, resulting in hyperemesis gravidarum (Aksoy et al., 2015; Beyazit & Sahin, 2018; Lagadec et al., 2018).

According to Boussard and Richer (1998) in Tiran Denise (2008), up to 90% of women experience some form of nausea and vomiting during pregnancy which can range from typical mild to moderate symptoms of nausea that can resolve on its own with or without vomiting to severe conditions. severe hyperemesis gravidarum. Anxiety or stress in pregnancy can trigger digestive disorders so it is not surprising that the symptoms of nausea tend to be more severe when stress strikes (Köken et al., 2008; Uguz et al., 2012). According to Nagendran cited by Fraser, Diane M., (2009), the exact cause of nausea and vomiting in pregnancy cannot be explained, but there is an assumption that this event is due to a combination of hormonal changes, psychological adaptation, and neurological factors. This is also supported by Musbikin Imam (2005) which states that a mother who is pregnant young, not ready to get pregnant or even does not want pregnancy will feel so depressed and this feeling of pressure will trigger nausea and vomiting. Research by Yossi Fitrina (2014) concluded that the higher the anxiety level of pregnant women, the higher the chance of hyperemesis gravidarum so that it can affect nutritional intake and disrupt the daily activity patterns of pregnant women (Kinser et al., 2021; Spiegel & Webb, 2012; Wenze & Tezanos, 2015).

Women with anxiety or stress during pregnancy have a high rate of spontaneous abortion and an increased incidence of preterm birth. In addition, if a mother experiences severe stress during pregnancy, her child is more likely to experience emotional and cognitive problems. Therefore. early diagnosis of hyperemesis gravidarum is clinically necessary. This is also to avoid various complications that may occur such as vitamin B1 and K deficiency in the mother, Wernicke's encephalopathy in the fetus, premature birth, intrauterine growth restriction (IUGR), and psychiatric disorders in adulthood (Cui et al., 2021; Tan et al., 2010; Wu et al., 2021). The American College of Obstetricians and Gynecologists (ACOG) recommends early treatment to prevent it from getting worse. Non-pharmacological first-line therapy for nausea and vomiting during pregnancy and hyperemesis gravidarum is dietary modification such as consumption of low-fat, low-fiber, and bland foods (bread, crackers, cereals, eggs, tofu, other than nuts, fruits, and vegetables). In addition, there is an alternative treatment, namely ginger. Current research shows that ginger is very safe in pregnancy. In addition, additional psychological support is also needed during treatment and as a follow-up for pregnant women with hyperemesis gravidarum (Aksov et al., 2015; Lagadec et al., 2018; Tan et al., 2014; Wenze & Tezanos, 2015; Wong et al., 2021).

#### JKM (Jurnal Kebidanan Malahayati),Vol 9, No. 2. April 2023, ISSN (Print) 2476-8944 ISSN (Online) 2579-762X, Hal 147-152

#### CONCLUSION

There is a relationship between the level of anxiety and the incidence of nausea in pregnant women in the first trimester. There is a relationship between the level of anxiety and the incidence of vomiting in pregnant women in the first trimester. There is a need for Health Education from health workers, especially midwives about anxiety in the Covid-19 pandemic situation because the anxiety that arises can cause nausea and vomiting because the effects of nausea and vomiting are premature birth and low birth weight (LBW) while the impact of nausea and vomiting for pregnant women who The most common is anemia.

#### SUGGESTION

It is hoped that pregnant women can coping with their anxiety well in order to reduce nausea and vomiting during pregnancy.

#### REFERENCES

- Aksoy, H., Aksoy, Ü., Karadağ, Ö. İ., Hacimusalar, Y., Açmaz, G., Aykut, G., Çağlı, F., Yücel, B., Aydın, T., & Babayiğit, M. A. (2015).
  Depression levels in patients with hyperemesis gravidarum: a prospective case-control study. *SpringerPlus*, 4(1), 2–7. https://doi.org/10.1186/s40064-015-0820-2
- Bazargani, F., Iliadis, S. I., & Elenis, E. (2021). Mode of conception in relation to nausea and vomiting of pregnancy: a nested matched cohort study in Sweden. *Scientific Reports*, *11*(1), 9039. https://doi.org/10.1038/s41598-021-88575-z
- Beyazit, F., & Sahin, B. (2018). Effect of nausea and vomiting on anxiety and depression levels in early pregnancy. *Eurasian Journal of Medicine*, 50(2), 111–115. https://doi.org/10.5152/eurasianjmed.2018.1 70320
- Cui, C., Zhai, L., Sznajder, K. K., Wang, J., Sun, X., Wang, X., Zhang, W., Yang, F., & Yang, X. (2021). Prenatal anxiety and the associated factors among Chinese pregnant women during the COVID-19 pandemic—a smartphone questionnaire survey study. *BMC Psychiatry*, 21(1), 1–10. https://doi.org/10.1186/s12888-021-03624-1
- Elmas, B., Vatansever, M., Kahve, A. C., Özgü, B. S., Asut, G., Çakmak, I. B., Bestel, A., & Erkaya, S. (2021). Evaluation of psychological resilience and anxiety levels of patients with hyperemesis gravidarum diagnosis and comparison with healthy pregnant women. *Turkish Journal of Obstetrics and*

*Gynecology*, *18*(2), 115–123. https://doi.org/10.4274/tjod.galenos.2021.05 994

- Jahangiri, F., Hirshfeld-Cytron, J., Goldman, K., Pavone, M. E., Gerber, S., & Klock, S. C. (2011). Correlation between depression, anxiety, and nausea and vomiting during pregnancy in an in vitro fertilization population- A pilot study. *Journal of Psychosomatic Obstetrics and Gynecology*, *32*(3), 113–118. https://doi.org/10.3109/0167482X.2011.5767 90
- Kinser, P. A., Jallo, N., Amstadter, A. B., Thacker, L. R., Jones, E., Moyer, S., Rider, A., Karjane, N., & Salisbury, A. L. (2021). Depression, Anxiety, Resilience, and Coping: The Experience of Pregnant and New Mothers during the First Few Months of the COVID-19 Pandemic. *Journal of Women's Health*, 30(5), 654–664.

https://doi.org/10.1089/jwh.2020.8866

- Köken, G., Yilmazer, M., Cosar, E., Sahin, F. K., Cevrioglu, S., & Gecici, Ö. (2008). Nausea and vomiting in early pregnancy: Relationship with anxiety and depression. *Journal of Psychosomatic Obstetrics and Gynecology*, 29(2), 91–95. https://doi.org/10.1080/01674820701733697
- Lagadec, N., Steinecker, M., Kapassi, A., Magnier, A. M., Chastang, J., Robert, S., Gaouaou, N., & Ibanez, G. (2018). Factors influencing the quality of life of pregnant women: A systematic review. *BMC Pregnancy and Childbirth*, 18(1), 1–14. https://doi.org/10.1186/s12884-018-2087-4
- Spiegel, D. R., & Webb, K. (2012). A case of treatment refractory hyperemesis gravidarum in a patient with comorbid anxiety, treated successfully with adjunctive gabapentin: A review and the potential role of neurogastroentereology in understanding its pathogenesis and treatment. *Innovations in Clinical Neuroscience*, 9(11–12), 31–38.
- Tan, P. C., Vani, S., Lim, B. K., & Omar, S. Z. (2010). Anxiety and depression in hyperemesis gravidarum: prevalence, risk factors and correlation with clinical severity. *European Journal of Obstetrics and Gynecology and Reproductive Biology*, 149(2), 153–158. https://doi.org/10.1016/j.ejogrb.2009.12.031
- Tan, P. C., Zaidi, S. N., Azmi, N., Omar, S. Z., & Khong, S. Y. (2014). Depression, anxiety, stress and hyperemesis Gravidarum: Temporal and case controlled correlates.

*PLoS ONE*, 9(3). https://doi.org/10.1371/journal.pone.0092036

Uguz, F., Gezginc, K., Kayhan, F., Cicek, E., & Kantarci, A. H. (2012). Is hyperemesis gravidarum associated with mood, anxiety and personality disorders: A case-control study. *General Hospital Psychiatry*, 34(4), 398–402.

https://doi.org/10.1016/j.genhosppsych.2012. 03.021

- Wenze, S. J., & Tezanos, K. M. (2015). *parenthood. 18*(2), 163–176. https://doi.org/10.1007/s00737-014-0484x.Raising
- Wong, C. L., Li, C. K., Choi, K. C., So, W. K. W., Kwok, J. Y. Y., Cheung, Y. T., & Chan, C. W.

H. (2021). Effects of immersive virtual reality for preventing and managing anxiety, nausea and vomiting among paediatric cancer patients receiving their first chemotherapy: A study protocol for an exploratory trial. *PLoS ONE*, *16*(10 October), 1–13. https://doi.org/10.1371/journal.pone.0258514

Wu, F., Lin, W., Liu, P., Zhang, M., Huang, S., Chen, C., Li, Q., Huang, W., Zhong, C., Wang, Y., & Chen, Q. (2021). Prevalence and contributory factors of anxiety and depression among pregnant women in the post-pandemic era of COVID-19 in Shenzhen, China. *Journal of Affective Disorders*, 291(May), 243–251. https://doi.org/10.1016/j.jad.2021.05.014