## © 2023 International Journal of Nursing and Midwifery Science (IJNMS)

This is an Open Access article distributed authors retain copyright licensed under a <u>Creative Commons Attribution-ShareAlike 4.0</u> International License that allows others to share the work commercially with an acknowledgement of the work's authorship and initial publication in this journal.

http://ijnms.net/index.php/ijnms

# **ORIGINAL RESEARCH**



# EARLY ASSESMENT ON COMMON MENTAL DISORDERS OF PREGNANT WOMEN USING SELF-REPORTING QUESTIONNAIRE (SRQ-20)

e- ISSN: 2686-2123

p- ISSN: 2686-0538

# Selvia Nurul Qomari, Iin Setiawati, Rila Rindi Antina, Nurun Nikmah

Sekolah Tinggi Ilmu Kesehatan Ngudia Husada Madura

Corresponding Email: selviadp09@gmail.com

ABSTRACT	Keywords
During pregnancy, women may experience physical and psychological changes that can make them vulnerable to mental health disorders, also known as CMD. This can have a significant impact on both the mother and the child's health, making it a public health concern. To address this issue, a quantitaive descriptive study was conducted on pregnant women attending classes at the Arosbaya Community Health Center, where 25 pregnant women participated in prenatal class activities. The study used the Self-Reporting Questionnaire (SRQ-20) to collect data on CMD. The results showed that 40% of pregnant women suffer from CMD, with decreased energy and anxiety being the most common symptoms. It is crucial for healthcare professionals to prioritize the mental well-being of pregnant women and take steps to alleviate the symptoms of psychological disorders.	Pregnancy, CMD

#### INTRODUCTION

According to (Rahardjo Putri et al., 2022), pregnancy typically lasts around 9 months or 40 weeks. Throughout this period, expectant mothers may go through a range of physical and psychological changes and adaptations. While many hope for a smooth and pleasant pregnancy experience, some may find it challenging to adjust to bodily changes, which can make them more susceptible to stress, anxiety, and other mental health concerns. Common Mental Disorders (CMDs) are non-psychotic mental health conditions that can impact daily functioning, including depression, anxiety,

adaptation, and somatoform disorders, as described by (Jha et al., 2018)

Research conducted by Fisher has revealed that mental disorders such as anxiety and depression are experienced by around 15% of pregnant women in developing countries (Do et al., 2023). The

occurrence of Common Mental Disorders (CMDs) in pregnant women ranges from 1% to 37%. Depression and anxiety remain the most prevalent disorders, with rates ranging from 1% to 30% and 1% to 26%, respectively (Jha et al., 2018).. Recently, it has been found that mood or anxiety disorders affect up to 20% of women during pregnancy (Danti & Khasanah, 2020)

A preliminary investigation was carried out in January 2023 in the Pregnant Women's Class (KIH) in Berbeluk villages, the working area of the Arosbaya Community Health Center, which revealed that 40% of the ten pregnant women studied demonstrated signs of mental health issues. Psychological symptoms such as difficulty in thinking clearly and frequent crying, as well as general physical symptoms such as headaches, difficulty sleeping, and loss of appetite, were commonly reported by most pregnant women.

During pregnancy, the hormone progesterone is produced at higher levels which can cause psychological changes in pregnant women. However, a mother's personality and psychological vulnerability also play a significant role in determining psychological changes and adaptation during the antenatal period (Setiawati et al., 2021). Factors such as low socio-economic conditions, partner violence, previous history of mental disorders, family history of mental illness, and unmarried status are commonly associated mental/psychological disorders (Jha et al., 2018)

Changes in a pregnant woman's psychological condition can have an impact on their physical well-being during and after pregnancy (Purwaningsih, 2020). Mental health in pregnant women is a significant public health concern as it can affect the health of both the mother and child. Mothers with mental/psychological disorders often neglect pregnancy check-ups and face difficulties in gaining weight or may even become obese. They are also at risk of premature birth, prolonged labor, immune disorders, and metabolic disorders.

Additionally, pregnant women experiencing stress, anxiety, or depression may give birth to children with low weight, motor and cognitive delays, poor nutrition, and stunting (Do et al., 2023; Rahardjo Putri et al., 2022).

The implications of psychological disorders in pregnant women are farreaching and can have significant consequences for both the mother and the child. Maintaining the health of both the mother and fetus during pregnancy is crucial, which is why detecting any potential disorders is very important. mental Therefore, it is necessary to identify these disorders as early as possible to mitigate their effects by this research. So we can provide accurate and informative knowledge about this issue and contribute to the broader body on this topic. The Self-Reporting Questionnaire (SRQ-20), developed by the World Health Organization (WHO), is a screening tool consisting of 20 questions that can identify non-psychotic symptoms of mental disorders in expectant mothers. (Van

der Westhuizen et al., 2016; WHO, 1994). This study focuses on early detection of mental disorders in pregnant women at the Arosbaya Health Center in Kab. Bangkalan, utilizing the SRQ-20 screening tool.

#### **METHOD**

This research focuses on the psychological and mental condition of pregnant women using quantitative descriptive research. The study aims to describe the symptoms and problems that tend to occur in the body during the last 30 days of pregnancy. The research was conducted in two villages, namely Lajing, and Berbeluk in Arosbaya, Bangkalan, Madura. where 25 pregnant women participated in prenatal class activities. The data for this study was collected in June and 2023 using the Self-Reporting Questionnaire (SRQ-20) instrument, which designed to detect non-psychotic disorders. The questionnaire consists of 20 questions to identify the mental problems of pregnant women. The research subjects were asked to fill out the questionnaire themselves and accompanied by the researcher. The data analysis used univariate analysis to identify the indications of mental problems in pregnant women. The SRQ-20 has a Cronbach's Alpha reliability value of 0.87, which has been proven to be effective and is recommended for screening psychological/psychiatric disorders pregnant women in Vietnam (Danti & Khasanah, 2020; Do et al., 2023).

### **RESULTS**

Tabel 1. Characteristics of pregnant women who participate in Prenatal Class in the working area of Arosbaya Health Center (2023)

Characteristics	f	%
Age		

<20 years	4	16
20-35 years	18	72
>35 years	3	12
Total	25	100
Occupation	20	80
Housewife	1	4
Private worker	-	•
Government employees	4	16
Total	25	100
Pregnancy		
1 <sup>st</sup> pregnancy	7	28
2nd – 4 <sup>th</sup> pregnancy	17	68
>4 <sup>th</sup> pregnancy	1	4
Total	25	100
Gestation weeks		
1 <sup>st</sup> trimester	2	8
2 <sup>nd</sup> trimester	10	40
3 <sup>rd</sup> trimester	13	52
Total	25	100

Source: Primary data (2023)

Based on the data presented, it is clear that 72% of women who are pregnant and fall between the ages of 20-35 are currently participating in the study. Furthermore, 80% of these women are homemakers and a significant majority have previous pregnancy experience (multigravida). The majority of attendees in the class are currently in their third trimester of pregnancy.

Table 2. Characteristics of Pregnant Women Based on Identification of Pregnancy Problems/Risk Factors

Risk Factors	f	%	
Identified	6	24	
Not identified	19	76	
Total	25	100	

Source: Primary data (2023)

According to the information in Table 2, most pregnant women do not have any pregnancy-related issues or risk factors. However, the data indicates that a considerable number of women, precisely 6 out of 25 pregnant women (24%) had risk factors like pre-eclampsia or had

experienced unsuccessful pregnancies before.

Table 3. Results of initial assessment/screening for psychiatric problems (Common Mental Disorder) of pregnant women with SRQ-20

Characteristics	f	%
Indicated psychological problems (CMD)	10	40
Not indicated psychological problems (CMD)	15	60
Total	25	100

Source: Primary data (2023)

According to data in table 3, a significant 44% of pregnant women who participated in the Pregnancy Class at the Arosbaya Community Health Center's working area were found to be exhibiting signs of mental health issues, specifically Common Mental Disorder.

Table 4. Psychiatric problems (Common Mental Disorder) distribution in pregnant women based on symptoms

Symptomps	f	%
Depression	10	40
Anxiety	17	68
Somatic	15	60
Deacreased Energy	18	72

Source: Primary data (2023)

According to the data presented in table 4, it is evident that pregnant women in Arosbaya commonly experience symptoms of decreased energy (70%), followed by

anxiety (68%) and somatic symptoms (60%). However, only 40% of them experience symptoms of depression.

Table 5: Number of pregnant women reporting symptoms of Common Mental Disorders

Q	Symptomps	Answer Yes	Answer No
Sym	ptomps of Depression		
9.	Are you unhappy?	3	22

Is it difficult for you to play a big role in your life?	0	25		
Do you feel like you have lost interest in something enjoyable?	3	22		
Do you feel like a useless human being?	3	22		
Have you ever thought about ending your life?	0	25		
ptomps of Anxiety				
Do you have trouble sleeping?	12	13		
Do you get scared easily?	8	17		
Are your hands shaking?	5	20		
Do you feel nervous, tense, or anxious?	5	20		
Are you crying more than usual?	3	22		
Symptomps of Somatic				
Do you often have headaches?	8	17		
Has your appetite decreased?	6	19		
Has your digestion worsened?	4	21		
Do you have discomfort in your stomach?	9	16		
Symptomps of Decreased Energy				
Do you find it difficult to think clearly?	4	21		
Do you find it difficult to enjoy daily activities?	3	22		
Do you have difficulty making decisions?	1	24		
Does daily work feel like a burden?	4	21		
Do you always feel weak?	8	17		
Do you feel tired easily?	17	8		
	Do you feel like you have lost interest in something enjoyable? Do you feel like a useless human being? Have you ever thought about ending your life?  ptomps of Anxiety  Do you have trouble sleeping? Do you get scared easily? Are your hands shaking? Do you feel nervous, tense, or anxious? Are you crying more than usual?  ptomps of Somatic  Do you often have headaches? Has your appetite decreased? Has your digestion worsened? Do you have discomfort in your stomach?  ptomps of Decreased Energy  Do you find it difficult to think clearly? Do you find it difficult to enjoy daily activities? Do you have difficulty making decisions? Does daily work feel like a burden? Do you always feel weak?	Do you feel like you have lost interest in something enjoyable?  Do you feel like a useless human being?  Have you ever thought about ending your life?  Do you have trouble sleeping?  Do you get scared easily?  Are your hands shaking?  Do you feel nervous, tense, or anxious?  Are you crying more than usual?  Do you often have headaches?  Has your appetite decreased?  Has your digestion worsened?  Do you have discomfort in your stomach?  Potomps of Decreased Energy  Do you find it difficult to think clearly?  Do you have difficulty making decisions?  Does daily work feel like a burden?  Do you always feel weak?		

Source: Primary data (2023)

Based on the findings outlined in Table 5, it appears that the majority of pregnant women did not exhibit signs of depression, where it is known by the answer "No" to questions regarding symptoms of depression. Nonetheless, a small number of three pregnant women noted feelings of dissatisfaction, disinterest, and inadequacy who answered "Yes" to questions number 9, 10, 15, and 16.

As for anxiety symptoms, approximately 12 or almost half of pregnant women answered "Yes" to question number 3, which might show us that 48% of pregnant women reported difficulty sleeping. Apart from that, around 8 pregnant women (32%) felt easily frightened.

In addition, between 8-9 pregnant women (32-36%) answered "Yes" to question number 1 and 19 which indicates that they experienced symptoms of headaches and abdominal discomfort.

Regarding decreased energy levels, 68% of pregnant women answered "Yes' to question number 20 which indicated feeling fatigued/tired easily. And roughly 8 out of

25 pregnant women (32%) feeling persistently weak.

# DISCUSSION

Research conducted in Lajing and Berbeluk, the working area of Arosbaya Community Health Center, has shown that over 50% of the expectant mothers who participated in the prenatal class did not exhibit any signs of mental health issues, as evidenced by a SRQ-20 score of less than 5. While it is common for pregnant women to experience physical and psychological changes during pregnancy, these changes are typically considered normal. However, some women may be more vulnerable to common mental disorders like depression, anxiety disorders, adaptation disorders, and somatic disorders due to the changes brought on by pregnancy and their new role as a mother (Carter & Kostaras, 2005). This study found that 10 out of 25 expectant mothers (40%) were indicated to be experiencing mental health issues.

During pregnancy, women frequently contemplate the ways in which their lives will transform after childbirth, including changes to familial relationships and potential physical complications. In addition, anxiety about potential issues during pregnancy may arise. If these concerns are not addressed, the likelihood of developing CMD during pregnancy may rise. A Vietnamese study discovered that 50% or half of pregnant women living in rural areas who took part in the research experienced CMD symptoms at least once during pregnancy, while approximately six women experienced persistent CMD throughout their pregnancy. (Fisher et al., 2013).

This research indicates that pregnant women who are diagnosed with CMD often have risk factors such as being under 20 years old, experiencing pre-eclampsia, and having had unsuccessful pregnancies in the past. Other studies suggest that factors like age at the time of pregnancy, current pregnancy complications, lack of social support, living in a densely populated area, low employment status, and a history of psychological treatment may also increase the likelihood of developing CMD. (Faisal-Cury et al., 2009)

It has been observed that pregnant women who have pre-eclampsia often experience anxiety due to the potential risks to themselves and their babies (Trisiani et al., 2016). Furthermore, women who have experienced unsuccessful pregnancies in the past may be at risk of developing trauma due to negative experiences. Research conducted in Japan on CMD rates and influential factors has indicated that personal traumatic events during pregnancy can significantly impact the occurrence of CMD. (Usuda et al., 2016).

According to research, pregnant women who participate in prenatal classes at the Arosbaya Community Health Center working area often experience symptoms of decreased energy, which is a common symptom of CMD. A survey analysis revealed that many pregnant women experience fatigue and weakness, particularly during the 1st and 3rd trimesters. Hormonal changes, including an increase in estrogen, progesterone, and HCG, are believed to be linked to these symptoms. Additionally, the body works harder during pregnancy to support fetal

growth and development, leading to physical discomfort such as uterine enlargement, weight gain, leg cramps, low back pain, fetal movement, and frequent urination. Moreover, adaptations like changes in metabolism, increased heart rate, and hemodilution also contribute to fatigue in pregnant women. (Muzakir et al., 2021; Widjayanti et al., 2019).

A meta-analysis study also found that fatigue experienced by pregnant women during pregnancy may be a result from combination of physiological, psychological, and situational factors. Such factors include insufficient levels of ferritin and hemoglobin, inadequate sleep quality, adapting to a new role, and attending to household responsibilities, all of which may contribute to maternal fatigue.. (Liu et al., 2020)

Expectant mothers may experience exhaustion and physical weakness, which could affect their capacity to tend to their needs and perform routine tasks or daily activities. These sensations can trigger emotions of powerlessness, consequently, intensify symptoms of CMD. To promote their overall well-being, the American College of Obstetricians and Gynecologists (ACOG) recommends that pregnant women engage in 20-30 minutes of moderate to strenuous physical activity daily. Additionally, light exercise can help alleviate fatigue during pregnancy..(Liu et al., 2020)

Apart from symptoms of decreased energy, in this study, the symptoms of CMD that were most often felt by pregnant women were symptoms of anxiety. Out of the 25 women surveyed, 17 reported experiencing symptoms of anxiety, making up 68% of the group. The most common symptoms of anxiety reported were difficulty sleeping (12) women) and increased fear (8 women). Some of the women mentioned having trouble sleeping at night and being unable to take naps during the day. These symptoms tend to occur more frequently as pregnancy progresses, particularly during the third trimester. This can have a negative impact on the quality of rest and sleep.

Other studies have shown a strong link between sleep quality and symptoms of

common mental disorders (CMD) in pregnant women. Poor sleep quality, particularly daytime dysfunction ( $\beta = 0.37$  p = 0.006) and sleep disturbance ( $\beta$  = 0.23 p = 0.047), are associated with psychological distress such as depressive symptoms, anxiety, and stress during the second trimester (Teoh et al., 2021). A study in China found that 87% of a total of 4545 experienced pregnant women sleep disorders (PSQI value >5). Factors that may influence sleep quality during pregnancy include prenatal depression, maternal age, and gestational age. (Yang et al., 2018)

Based on this study, certain pregnant women were found to be experiencing CMD (common mental disorders) wih a somatic symptomps and depression. Amongst the reported somatic symptoms, stomach discomfort and headaches were observed. Specifically, out of the 25 expectant mothers who were examined, 36% experienced abdominal discomfort, which was primarily attributed to bloating and constipation. This discomfort can be linked to the heightened progesterone levels during pregnancy, which cause the intestinal muscles to relax and lead to reduced motility, flatulence, and constipation. Such symptoms can be quite distressing for pregnant women and may require medical attention to alleviate the discomfort.(Baron et al., 1993; Sembiring, 2015)

Meanwhile, the symptoms of depression found in a small number of pregnant women are feelings of unhappiness, helplessness, and disinterest in enjoyable activities. There are several factors that can contribute to this condition, including a lack of self-confidence, feelings of loneliness, and inadequate support from family and friends. (Sudirman, 2016)

To ensure the best possible outcomes for both mother and child, it is essential to detect and address any mental health concerns as early as possible. This can be achieved through regular screenings performed by healthcare professionals. Additionally, pregnant women can be taught alternative methods to help manage their symptoms, such as practicing yoga or engaging in pregnancy-specific exercises. Prioritizing psychological well-being during

pregnancy is of the utmost importance, and taking proactive steps to maintain mental health is an essential aspect of any healthy pregnancy. (Noviani & Adnyani, 2022).

#### **CONCLUSIONS**

According to research conducted at Arosbaya Community Health Center's working area, it has been found that 40% of expectant mothers who participate in prenatal classes display symptoms of mental health disorders or CMD. The symptoms mainly include decreased energy levels, easy fatigue, and feelings of weakness. Additionally, common anxiety-related symptoms, such as difficulty sleeping and being easily frightened, were also observed among the study group. These findings highlight the importance of addressing and support for mental health providing concerns among pregnant mothers, particularly those who are attending prenatal classes.

#### REFERENCES

Baron, T. H., Ramirez, B., & Richter, J. E. (1993). Gastrointestinal Motility Disorders during Pregnancy. *Annals of Internal Medicine*, 118(5), 366–375. https://doi.org/10.7326/0003-4819-118-5-199303010-00008

Carter, D., & Kostaras, X. (2005). Psychiatric Disorders in Pregnancy. *BC Medical Journal*, 47(2), 96–99.

Danti, R. R., & Khasanah, R. N. (2020). Gangguan Psikiatri Pada Kehamilan: Review. *Healthy*, 8(2).

Do, T. T. H., Bui, Q. T. T., Ha, B. T. T., Le, T. M., Le, V. T., Nguyen, Q. C. T., Lakin, K. J., Dang, T. T., Van Bui, L., Le, T. C., Tran, A. T. H., Pham, H. T. T., & Van Nguyen, T. (2023). Using the WHO Self-Reporting Questionnaire-20 (SRQ-20) to Detect Symptoms of Common Mental Disorders among Pregnant Women in Vietnam: a Validation Study. *International Journal of Women's Health*, 15, 599–609. https://doi.org/10.2147/IJWH.S404993

Faisal-Cury, A., Menezes, P., Araya, R., & Zugaib, M. (2009). Common mental

- disorders during pregnancy: prevalence and associated factors among low-income women in São Paulo, Brazil. *Archives of Women's Mental Health*, *12*(5), 335–343. https://doi.org/10.1007/s00737-009-0081-6
- Fisher, J., Tran, T., Duc Tran, T., Dwyer, T., Nguyen, T., Casey, G. J., Anne Simpson, J., Hanieh, S., & Biggs, B.-A. (2013). Prevalence and risk factors for symptoms of common mental disorders in early and late pregnancy in Vietnamese women: A prospective population-based study. *Journal of Affective Disorders*, 146(2), 213–219. https://doi.org/https://doi.org/10.1016/j.jad. 2012.09.007
- Jha, S., Salve, H. R., Goswami, K., Sagar, R., & Kant, S. (2018). Burden of common mental disorders among pregnant women: A systematic review. *Asian Journal of Psychiatry*, 36, 46–53. https://doi.org/https://doi.org/10.1016/j.ajp. 2018.06.020
- Liu, N., Wang, J., Chen, D., Sun, W., Li, P., & Zhang, W. (2020). Effects of exercise on pregnancy and postpartum fatigue: A systematic review and meta-analysis. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 253, 285–295. https://doi.org/https://doi.org/10.1016/j.ejog
  - https://doi.org/https://doi.org/10.1016/j.ejogrb.2020.08.013
- Muzakir, H., Prihayati, & Novianus, C. (2021).

  Analisis Faktor Risiko Kelelahan dan Non-Pekerjaan Pada Ibu Hamil. *Jurnal Keselamatan, Kesehatan Kerja, Dan Lingkungan (JK3L)*, 02(1). http://jk31.fkm.unand.ac.id/
- Noviani, N. W., & Adnyani, N. W. K. (2022).

  Pengaruh Senam Hamil terhadap Tingkat
  Depresi Ibu Hamil Trimester III di
  Kecamatan Sukawati. *Jurnal Genta Kebidanan*, 11(2).

  http://ejournal.politeknikkesehatankartiniba
  li.ac.id/index.php/JGK
- Purwaningsih, H. (2020). Analisis Masalah Psikologis pada Ibu Hamil Selama Masa Pandemi Covid-19: Literature Review.

- Rahardjo Putri, N., Amalia, R., & Indri Kusmawati, I. (2022). Kelas Ibu Hamil Terhadap Kesehatan Psikologis Ibu Hamil dan Persiapan Persalinan: Systematic Review. *Indonesian Journal of Midwifery (IJM)*, 5(1). http://jurnal.unw.ac.id/index.php/ijmAvaila bleat:http://jurnal.unw.ac.id:1254/index.php/ijm/issue/view/125
- Sembiring, L. P. (2015). Konstipasi pada Kehamilan. *Jurnal Ilmu Kedokteran* (*Journal of Medical Science*), 9(1).
- Setiawati, I., Qomari, S. N., & Soliha. (2021). Terapi Murottal Untuk Psikologi Ibu Hamil. NHM Press.
- Sudirman, F. D. (2016). *Depresi Pada Ibu Hamil*. Psikiatri.Forumid.Net.
- Teoh, A. N., Kaur, S., Mohd Shukri, N. H., Shafie, S. R., Ahmad Bustami, N., Takahashi, M., Lim, P. J., & Shibata, S. (2021). Psychological state during pregnancy is associated with sleep quality: preliminary findings from MY-CARE cohort study. *Chronobiology International*, *38*(7), 959–970. https://doi.org/10.1080/07420528.2021.190
  - https://doi.org/10.1080/07420528.2021.190 2338
- Trisiani, D., Hikmawati, R., Bhakti, S., & Bandung, K. (2016). HUBUNGAN KECEMASAN IBU HAMIL TERHADAP KEJADIAN PREEKLAMPSIA DI RSUD MAJALAYA KABUPATEN BANDUNG: Vol. I (Issue 3).
- Usuda, K., Nishi, D., Makino, M., Tachimori, H., Matsuoka, Y., Sano, Y., Konishi, T., & Takeshima, T. (2016). Prevalence and related factors of common mental disorders during pregnancy in Japan: A cross-sectional study. *BioPsychoSocial Medicine*, 10(1). https://doi.org/10.1186/s13030-016-0069-1
- Van der Westhuizen, C., Wyatt, G., Williams, J. K., Stein, D. J., & Sorsdahl, K. (2016). Validation of the Self Reporting Questionnaire 20-Item (SRQ-20) for Use in a Low- and Middle-Income Country Emergency Centre Setting. *International Journal of Mental Health and Addiction*,

- 14(1), 37–48. https://doi.org/10.1007/s11469-015-9566-x
- WHO. (1994). A User's Guide To The Self Reporting Questionnaire (SRQ).
- Widjayanti, Y., Katolik, S., Vincentius, S., & Surabaya, P. (2019). HUBUNGAN ANTARA KELELAHAN, KEBIASAAN KONSUMSI SUSU DENGAN KUALITAS
- TIDUR IBU HAMIL. Jurnal Penelitian Kesehatan, 9(1).
- Yang, Y., Mao, J., Ye, Z., Zeng, X., Zhao, H., Liu, Y., & Li, J. (2018). Determinants of sleep quality among pregnant women in China: a cross-sectional survey. *The Journal of Maternal-Fetal & Neonatal Medicine*, 31(22), 2980–2985. https://doi.org/10.1080/14767058.2017.135 9831