

DETERMINANTS OF ANXIETY IN TRIMESTER III PREGNANT WOMEN IN THE WORKING AREA OF GUNUNGSARI PUSKESMAS, SERANG DISTRICT

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ABSTRACT

Keywords:
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Mental disorders are experienced by pregnant women 10% worldwide, the occurrence of mental health disorders certainly requires the best solution, so that it can reduce the impacts that arise, such as preeclampsia/eclampsia, bleeding, increased blood pressure measurement results, and prolonged second stage. Preliminary studies found that pregnant women felt anxious, and the examination was still focused on physical examination. The purpose of the study was to see the determinants that cause anxiety in pregnant women in the third trimester, using a Cross-Sectional design and interview method using the Perinatal Anxiety Screening Scale (PASS) questionnaire, a sample for the study of 138 respondents using the total population. The primary data used was from the questionnaire. Statistical analysis using multiple logistic regression. The variables of parity, history of pregnancy complications, facilities, husband's support, and support from health workers have a significant effect on anxiety in pregnant women in the third trimester. The variable of health worker support is the most dominant on anxiety in pregnant women with an OR of 4.727. There is an influence of the variables of knowledge, parity, history of pregnancy complications, health facilities, and support from health workers, the dominant variable is the support of health workers, which is the main key to reducing anxiety in pregnant women in the third trimester. The better the support from health workers for pregnant women, the greater the opportunity for mothers to not feel anxious during their pregnancy.

ABSTRAK

Kata Kunci:
kecemasan,
determinan,
ibu hamil

Diketahui bahwa gangguan jiwa bisa dialami oleh ibu hamil sebesar 10% di seluruh dunia, terjadinya gangguan kesehatan jiwa tentu membutuhkan solusi yang terbaik, sehingga bisa mengurangi dampak yang timbul, seperti preeklampsia/eklampsia, perdarahan, hasil pengukuran tekanan darah yang meningkat, dan kala II berkepanjangan. Studi pendahuluan didapatkan hasil ibu hamil merasa cemas dan pemeriksaan masih terfokus pada pemeriksaan fisik. Tujuan penelitian untuk melihat determinan yang menyebabkan rasa cemas pada ibu hamil usia kandungan trimester III, dengan menggunakan desain Cross Sectional dan metode wawancara menggunakan kuisioner Perinatal Anxiety Screening Scale (PASS), sampel untuk penelitian sebanyak 138 responden menggunakan total populasi. Data yang digunakan data primer dari kuisioner. Analisis statistik menggunakan regresi logistik berganda. Variabel paritas, riwayat komplikasi kehamilan, fasilitas, dukungan suami dan dukungan tenaga kesehatan memiliki pengaruh bermakna dengan kecemasan ibu hamil trimester III. Variabel dukungan tenaga kesehatan paling dominan terhadap kecemasan ibu hamil dengan OR sebesar 4,727. Ada pengaruh variabel pengetahuan, paritas, riwayat komplikasi kehamilan, sarana kesehatan dan dukungan dari tenaga kesehatan, variabel dominan yaitu dukungan tenaga kesehatan merupakan kunci utama dalam menurunkan rasa cemas ibu hamil trimester III. Dukungan tenaga kesehatan yang semakin baik kepada ibu hamil, maka peluang ibu untuk tidak merasa cemas selama masa kehamilannya akan semakin besar.

INTRODUCTION

Pregnancy begins at conception and continues until the fetus in the womb of the pregnant woman is born through the birth process. The calculation of the normal length of

pregnancy is 40 weeks/9 months 7 days (280 days) (1). Pregnancy necessitates conducive physical and psychological conditions so that the pregnancy process until delivery can run smoothly because pregnancy brings various physical and psychological changes (2).

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According to the Ministry of Health in 2018, the Maternal Mortality Rate (MMR) in Indonesia is currently still at a high figure, namely around 305 per 100,000 live births (3). The Ministry of Health collects the number of maternal deaths in the family health program records which increase every year, there were 4,627 deaths in 2020 and there were 7,389 deaths in 2021.

Most of the maternal deaths that increased in 2021 were caused by hypertension in pregnancy with a total of 1,077 cases, 1,330 cases of bleeding, and 2,982 cases of COVID-19 (3). There are two causes of maternal death, namely direct causes which are all related to obstetric events, and indirect causes, which are the result of existing diseases or diseases that arise during pregnancy that affect pregnancy, for example, malaria, anemia, HIV/AIDS, and cardiovascular disease. Those included in the direct causes of maternal death are bleeding (28%), high-risk pregnancy (24%), infection (11%) and abortion (5%) (4). According to *the World Health Organization* (WHO), mental disorders can be experienced by pregnant women as much as 10% and also new mothers as much as 13% worldwide, the mental disorder experienced was depression in 2020 (5).

In developing countries, the prevalence of anxiety and depression exceeds 20%, compared to 7–20% in developed countries (6). Depression, anxiety, sleep disorders, and psychosis are among the mental health problems often experienced by pregnant, giving birth, postpartum, and breastfeeding mothers (7).

Mental health disorders require the best solutions to reduce the impacts that will arise, such as preeclampsia/eclampsia, bleeding, increased blood pressure readings, and prolonged second stage. Anxiety disorders and depression are two disorders that are commonly experienced by people around the world, including Indonesian people, so these are mental health disorders that have the highest prevalence (8).

Pregnancy is a significant source of stress for women. While discovering a pregnancy often brings joy, it also may induce anxiety because of the changes taking place in her and the growth and development of the fetus in her womb (9).

Most of the women experiencing fear and anxiety during pregnancy are likely caused by worry about changes in marital relationships,

fetal health, and problems in accepting the new role as a mother. Anxiety that arises in the third trimester is more about childbirth, caused by physical changes in pregnancy and childbirth which seem to be an uncontrolled process (10).

Another study stated that statistical results showed that the majority of pregnant women were very anxious (47.1%) (11). Other studies state that pregnant women experience mild anxiety (87%) and moderate anxiety (13%) (12). Variables of age, education, work, parity, and history of abortion are factors that influence the emergence of anxiety in pregnant women in the third trimester (6). Based on the description of the problem, it is necessary to know which variables are the most dominant in influencing the occurrence of anxiety in pregnant women in the third trimester.

METHODS

Data collection was conducted in February 2023 at the Gunungsari Health Center, with ethical approval number of 03/23.01/02231 which was granted by the ethics commission of Prof. Dr. Hamka University. This study used a cross-sectional research design. The study population comprised 138 respondents with a gestational age of trimester III with a sample selection method, Total Sampling so that 138 pregnant women in trimester III were used as samples. The sample must meet the inclusion criteria and agree to fill out the research questionnaire. The inclusion criteria are pregnant women over 28 weeks, pregnant women domiciled in Gunungsari, and willing to participate in the study from start to finish.

Knowledge, education, parity, age, history of complications, health facilities, husband's support, and health worker support are independent variables in this study, while the anxiety of pregnant women in the third trimester is the dependent variable. Primary data obtained from the Perinatal Anxiety Screening Scale (PASS) questionnaire, husband's support, and health worker support are research data which will then be analyzed statistically using a computerized program in the form of Statistical Product and Service Solution (SPSS) version 26, including testing one variable, comparing two variables and comparing more than two variables using multiple logistic regression.

RESULT

Characteristics of Pregnant Women

Pregnant women who experience high anxiety (31.9%) are primarily mothers with multiparous pregnancies (55.8%), low levels of knowledge (52.2%), and no formal education level (52.2%). Elementary school, junior high school (71.7%), with age group 20–35 years (68.1%), pregnancy without complications (55.8%), and complete health facilities (60.1%). Respondents received support from their husbands (62%) and received support from health workers (65.2%).

High anxiety levels were higher in pregnant women in the third-trimester with low knowledge, namely 28 respondents (38.9%), low education, namely 32 respondents (32.2%), multiparous, namely 31 respondents (40.3%), non-risk age, namely 32 respondents (34%), history of pregnancy complications with complications, namely 27 respondents (44.3%), incomplete health facilities, namely 27 (49.1%), not getting support from their husbands, namely 23 respondents (45.1%) and not getting support from health workers, namely 26 (54.2%).

Table 2 shows the number of pregnant women in the third trimester with high anxiety associated with low knowledge, low education, and multiparity. Multipara, namely statistical analysis obtained PR = 2.488 (CI 95%: 1.160 - 5.339) which states that pregnant women in the third trimester with multipara have a 2.4 times risk of experiencing high anxiety.

Table 1. Respondent Characteristics

| Variables | f | % |
|------------------------------|----|------|
| Anxiety | | |
| Tall | 44 | 31.9 |
| Low | 94 | 68.1 |
| Knowledge | | |
| Low | 72 | 52.2 |
| Tall | 66 | 47.8 |
| Education | | |
| Low | 99 | 71.7 |
| Tall | 39 | 28.3 |
| Parity | | |
| Multipara | 77 | 55.8 |
| Primipara | 61 | 44.2 |
| Age | | |
| No Risk | 94 | 68.1 |
| At risk | 44 | 31.9 |
| Complications History | | |
| With Complications | 61 | 44.2 |
| Without complications | 77 | 55.8 |
| Health Facilities | | |
| Incomplete | 55 | 39.9 |
| Complete | 83 | 60.1 |
| Husband Support | | |
| Does not support | 51 | 37 |
| Support | 87 | 63 |
| Health Worker Support | | |
| Does not support | 48 | 34.8 |
| Support | 90 | 65.2 |

Table 2. Characteristics of Respondents with Anxiety

| Variables | Anxiety | | | | Total | | PR (95%CI) |
|------------------|---------|------|-----|------|-------|-----|-----------------|
| | Tall | | Low | | N | % | |
| | N | % | N | % | | | |
| Knowledge | | | | | | | |
| Low | 28 | 38.9 | 44 | 61.1 | 72 | 100 | 1,989 |
| Tall | 16 | 24.2 | 50 | 75.8 | 66 | 100 | (0.953 – 4.151) |
| Education | | | | | | | |
| Low | 32 | 32.3 | 67 | 67.7 | 99 | 100 | 1,075 |
| Tall | 12 | 30.8 | 27 | 69.2 | 39 | 100 | (0.483 – 2.391) |
| Parity | | | | | | | |
| Multipara | 31 | 40.3 | 46 | 59.7 | 77 | 100 | 2,488 |
| Primipara | 13 | 21.3 | 48 | 78.7 | 61 | 100 | (1,160 – 5,339) |
| Age | | | | | | | |
| No Risk | 32 | 34 | 62 | 66 | 94 | 100 | 1,376 |
| At risk | 12 | 27.3 | 32 | 72.7 | 44 | 100 | (0.625 - 3.029) |

| Variables | Anxiety | | | | Total | | PR (95%CI) |
|------------------------------|---------|------|-----|------|-------|-----|------------------|
| | Tall | | Low | | N | % | |
| | N | % | N | % | | | |
| Complications History | | | | | | | |
| With Complications | 27 | 49.1 | 34 | 55.7 | 61 | 100 | 2,803 |
| Without complications | 17 | 20.5 | 60 | 77.9 | 77 | 100 | (1,339 – 5,865) |
| Health Facilities | | | | | | | |
| Incomplete | 27 | 49.1 | 28 | 50.9 | 55 | 100 | 3,744 |
| Complete | 17 | 20.5 | 66 | 79.9 | 83 | 100 | (1,767– 7,931) |
| Husband Support | | | | | | | |
| Does not support | 23 | 45.1 | 28 | 54.9 | 51 | 100 | 2,582 |
| Support | 21 | 24.1 | 66 | 75.9 | 87 | 100 | (1,234 – 5,403) |
| Health Worker Support | | | | | | | |
| Does not support | 26 | 54.2 | 22 | 45.8 | 48 | 100 | 4,727 |
| Support | 18 | 20 | 72 | 80 | 90 | 100 | (2,194 – 10,185) |

Pregnant women in the third trimester who do not receive support from their husbands in the analysis obtained PR = 2.582 (995% CI; 1.234 - 5.403) which states that pregnant women in the third trimester who do not receive support from their husbands have a 2.5 times risk of experiencing high anxiety. Pregnant women in the third trimester who do not receive support from health workers, namely 26 respondents, in the analysis obtained PR = 4.727 (95% CI: 2.194 - 10.185) which states that the opportunity is 4.7 times for pregnant women to experience high anxiety because they do not receive support from health workers.

Table 3 shows six variables influencing the level of anxiety in pregnant women: such are knowledge, parity, history of complications, health facilities, husband's support, and support from health workers. After conducting multiple logistic regression tests, the variable of health worker support is the dominant variable for the

occurrence of anxiety in pregnant women in the third trimester of pregnancy compared to the variables of knowledge, parity, and health facilities. The Odds Ratio (OR) value of the variable of health worker support is 3.542.

Table 3. Relationship between Characteristics and Anxiety of Pregnant Women in the Third Trimester in the Gunungsari Health Center Work Area, Serang Regency

| Variables | Anxiety level (PR) |
|-----------------------|-----------------------|
| Knowledge | 1,989 |
| Education | 1,075 |
| Parity | 2,488 |
| Age | 1,376 |
| Complications History | 2,803 |
| Health Facilities | 3,7444 |
| Husband Support | 2,582 |
| Health Worker Support | 4,727 |

Table 4. Multivariate Final Modeling

| Variables | Exp (B) | 95% CI for EXP(B) | | R2 |
|-----------------------|---------|-------------------|--------|-------|
| | | Lower | Upper | |
| Knowledge | 1,989 | 0.953 | 4,151 | 0.284 |
| Education | 1,075 | 0.483 | 2,391 | |
| Parity | 2,488 | 1,160 | 5,339 | |
| Age | 0.727 | 0.330 | 1,599 | |
| Complications History | 2,803 | 1,339 | 5,865 | |
| Health Facilities | 3,744 | 1,767 | 7,931 | |
| Husband Support | 2,582 | 1,234 | 5,403 | |
| Health worker support | 4.727 | 2,194 | 10,185 | |
| Constant | | | | |

DISCUSSION

Bivariate Test

This study analyzed variables of knowledge, education, parity, age, health facilities, support, and history of complications. Research conducted in Brazil also has the same characteristics as respondents (13). The variables that differentiate this study from other studies are that in addition to the characteristics of pregnant women above, the researcher also analyzed the variables of health facilities, husband's support, and the variables of health worker support.

The anxiety felt by pregnant women in this study was 31.9%. The measuring instrument in this study used the Perinatal Anxiety Screening Scale (PASS) questionnaire. The PASS questionnaire is a self-report instrument to see the anxiety problems experienced by pregnant and postpartum women in a period of less than 1 year. The questions in the PASS questionnaire consist of 31 items and do not need to be tested for validity and reliability again because they already have valid and reliable values. The four points assessed in this questionnaire are excessive worry and special fear, perfectionism, control, and finally trauma (14).

Knowledge

Low knowledge of pregnant women does not directly cause anxiety such as the results of statistical tests of research in the Sleman area, there was no relevant relationship between the variable of anxiety of pregnant women and the level of knowledge of mothers regarding risk factors for childbirth at the Sleman Health Center, Yogyakarta (15). However, research stated that 191 people (79.3%) respondents with less knowledge were related to the level of anxiety (16).

Anxiety can be influenced by other things, such as experience, tradition, attitude, and community belief, so high or low knowledge is not a measure to assess whether pregnant women feel anxious. The knowledge obtained by pregnant women can anticipate anxiety because the mother can be prepared if there is something unusual in her pregnancy and vice versa, the more knowledge obtained can cause anxiety if the mother does not get good information.

Education

Education level of pregnant women in the third trimester with high anxiety but low education. A study at the Tuminting Community Health Center by Bidjuni stated that there is no relationship between education and anxiety in primigravida mothers (17). Research conducted in 2022 also states the same thing that there is no relationship between education and the occurrence of anxiety in mothers giving birth during the COVID-19 pandemic (18). According to research in 2024, women with higher levels of education have a lower risk of anxiety levels because they are people who have a greater capacity to cope with uncertainty and emotional stress (19).

Education certainly cannot alone provide a mother's readiness to face anxiety in the third trimester of pregnancy, because anxiety occurs when there is excessive fear that arises due to hormonal changes. Mothers with higher education in the process of receiving information can choose information that is useful and good for themselves and their fetuses more easily, while mothers with low education can only receive all information without filtering or selecting it again.

Parity

High anxiety is felt by pregnant women with multipara, PR value = 2.488 (95%: 1.160 - 5.339) which states that pregnant women in the third trimester with multipara have a 2.4 times greater chance of experiencing high anxiety. Another study in 2022 states a relevant relationship between parity and anxiety levels of pregnant women in the third trimester of pregnancy (20). According to research in 2024, a mother who has given birth will feel anxious, if seen from the history of previous pregnancies several mothers experience difficulties starting from pregnancy, childbirth to the postpartum period (19).

Previous unpleasant experiences can trigger anxiety. Fatigue from taking care of the house and children can also be one of the causes of high anxiety in some multiparous mothers (19). Becoming a mother is associated with greater emotional stress due to the increased responsibilities involved, the more children there are, the greater the stress.

Age

High anxiety levels can also be observed in pregnant women of non-risk age. In line with research that was conducted in 2018, stated that the mother's age level does not influence the anxiety of pregnant women in the third trimester (6).

Research in 2014 stated that pregnant women who have immature personalities (less mature) are usually found in very young mothers, do not want to share with other people and tend to show unstable emotions in dealing with pregnancy compared to pregnant women who have stable and mature personalities so that they show excessive anxiety and fear towards themselves and the baby they are carrying during pregnancy (21)

A mother's readiness is not measured by age, because the results of the study showed that respondents were aged 20-35 years, this study was conducted in a mountainous area with a culture of people marrying off their children at a young age and it was also found that there were concerns that occurred to pregnant women regarding the development of their fetus, especially if the estimated birth date is missed it will be easier to be anxious if during the pregnancy it is not the same as other pregnant women.

Complications History

Pregnant women in the third trimester with a history of pregnancy complications with complications experience high levels of anxiety PR of value = 2.803 (CI 95%: 1.339 - 5.865) states that pregnant women in the third trimester with complications have a 2.8 times greater chance of experiencing high anxiety. Brazil has conducted research with the same results, namely complications that occurred in previous pregnancies are related to antenatal anxiety in the current pregnancy (13).

According to researchers, anxiety can be caused by changes that occur in the body of pregnant women, both psychologically and physiologically, especially with previous unpleasant pregnancy or childbirth experiences and pregnant women who have a history of complicated pregnancies show symptoms of anxiety.

Health Facilities

High levels of anxiety are more common in incomplete health facilities,

PR=3.744 (CI 95%: 1.767 – 7.931) which states that incomplete health facilities have a 3.7 times greater chance of experiencing high anxiety. A study conducted in 2022 stated that pregnant women's perceptions of health facilities determine decisions and feelings of security (22).

According to researchers, health facilities with incomplete facilities certainly make mothers feel uncomfortable it can trigger feelings of anxiety. A pregnant woman who is about to take action to check her pregnancy in a health facility with incomplete health facilities has excessive fear and a sense of distrust, especially towards health workers.

Husband Support

High levels of anxiety in pregnant women who do not get support from their husbands, PR value = 2.582 (95% CI: 1.234–5.403) which states that if their husband's support is not provided to pregnant women, pregnant women will experience anxiety with a 2.5 times higher chance. Another study obtained a p-value of 0.003, which states that there is a relationship between the variable of husband's support for pregnant women and the variable of anxiety in pregnant women (20).

Good communication and support from a partner are some of the determining factors for physical health and psychological well-being, especially during pregnancy. However, support from a partner does not always match the expectations of pregnant women. A study stated that lack of support and communication is a stressor in pregnant women (19)

According to researchers, the support of a husband will certainly provide a sense of comfort to pregnant women, with the form of attention from the husband will certainly help the mother to reduce or prevent anxiety that arises during her pregnancy. Helping the mother with her household chores, preparing for pregnancy and childbirth needs, preparing for childbirth costs, taking her for pregnancy check-ups, or just listening to the story of the pregnant woman can reduce the anxiety felt by the mother because her husband is alert.

Health Worker Support

High levels of anxiety occur in pregnant women where health workers do not provide support OR = 4.727 (CI 95%: 2.194 – 10.185) states that if health workers do not provide

support to pregnant women, then the mother will have a 4.7 times chance of experiencing high anxiety. Based on research that has been conducted, states that there is a relevant relationship between health worker support and anxiety levels (23).

According to researchers, with the support of health workers who are ready to accompany pregnant women, providing information and education about pregnancy in the third trimester will certainly reduce and prevent anxiety in pregnant women. Support from health workers in the form of accompanying mothers during pregnancy, providing solutions to complaints experienced, and providing useful education, such as how to do stress management during pregnancy exercise. The background of pregnant women at Gunungsari Health Center have a low level of education and knowledge and of course, support from health workers plays a very important role in overcoming pregnant women who feel anxiety, and the need for maximum and continuous efforts so that the support of these health workers can be felt by pregnant women.

Multivariate Test

The results of the multivariate analysis showed that the variable of health worker support was the most dominant on the anxiety of pregnant women in the third trimester with an Odds Ratio (OR) of 4.727 with the final modeling results having an R2 value of 0.248, meaning that the four independent variables can explain the variation in the anxiety variable of pregnant women in the third trimester by 28.4%.

Form of support from health workers to pregnant women in the third trimester, some of them give attention and appreciation which is a sign that pregnant women are listened to by health workers, creating a feeling of comfort and feeling needed. These feelings will arise with the support of health workers. The positive support that we give to pregnant women will encourage mothers to be positive (23).

CONCLUSION AND SUGGESTIONS

Conclusion

A study on pregnant women in the third trimester in the Gunung Sari Health Center work area, the results showed that pregnant

women experienced anxiety caused by low knowledge, low education, mothers with multipara and a history of pregnancy complications as well as incomplete health facilities, lack of support from husbands and support from health workers.

The results of the multivariate test stated that there are 5 variables that indicate the influence on anxiety in pregnant women in the third trimester, namely knowledge, parity, history of pregnancy complications, health facilities, and support from health workers. The dominant variable in the occurrence of anxiety in pregnant women in the third trimester is support from health workers. Health workers with an Odds Ratio (OR) of 4.727 who do not provide support to pregnant women will provide a 4.7 times greater chance for pregnant women to experience anxiety in the third trimester of pregnancy,

Suggestion

The study provides results that show that there are pregnant women in the third trimester who experience anxiety, there needs to be early screening in every pregnancy, and a tool or facility is needed that allows for the identification of warning signs in the mental health of pregnant women can lead to early treatment and reduce the impact of anxiety. Health workers' training on stress management is very necessary so that in assisting pregnant women, quality interpersonal relationships between pregnant women and health workers are very important, where midwives play a fundamental role because of their closeness to mothers during the prenatal period. It is recommended that medical personnel and mental health workers work together to provide prenatal care when needed and be proactive in starting care during pregnancy.

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REFERENCES

1. Prawiroharjo S. Ilmu Kebidanan. 4th ed. Jakarta: Yayasan Bina Pustaka Sarwono Prawiroharjo; 2020.
2. Mukhadiono, Subagyo W, Wahyuningsih D. Hubungan Antara Dukungan Suami Dengan Tingkat Kecemasan pada Ibu Primigravida Trimester III dalam Menghadapi Persalinan. *J Keperawatan Soedirman* [Internet]. 2015;10(1):53–60. Available from: <http://www.jks.fikes.unsoed.ac.id/index.php/jks/article/viewFile/592/331>
3. Ministry of Health of the Republic of Indonesia. Profil Kesehatan [Internet]. Jakarta: Ministry of Health of the Republic of Indonesia; 2021. Available from: <https://repository.kemkes.go.id/book/828>
4. Riyanti N, Devita R, Wahyuni D. Analisis Faktor Yang Berhubungan Dengan Risiko Kehamilan Pada Ibu Hamil. *Jurnal Aisyiyah Med* [Internet]. 2021;6(2). Available from: <https://jurnal.stikes-aisyiyah-palembang.ac.id/index.php/JAM/article/view/1051>
5. Audyna JA, Marcelina LA. Hubungan Dukungan Sosial Suami Dengan Depresi Pada Ibu Postpartum Saat Pandemic Covid-19 di Puskesmas Kecamatan Pasar Rebo Jakarta Timur. *J Keperawatan Widyagantari Indones* [Internet]. 2022;6(1):12–8. Available from: <https://ejournal.upnvj.ac.id/Gantari/article/view/3230>
6. Alza N, Ismarwati I. Faktor-faktor yang Mempengaruhi Kecemasan Ibu Hamil Trimester III. *J Kebidanan dan Keperawatan Aisyiyah* [Internet]. 2018;13(1):1–6. Available from: <https://doi.org/10.31101/jkk.205>
7. Nuryati T. Pelatihan Manajemen Stres Pada Ibu Hamil di Puskesmas Bojong Menteng Kota Bekasi. *J-ABDI J Pengabdian Kpd Masy* [Internet]. 2022;1(9):2115–24. Available from: <https://doi.org/10.53625/jabdi.v1i9.1248>
8. Sany UP. Gangguan Kecemasan dan Depresi Menurut Perspektif Al Qur'an. *Syntax Lit J Ilm Indones* [Internet]. 2022;7(1):1262–78. Available from: https://www.researchgate.net/publication/358285746_Gangguan_Kecemasan_dan_Depresi_Menurut_Perspektif_Al_Qur'an
9. Maki FP, Pali C, Opod H. Gambaran Tingkat Kecemasan Ibu Hamil Primigravida Trimester III di Klinik Bersalin Sutra Minahasa Selatan. *e-Biomedik* [Internet]. 2018;6(2). Available from: <https://ejournal.unsrat.ac.id/v3/index.php/ebiomedik/article/view/21889>
10. Kartika I, Claudya TP. Hubungan Dukungan Keluarga Dengan Tingkat Kecemasan Ibu Hamil Menghadapi Proses Persalinan. *J Midwifery Public Heal* [Internet]. 2021;3(2):47–52. Available from: <http://dx.doi.org/10.25157/jmph.v3i2.6821>
11. Murdayah, Lilis DN, Lovita E. Faktor-faktor yang berhubungan dengan kecemasan pada ibu bersalin. *Jambura J Heal Sci Res* [Internet]. 2021;3(1):115–25. Available from: <https://doi.org/10.35971/jjhsr.v3i1.8467>
12. Siallagan D, Lestari D. Tingkat Kecemasan Menghadapi Persalinan Berdasarkan Status Kesehatan, Graviditas dan Usia di Wilayah Keaja Puskesmas Jombang. *Indones J Midwifery* [Internet]. 2018;1(2). Available from: <https://jurnal.unw.ac.id/index.php/ijm/article/view/101>
13. Nugroho, Nurrezki, Warnaliza W. Buku Ajar Askeb 1 Kehamilan. Yogyakarta: Nuha Medika; 2017.
14. Khomsah YS, Sukmawati E. Pengetahuan, Sikap Ibu, Sarana Kesehatan dan Sikap Petugas Kesehatan tentang Pemeriksaan Kehamilan Selama Masa Pandemi Covid-19 terhadap Perilaku Kunjungan Pemeriksaan Kehamilan. *J Bidan Komunitas* [Internet]. 2022;5(1):42–50. Available from: <https://doi.org/10.33085/jbk.v5i1.5107>

15. Silva MM de J, Nogueira DA, Clapis MJ, Leite EPRC. Anxiety in Pregnancy: Prevalence and Associated Factors. *Rev da Esc Enferm da USP* [Internet]. 2017;51. Available from: <https://doi.org/10.1590/S1980-220X2016048003253>
16. Somerville S, Dedman K, Hagan R, Oxnam E, Wettinger M, Byrne S, et al. The Perinatal Anxiety Screening Scale: Development and Preliminary Validation. *Arch Womens Ment Health* [Internet]. 2014;17(5):443–54. Available from: <https://doi.org/10.1007/s00737-014-0425-8>
17. Nurlailiyah A, Machfoedz I, Sari DP. Tingkat Pengetahuan Tentang Faktor Risiko Persalinan dengan Tingkat Kecemasan dalam Menghadapi Persalinan pada Ibu Hamil Trimester III di Puskesmas Sleman Yogyakarta. *JNKI (Jurnal Ners dan Kebidanan Indones J Nurs Midwifery)* [Internet]. 2015;3(3):169–75. Available from: [http://dx.doi.org/10.21927/jnki.2015.3\(3\).169-175](http://dx.doi.org/10.21927/jnki.2015.3(3).169-175)
18. Novelia S, Rukmaini R, Umayah U. Hubungan Pengetahuan Ibu Hamil dan Dukungan Suami dengan Kecemasan Ibu Hamil dalam menghadapi Persalinan. *J Qual Women's Heal* [Internet]. 2022;5(1):90–8. Available from: <https://doi.org/10.30994/jqwh.v5i1.140>
19. Bidjuni H, Kallo V. Hubungan Karakteristik Ibu Hamil Trimester III Dengan Tingkat Kecemasan Dalam Menghadapi Persalinan Di Poli KIA Puskesmas Tuminting. *J Keperawatan* [Internet]. 2014;2(2). Available from: <https://ejournal.unsrat.ac.id/v3/index.php/jkp/article/view/5307>
20. Muliani RH. Faktor-Faktor yang Mempengaruhi Kecemasan pada Ibu Bersalin dalam Masa Pandemi COVID 19. *J Bina Cipta Husada* [Internet]. 2022;18(1):56–66. Available from: <https://jurnal.stikesbch.ac.id/index.php/jurnal/article/view/54>
21. Paz-Pascual C, Artieta-Pinedo I, Bully P, García-Álvarez A, Group ema Q, Espinosa M. Anxiety and depression in pregnancy. Associated variables during the covid-19 pandemic period. *Enferm Clin* [Internet]. 2024;34(1):23–33. Available from: <https://www.elsevier.es/es-revista-enfermeria-clinica-english-edition--435-articulo-anxiety-depression-in-pregnancy-associated-S2445147924000158>
22. Astuti LD, Hasbiah H, Rahmawati E. Faktor - Faktor Yang Mempengaruhi Tingkat Kecemasan Ibu Hamil Trimester III di Puskesmas Mekarsari. *PREPOTIF J Kesehat Masy* [Internet]. 2022;6(1):755–61. Available from: <https://doi.org/10.31004/prepotif.v6i1.3214>
23. Jayanti GD, Umarianti T, Pratiwi EN. Hubungan Skoring Risiko Ibu Hamil dan Dukungan Tenaga Kesehatan dengan Tingkat Kecemasan Ibu Hamil di Puskesmas Kratonan Kota Surakarta [Internet]. *Universitas Kusuma Husada Surakarta*; 2022. Available from: <https://eprints.ukh.ac.id/id/eprint/3407/>