Original Research

The Phenomenon Of Pregnant Women's Anxiety In Facing Labor

Lutfiana Puspita Sari1*, Dewi Susilowati2, Sofia Sagita3

1,2,3 Departement of Midwifery, Poltekkes Kemenkes Surakarta, Indonesia

ABSTRACT

Background: The delivery process is a natural event of conception in the form of a baby and placenta from the uterus that can cause anxiety. If anxiety in pregnant women is not managed properly, it will have an impact on the physical and psychological health of the mother and baby.

Methods: This study uses descriptive methods. The implementation of the research will take place in December 2021–May 2022 at PMB Lutfiana. A total of 40 maternity mothers during phase I was active were obtained through a total sampling technique. The data collection technique uses the STAI scale. Data analysis using descriptive analysis.

Result: The age characteristics of respondents aged 20–35 years included as many as 34 respondents (85%). The majority of low-educated elementary-junior high school students amounted to 21 respondents (52.5 %). The majority of respondents did not work, a total of 27 respondents (67.5%), and the majority of multiparous respondents amounted to 31 respondents (77.5%). The majority of maternity mothers' anxiety during the active phase was severe anxiety level, with 28 respondents (70%). The average anxiety score was 46.43, with 95% of the CI being at a score of 43.01-49.84.

Conclusion: The majority of anxiety levels in active phase maternity mothers are severe anxiety levels.

INTRODUCTION

Childbirth is a phenomenon that every married couple looks forward to. However, when heading into the delivery process, pregnant women will feel mixed feelings. In addition to being impatient to see the baby born, the mother will also feel fear and anxiety in the face of her delivery (Maryunani, 2015). Anxiety experienced by mothers in labor can have an impact on both the delivery process and the fetus in the womb.

Anxiety is believed to be a common mental problem in pregnant women, including being more present in the third trimester of pregnancy. Higher levels of anxiety in the third trimester of pregnancy may be related to the closeness of childbirth, which is perceived by some pregnant women as a vulnerable moment and capable of triggering feelings of fear (Silva et al., 2017). The number of cases of postpartum depression, one of which is due to the unidentified psychological condition of pregnant women, is increasing.

Some pregnant women are not honest about the psychological conditions they experience. They feel happy and enjoy their pregnancy, but actually, they have a big problem that could affect their pregnancy. Anxiety that is not identified during pregnancy can have an impact on childbirth and can even make the mother experience postpartum depression (Silva, Nogueira, Clapis, & Leite, 2017).

The level of anxiety greatly affects the welfare of pregnant women and the fetus in the womb. Low levels of anxiety in pregnant women can reduce the complications caused
by it so that it can indirectly reduce maternal and infant mortality rates, while high levels of anxiety can aggravate complications of maternal and infant mortality rates (Siallagan & Lestari, 2018).

Research in Indonesia shows that pregnant women who experience high levels of anxiety can increase the risk of premature birth and even miscarriage. If this is allowed to happen, then the mortality and morbidity rates in pregnant women will increase (Astria, 2019) (Shodiqoh, 2014). The same thing was revealed by Hasim (2018) in his research, where anxiety in pregnancy, if not overcome as soon as possible, will have a negative impact on the mother and fetus.

Anxiety during pregnancy does not have a direct impact on death. But anxiety can result in a decrease in uterine contractions so that childbirth will increase for longer, an increase in the incidence of uterine atony, lacerations of bleeding, infections, maternal fatigue, and shock, while in babies it can increase the risk of premature birth and LBW. Previous research by Alexandra et al., (2019) showed that a history of mental health disorders, lack of social support, previous negative childbirth experiences, and Mood of Delivery (MOD) correlates with Fear of Childbirth (FOC) and Post Traumatic Stress Disorder (PTSD).

This study confirms the previous study where the results showed that the level of anxiety in respondents was moderate anxiety in as many as 14 respondents (43.8%), severe anxiety in 10 respondents (31.3%), mild anxiety in 6 respondents (18.8%), and did not have anxiety in 2 respondents (6.3%) (Frincia et al., 2018). This study aims to determine maternal anxiety during pregnancy, especially in the face of childbirth. After knowing the phenomenon of anxiety experienced by the mother in labor, the midwife can intervene so that the mother in labor can be more relaxed so that delivery takes place smoothly, naturally, and normally without any trauma.

Identifying anxiety through instruments to measure maternal anxiety during pregnancy can help pregnant women so that their anxiety does not get worse, which will have an impact on both the mother and the baby. The results of a preliminary study at PMB Lutfiana, Yogyakarta during August–October 2021 obtained data on the normal delivery of 20 patients. Of the 20 patients, 15 (75%) experienced anxiety on the eve of delivery. The high rate of anxiety experienced by maternity mothers can have an impact on the delivery process.

This is what prompted researchers to conduct research on maternal anxiety phenomena before delivery in order to identify the anxiety experienced by maternity mothers so that appropriate interventions can be made as a solution to overcome anxiety in maternity mothers.

MATERIALS AND METHOD

This type of research is carried out by a descriptive method with a cross-sectional approach. The cross-sectional design is a study to study the dynamic correlation between risk factors and effects, and all data can be taken over a period of time. The population in this study was all normal maternity mothers who gave birth in PMB Lutfiana. The sampling technique used was total sampling.

Given that the results of the study can be generalized and the calculation does not require a table of the number of samples, the number of samples must be made representative. Thus, the sampling in this study used the Slovin formula to obtain a sample that could represent the overall state of the object. This study used 40 physiological maternity mother subjects with an active phase of 4 cm to ≤ 7 cm who were willing to be respondents and follow the research procedure.

A tool for measuring anxiety in maternity mothers using the Y-1 STAI (The Spielberger State and Trait Anxiety Inventory) scale contains 20 items, where 10 items contain statements about anxiety (favorable) and 10 items contain no statements regarding anxiety (unfavorable). The variable in this study is a picture of the anxiety of the maternity mother before delivery during the active phase of labor.
RESULTS
The results of the characteristics of the study subjects showed 40 research subjects based on characteristics, frequency and percentage

Table 1. Characteristics of respondents in the facing of labor

| Background Characteristic | Frequency (f) | Percentage (%) |
|--------------------------|--------------|----------------|
| Age                      |              |                |
| 20 – 35                  | 34           | 85             |
| >35                      | 6            | 15             |
| Education Level          |              |                |
| Lower Education          | 21           | 52.5           |
| Higher Education         | 19           | 47.5           |
| Occupation               |              |                |
| Working                  | 13           | 32.5           |
| Not Working              | 27           | 67.5           |
| Parity                   |              |                |
| Primiparous              | 9            | 22.5           |
| Multiparous              | 31           | 77.5           |

Based on table 1, shows that the characteristics of respondents according to age in PMB Lutfiana are mostly aged 20–35 years, with a total of 34 respondents (85%). The level of education of respondents in PMB Lutfiana is mostly low education, starting from elementary-junior high schools, with a total of 21 respondents (52.2%). The characteristics of respondents according to employment at PMB Lutfiana show that the majority are not working, with a total of 27 respondents (67.5%).

The characteristics of respondents according to parity or number of pregnancies in PMB Lutfiana were mostly multiparous, with a total of 31 respondents (77.5%).

Table 2. Distribution of the incidence of anxiety in pregnant women in the face of labor

| Anxiety        | Frequency (f) | Percentage (%) |
|----------------|--------------|----------------|
| Mild anxiety   | 10           | 25             |
| Severe anxiety | 30           | 75             |
| Total          | 40           | 100            |

Based on table 2, it shows that the phenomenon of anxiety of pregnant women in facing labor during the active phase of labor at PMB Lutfiana the majority experienced severe anxiety as many as 30 respondents (75%).

Table 3. The relationship between age and anxiety in the face of labor

| Age     | Mild | Severe | Total |
|---------|------|--------|-------|
| n       | %    |        | %     |
| 20-35 th| 9    | 22.5   | 85    |
| >35 th  | 1    | 25     | 15    |
| Total   | 10   | 25     | 100   |

Based on table 3 shows that the majority of the age of 20-35 years experience severe anxiety 25 respondent (62.5%).

Table 4. The relationship between education level and anxiety in the face of labor

| Education Level | Mild | Severe | Total |
|-----------------|------|--------|-------|
| n               | %    |        | %     |
| Lower Education | 7    | 17.5   | 52.5  |

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Based on table 4 shows that respondents who have a higher level of education (high school-college) are more likely to experience severe anxiety, as many as 16 respondent (40%).

Table 5. The relationship between Occupation and anxiety in the face of labor

| Occupation  | Anxiety | Total |
|-------------|---------|-------|
|             | Mild    | Severe|     |
|             | n       | %     | n   | %  |
| Working     | 2       | 5     | 11  | 27.5| 52.5|
| Not Working | 8       | 20    | 19  | 47.5| 47.5|
| Total       | 10      | 25    | 30  | 75  | 100 |

Based on table 5 shows the respondent's occupation, the majority of working mothers experience more severe anxiety than others as much 19 respondent (47.5 %).

Table 6. The relationship between Parity and anxiety in the face of labor

| Parity      | Anxiety | Total |
|-------------|---------|-------|
|             | Mild    | Severe|     |
|             | n       | %     | n   | %  |
| Primiparous | 2       | 5     | 7   | 17.5| 22.5|
| Multiparous | 8       | 20    | 23  | 57.5| 77.5|
| Total       | 10      | 25    | 30  | 75  | 100 |

Based on table 6 shows the respondent's parity multiparous were more likely to experience severe anxiety than others as much 23 respondent (57.5%)

DISCUSSION

The Relationship Between Age and Anxiety in The Face of Labor

The first pregnancy for a mother-to-be is a new journey marked by physical and psychological changes so that various psychological problems arise (Varney, 2018). In this study, the results revealed that the majority of the participants aged 20–35 years experienced severe anxiety in 25 respondents (62.5%). This means that the age of good maternity mothers who are in the risk category (> 35 years) and the non-risk category (20–35 years) do not have a significant influence on the level of anxiety of maternity mothers.

However, this is supported by the results of research conducted by Komariah (2017) that found the readiness of maternity mothers does not depend on their age, so age is not a factor that affects the anxiety of maternity mothers. Whether a person matures or not is not only based on age. Some are young, but she is ready to be a mother so as not to experience anxiety.

The results of a similar study by Musahib et al (2015) also strengthened the results of this study where the age factor of pregnant women before delivery at the Maternal and Child Health Clinic of the Mabelopura Health Center was statistically not related to the level of anxiety. This may be due to the uncontrolled interference factor that affects the level of anxiety, i.e., knowledge.
The Relationship Between Education Level and Anxiety in The Face of Labor

A person's level of education also determines whether it is easy to absorb and understand the knowledge about the labor process they have gained. Thus, the increasing gestational age approaching the maternal labor process can prepare mature psychology so that it can reduce the burden on the mother's mind (Janiwarty, 2013). In the results of this study, it was found that respondents with high education experienced severe anxiety, with a total of 16 respondents (60%). This result is certainly not in line with the results of research conducted by Kotimaki et al., (2020) that showed lower-educated women are likely to have worse health status and habits and a higher risk for health problems during pregnancy, which can also contribute to anxiety and depression.

Mothers who have less knowledge will view the labor process as frightening. However, this does not mean that mothers with high levels of knowledge will not experience anxiety during pregnancy. The higher the education level of a person, the better he will be able to search for or receive information so that he will quickly understand the conditions and risks he faces. However, this state will cause the person to become more anxious (Deklava et al., 2015).

The results of Ni'mah's research (2018) also strengthen the results and theories used in the results of this study that third-trimester pregnant women who are low or highly educated have the same chance of anxiety in the face of childbirth because the anxiety that occurs does not only depend on the education they have but also depends on knowledge, interpersonal relationships, and family history.

The Relationship Between Occupation and Anxiety in The Face of Labor

Meanwhile, on job characteristics, the majority of working mothers experience more severe anxiety than others, as many as 19 respondents (47.5%). The anxiety of people who work and do not work is certainly different. Individuals who do not work tend to have a lighter burden of mind than those who work, so the workload, which is one of the factors of anxiety in the individual, is not felt, but rather the anxiety felt tends to be caused by other factors.

Unlike the case with people who work, anxiety tends to be caused by the burden of work and the burden of household affairs. Working people tend to experience stress due to the workload they have (Murtiwidayanti & Ikiwati, 2021). This is reinforced by the results of Suyani's research (2020), where research shows that the majority of working pregnant women experience anxiety. In that sense, there is an element of necessity, so it is possible that the anxiety comes from the work itself and not from the process of preparation for childbirth.

The same is also in line with research conducted by Mayasari (2018) that shows one of the factors of anxiety for pregnant women is work. The workload that a person has, such as feeling incompetent in the world of work or feeling that he is unable to provide maximum work results, will trigger the emergence of anxiety in the individual.

The Relationship Between Parity and Anxiety in The Face of Labor

Parity levels have attracted the attention of many researchers in relation to maternal and infant health. It is generally said that there is a tendency for mothers with high parity to have mental and psychological readiness in the face of childbirth when compared to mothers with low parity (Pasaribu, 2014). But in fact, the results of this study showed that respondents with high parity levels (multipara) actually tended to feel severe anxiety in as many as 23 respondents (57.5%).

This is inconsistent with the theory expressed by Manuaba (2012) that in maternity homes, mothers with primigravida parity still do not have a shadow of what happens during childbirth and are often found feeling fearful because they often listen to stories about what will happen when the gestational age is getting closer to the time of delivery with the imagined scary delivery process. However, the results of this study are still in line with the theory expressed by Devi et al., (2018) that previous maternity experiences have a hand in influencing a mother's level of anxiety in facing the delivery process.
So it is possible that mothers who have been in labor before (multigravida) also experience anxiety because they are imagined to have had bad maternity experiences in the past and can also be influenced by the abnormal childbirth that multigravida mothers have experienced, which is also reinforced by the results of research by Fazdria and Harahap (2014) that shows anxiety increases as the risk factors are possessed, such as being too young or too old and too frequent pregnancies. The higher the parity, the more the mother will experience anxiety in the face of childbirth.

**The Phenomenon and Impacts of Maternal Anxiety during the First Stage of the Active Phase of Labor**

Childbirth is a phenomenon that every married couple looks forward to. For this reason, it is necessary to provide moral and material support that must be provided by the family, husband, and society for the welfare of the mother and fetus in her womb. However, when heading into the delivery process, pregnant women will feel mixed feelings. In addition to being impatient to see the baby born, the mother will also feel fear and anxiety in the face of her delivery (Maryunani, 2015).

The most commonly associated theory regarding childbirth anxiety is the pain felt by the mother during the labor process. The relationship between pain and anxiety is a positive correlation that is interconnected like a spiral whose tip is enlarged. The effect of anxiety on a spiral-like patterned pain whose tip is enlarged. The more advanced the labor process, the mother’s feelings will become more anxious, and the anxiety causes more intense pain, and vice versa (Sariati, 2016).

When the mother in labor feels anxious, the body will spontaneously release catecholamine hormones (Hartati & Sumarni, 2017). The increase in this hormone will cause vasoconstriction of blood vessels so that it can increase maternal blood pressure, decrease blood flow to the uterus, decrease uteroplacental flow, and decrease uterine activity so that it can cause prolonged labor (Potter & Perry, 2019). Maternal psychopathological symptomatology during pregnancy constitutes a significant risk factor for the well-being of the newborn. In particular, both prenatal anxiety and depression negatively affect the clinical aspects of the labor experience and, indirectly, the APGAR index (Smorti et al, 2021).

A prospective cohort study conducted by Shao et al., (2020) suggested the result that excessive anxiety experienced by a pregnant woman can trigger the incidence of ADHD in boys (Attention Deficit Hyperactivity Disorder) through increased C-reactive protein activity in the placenta. In her research, she explained that boys whose mothers experienced excessive anxiety while pregnant at least in the last 2 trimesters tended to have significant mRNA expressiveness in MCP-1, CRP, and HO-1 compared to the group of boys where the mother did not experience excessive anxiety while pregnant. It is also stated that the reason for this is that the fetoplacental "relationship" in male babies tends to be more sensitive to exposure to cytokines and maternal inflammation than in female babies.

Not only that, the adverse effects of excessive anxiety on pregnant women when facing childbirth were also revealed by Ramos et al., (2022) that pregnant women who experience excessive anxiety tend to have a shorter gestational age due to corticotropin-releasing hormone activity in the placenta. It is explained that an increase in pCRH occurs between the second and third trimesters compared to the beginning of pregnancy. In addition, a sharper increase in pCRH from the beginning of pregnancy to the third trimester of pregnancy can be triggered by excessive anxiety. High levels of pCRH in the placenta can "ripen" all conception results systematically and lead to a shorter gestational age. Generally, this event is called the pregnancy clock (Ramos et al, 2022).

Therefore, when the mother who is giving birth is in a comfortable, relaxed state, all the layers of muscles in the womb will work together in harmony as they should. That way, the delivery will run smoothly, easily, and comfortably. If the body and mind can feel comfort, then more constructive and positive thoughts can appear. A positive spike in maternity mothers’ confidence is indispensable in childbirth because it can foster the self-
confidence and mentality necessary to create the possibility of an uncomplicated delivery opportunity (Indrayani, 2013).

The presence of a delivery companion can provide a sense of comfort, security, enthusiasm, and emotional support and can encourage the mother. The companion should play an active role in supporting the maternity mother. The supportive treatment action is in the form of rubbing the mother’s back or holding her hand, maintaining eye contact, and convincing the maternity mother that they will not leave it alone (Nurul Hikmah, 2019).

The existence of a delivery companion can cause feelings of pleasure, which will be an impulse to the neurotransmitter in the limbic system, then passed on to the amygdala and then to the hypothalamus so that there is excitation in the ventromedial nucleus and the surrounding area, which can cause a feeling of calm and finally anxiety decreases so that the mother feels comfortable (Wati, 2015).

CONCLUSION

34 respondents (85%). The level of education of respondents in PMB Lutfiana is mostly low education, starting from elementary-junior high schools, with a total of 21 respondents (52.2%). The characteristics of respondents according to employment at PMB Lutfiana show that the majority are not working, with a total of 27 respondents (67.5%). The characteristics of respondents according to parity/number of pregnancies in PMB Lutfiana were mostly multiparous, with a total of 31 respondents (77.5%).

The suggestion for health workers, especially midwives, is that in carrying out services, they should always measure anxiety at the time of delivery so that interventions can be made to reduce maternal anxiety during childbirth. It is hoped that midwives will improve skills in an effort to assist childbirth without anxiety. Researchers are further encouraged not only to make this study a reference source but to expect to do more research by using different variables so that other factors of anxiety levels which can affect the birth process can be known. The samples can also be reproduced, so the research is more valid. The data collection process can also be done by using different techniques.

REFERENCES

Adam, J., & Umboh, J. (2015). Hubungan Antara Umur, Parietas dan Pendampingan Suami Dengan Intensitas Nyeri Persalinan Kala 1 Fase Aktif Deselarasi di Ruang Bersalin RSUD Prof. Dr. H. Aloe Saboe Kota Gorontalo. Jikmu, 5(2a), 361–374

Devi, N. S., Shinde, P., & Shaikh, G. (2018). Level of anxiety towards childbirth among primigravida and multigravida mothers. 4(5), 221–224.

Deklava L, Lubina K, Circenis K, Sudraba V, Millere I. Causes of anxiety during pregnancy. Procedia-Social Behav Sci. 2015;205:623–6

Fazdria F, Harahap MS. Gambaran Tingkat Kecemasan Pada Ibu Hamil Dalam Menghadapi Persalinan Di Desa Tualang Teungoh Kecamatan Langsa Kota Kabupaten Kota Langsa Tahun 2014. J Kedokt Syiah Kuala. 2016;16(1):6–13

Handayani, R. (2015). Faktor-Faktor Yang Berhubungan Dengan Tingkat Kecemasan Menjelang Persalinan Pada Ibu Primigravida Trimester III di Wilayah Kerja Puskesmas Lubuk Buaya Padang Tahun 2012. Ners Jurnal Keperawatan, 11(1), 62–71

Hasim, R. P. (2018). Gambaran Kecemasan Ibu Hamil [Universitas Muhammadiyah Surakarta]. http://eprints.ums.ac.id/63124/1/Naskah Publikasi Ilmiah.pdf

Hishikawa, K. (2019). Anxiety or Nervousness Disturbs the Progress of Birth Based on Human Behavioral Evolutionary Biology. 28(4), 218–223
Indrayani, D. (2013). *Asuhan Persalinan dan Bayi Baru Lahir*. Jakarta: Trans Infomedia.

Janiwarty, B. (2013). *Pendidikan Psikologi untuk Bidan: Suatu Teori dan Terapannya*. Yogyakarta: Rapha Publishing.

Kahyaoglu, Hatice Sut; Kucukkaya, B. (2020). Anxiety, depression, and related factors in pregnant women during the covid-19 pandemic in turkey: A web-based cross-sectional study. *Perspectives in Psychiatric Care, 57*(2), 860–868. https://doi.org/10.1111/ppc.12627

Koelewijn, J. M., Sluijs, A. M., & Vrijkotte, T. G. M. (2017). Possible relationship between general and pregnancy-related anxiety during the first half of pregnancy and the birth process: a prospective cohort study. https://doi.org/10.1136/bmjopen-2016-013413

Komariah, N. (2018). *Hubungan Antara Usia Ibu Dengan Tingkat Kecemasan Ibu Postpartum Di BPM Teti Herawati Palembang. JPP (Jurnal Kesehatan Poltekkes Palembang), 12*(2), 103-107. Retrieved from https://jurnal.poltekkespalembang.ac.id/index.php/JPP/article/view/21

Kotimäki S, Härkönen J, Karlsson L, Karlsson H, Scheinin NM. Educational differences in prenatal anxiety and depressive symptoms and the role of childhood circumstances. *SSM Popul Health*. 2020 Nov 10;12:100690. doi: 10.1016/j.ssmph.2020.100690. PMID: 33304984; PMCID: PMC7708856

Manuaba, I. B. G. (2012). *Ilmu Kebidanan, Penyakit Kandungan & Keluarga Berencana Untuk Pendidikan Bidan*. Jakarta: EGC.

Mardliyana, N. E., Raden, A., & EN, U. H. (2018). Effect of ice gel compress towards labor pain during Active Phase Stage I at private midwivery clinics in Surabaya City area. *Majalah Obstetri & Ginekologi, 25*(1), 21–24. https://doi.org/10.20473/mog.V25I12017.21-24

Maryunani, A. (2015). *Nyeri dalam Persalinan: Teknik dan Cara Penanganannya* (1st ed.). Jakarta: Trans Infomedia.

Mayasari, Windatania. (2018). Analisis Faktor-Faktor yang Berperan pada Kecemasan Ibu Hamil Prmigravida Trimester III di Puskesmas Bahu Kecamatan Malalayang Kota Manado, Jurnal Paradigma Sehat. Vol. 5 No. 2

Musahib AH, Waskito F, Syamsi N. Hubungan Antara Pendamping Persalinan, Umur dan Paritas Ibu Hamil dengan Tingkat Kecemasan Ibu Hamil Menjelang Persalinan di Klinik Kesehatan Ibu dan Anak Puskesmas Mabelopura Kecamatan Palu Selatan Sulawesi Tengah. J Kesehat Tadulako. 2015;1(1):11–5

Murtiwidayanti, S. Y., & Ikawati. (2021). Kecemasan Masyarakat Dalam Menghadapi Pandemi Covid-19. *Jurnal Penelitian Dan Pengembangan Kesejahteraan Sosial, 10*(4), 227–240.

Ni’mah, A. A. (2018). *Gambaran Kecemasan Menghadapi Persalinan Pada Ibu Hamil Trimester Iii Di Puskesmas Jetis Yogyakarta* [Universitas ’Aisyiyah Yogyakarta]. http://digilib.unisayogya.ac.id/4122/1/Naspub_Aghania An Ni%27mah_1710104186.pdf

Nurul Hikmah, Annisa; Idyawati, Susilia; Ulya, Y. (2019). Pengaruh Metode Deep Back
Massage Terhadap Nyeri Persalinan Kala I Fase Aktif. *Mahakam Midwifery Journal*, 3(1), 11–17. https://doi.org/http://dx.doi.org/10.35963/midwifery.v4i2.126

Pasaribu, 2014. Hubungan Paritas dan Usia Dengan Tingkat Kecemasan Ibu Hamil Trimester III Dalam Menghadapi Persalinan Di Puskesmas SiPea-Pea Kecamatan Sorkam Barat. *Jurnal Penelitian*. STIKES Nauli Husada Sibolga

Potter, Patricia A.; Perry, A. G. (2019). *Buku Ajar Fundamental Keperawatan* (9th ed.). Jakarta: EGC.

Prawirohardjo, S. (2010). *Ilmu Kebidanan*. Jakarta: Yayasan Bina Pustaka Sarwono Prawirohardjo

Ramos, Isabel F.; Ross, Kharah M.; Rinne, Gabrielle R.; Sommers, Jennifer A.; Mancuso, Roberta A.; Hobel, Calvin J.; Coussons-Read, Mary.; Shetter, C. D. (2022). Pregnancy anxiety, placental corticotropin-releasing hormone and length of gestation. *Biological Psychology*, 172(1), 1–10. https://doi.org/https://doi.org/10.1016/j.biopsycho.2022.108376

Sabda, B., Awatiszahro, A., & Kusuma, R. (2021). *The Relationship of Anxiety Level with the Success of the Process in Particular Mothers in the Active Phase I of Primigravida*. 6(2), 112–115. https://doi.org/10.30994/jgrph.v6i2.350

Sadock, Benjamin J; Victoria, J. S. (2010). *Buku Ajar Psikitri Klinis* (2nd ed.). Jakarta: EGC

Sariati, Y., Windari, E. N., & Hastuti, N. A. R. (2016). Pengaruh Hypnobirthing Terhadap Tingkat Kecemasan Ibu Bersalin Dan Lama Persalinan Di Bidan Praktek Mandiri Wilayah Kabupaten Malang. *Jurnal Ilmiah Bidan*, 1(3), 35–44. https://e-journal.ibi.or.id/index.php/jib/article/view/16

Setiawan, Sinta Ayu; Faiza, L. N. (2021). Hubungan Paritas Dengan Tingkat Kecemasan Ibu Menghadapi Persalinan Normal. *Oksitosin: Journal Ilmiah Kebidanan*, 8(2), 128–135. https://doi.org/10.35316/oksitosin.v8i2.908

Shao, Shanshan; Jianqing, Wang; Huang, Kun; Wang, Sufang; Liu, Hui; Wan, Shuhui; Yan, Shuangqin; Hao, Jiahu; Zhu, Peng; Tao, F. (2020). Prenatal pregnancy-related anxiety predicts boys’ ADHD symptoms via placental C-reactive protein. *Psychoneuroendocrinology*, 120(1), 1–7. https://doi.org/https://doi.org/10.1016/j.psyneuen.2020.104797

Siallagan, D & Lestari, D. (2018). Tingkat Kecemasan Menghadapi Persalinan Berdasarkan Status Kesehatan, Graviditas Dan Usia Di Wilayah Kerja Puskesmas Jombang. *Jurnal Midwivery*, 1(September), 104–110.

Silva, M. M. de J., Nogueira, D. A., Clapis, M. J., & Leite, E. P. R. C. (2017). Anxiety in pregnancy: Prevalence and associated factors. *Revista Da Escola de Enfermagem*, 51, 1–8. https://doi.org/10.1590/S1980-220X2016048003253

Slade, P., Sheen, K., Weeks, A., Wray, S., Pascalis, L. De, Lunt, K., Bedwell, C., Thompson, B., Hill, J., & Sharp, H. (2021). *Do stress and anxiety in early pregnancy affect the progress of labor: Evidence from the Wirral Child Health and Development Study*. November 2020, 1–9. https://doi.org/10.1111/aogs.14063

Smorti, M., Ponti, L., & Tani, F. (2019). The effect of maternal depression and anxiety on
labour and the well-being of the newborn. *Journal of Obstetrics and Gynaecology*, 0(0), 1–6. [https://doi.org/10.1080/01443615.2018.1536697](https://doi.org/10.1080/01443615.2018.1536697)

Sofiati, F., Widayati, E., Lestari, R., & Abdillah, S. (2022). *Characteristics Associated With Anxiety in Primigravida Mothers Facing Labor in Cianjur District.* 2022, 89–98. [https://doi.org/10.18502/kme.v2i2.11071](https://doi.org/10.18502/kme.v2i2.11071)

Sulu, R., Akbas, M., & Cetiner, S. (2022). European Journal of Integrative Medicine Effects of transcutaneous electrical nerve stimulation applied at different frequencies during labor on hormone levels , labor pain perception , and anxiety : A randomized placebo-controlled single-blind clinical trial. *European Journal of Integrative Medicine, 52*(March), 102124. [https://doi.org/10.1016/j.eujim.2022.102124](https://doi.org/10.1016/j.eujim.2022.102124)

Sutrisminah, Emi; Susiloningtyas, Is; Jayanti, M. (2021). Hubungan Usia, Paritas, Pendidikan Dan Dukungan Keluarga Dengan Kecemasan Ibu Bersalin Kala I Di Klinik Bersalin Esti Husada Semarang. *Jurnal Kebidanan Khatulistiwa*, 7(1), 15–19. [https://doi.org/DOI:10.30602/jkk.v7i1.718](https://doi.org/DOI:10.30602/jkk.v7i1.718)

Suyani, S. (2020). HUBUNGAN TINGKAT PENDIDIKAN DAN STATUS PEKERJAAN DENGAN KECEMASAN PADA IBU HAMIL TRIMESTER III. *JKM (Jurnal Kesehatan Masyarakat) Cendekia Utama*, 8(1), 19-28. [doi:https://doi.org/10.31596/jkm.v8i1.563](https://doi.org/10.31596/jkm.v8i1.563)

Tan, H. Sen, Agarthesh, T., Tan, C. W., Sultana, R., Chen, H. Y., Chua, T. E., & Sng, B. L. (2021). Perceived stress during labor and its association with depressive symptomatology , anxiety , and pain catastrophizing American Society of Anesthesiologists. *Scientific Reports*, 1–7. [https://doi.org/10.1038/s41598-021-96620-0](https://doi.org/10.1038/s41598-021-96620-0)

Thiel, F., Iffland, L., Drozd, F., Haga, S. M., Martini, J., & Weidner, K. (2020). Specific relations of dimensional anxiety and manifest anxiety disorders during pregnancy with difficult early infant temperament : a longitudinal cohort study. 535–546.

Varney, H. (2018). *Varney’s Midwifery.* United States of America: Jones & Bartlett Learning.

Wati, A. T. S. (2015). *Hubungan Pendampingan Suami Dengan Intensitas Nyeri Persalinan Kala I Di RS PKU Muhammadiyah Yogyakarta* [Universitas 'Aisyiyah Yogyakarta]. http://digilib.unisayogya.ac.id/46/1/Naskah Publikasi Arumtini.pdf

Wu, N., Huang, R., Shan, S., Li, Y., & Jiang, H. (2022). *Complementary Therapies in Clinical Practice Effect of the labour roadmap on anxiety , labour pain , sense of control , and gestational outcomes in primiparas.* 46(Febuary). [https://doi.org/10.1016/j.ctcp.2022.101545](https://doi.org/10.1016/j.ctcp.2022.101545)