

# Determinants of Anxiety in Third-Trimester Pregnant Women in Bengkulu City

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## ABSTRACT

Pregnancy-related anxiety is a prevalent mental condition characterized by apprehension and fear about uncertain events. Several factors contribute to anxiety in pregnant women, including Age, education, gravidity, husband's support, and spiritual self-care. This research aims to identify the influencing factors on anxiety levels in third-trimester pregnant women facing the birthing process in Bengkulu City, utilizing a cross-sectional approach. Forty-four respondents were selected through purposive sampling, and data were analyzed using the Spearman rank correlation test. The findings reveal significant relationships between Age (p-value  $0.012 < 0.05$ ), education (p-value  $0.018 < 0.05$ ), gravidity (p-value  $0.026 < 0.05$ ), husband's support (p-value  $0.038 < 0.05$ ), and spiritual self-care (p-value  $0.000 < 0.05$ ) and anxiety levels. In conclusion, Age, gravidity, education, husband's support, and spiritual self-care are associated with the anxiety levels of third-trimester pregnant women facing the birthing process in Bengkulu City.

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## Introduction

Pregnancy is a pleasant condition but also has the potential to be dangerous; during pregnancy, there are often factors that influence health that can harm the mother and fetus [1]. According to the World Health Organization (WHO), in 2020, around 10% of pregnant women

experienced depression, and this condition was higher in developing countries, reaching 15.6% during pregnancy and 19.8% after giving birth. In Indonesia, there are around 28.7% or 107,000,000 third-trimester pregnant women who experience anxiety before the birth process [2]. In Bengkulu Province, there are 33,826 pregnant women [3]. Meanwhile, in Bengkulu City, there were 6,865 pregnant women [4].

When a woman is pregnant, there will be an increase in the hormones progesterone and estrogen in the mother's body, causing several emotional changes that can cause anxiety [5]. Anxiety is a person's psychological condition that is full of fear and worry about something that is not certain to happen [6].

Anxiety that occurs during pregnancy can hurt pregnant women from pregnancy to delivery. Third-trimester pregnant women who cannot let go of fear and anxiety before giving birth will release high concentrations of catecholamine hormones (stress hormones), which will cause increased labor pain, prolonged labor, and tension during the birth process [7]. Anxiety experienced by pregnant women also has a higher risk of fetal miscarriage compared to those who do not share it. Each pregnant woman has different resistances when facing stress [8]. Apart from that, pregnant women who experience anxiety can also experience complications such as premature birth, LBW, delayed fetal growth, and complications after giving birth. This anxiety is also associated with hypertension, preeclampsia, and gestational diabetes [9].

The anxiety experienced by pregnant women will increase as the delivery schedule approaches. Things that can cause anxiety in pregnant women in the third trimester are that mothers are afraid of the pain and physical danger that can occur during childbirth and are worried about their safety. The mother is concerned that the baby will be born in an abnormal condition. Apart from that, mothers also feel sad because they will be separated from their babies; mothers are afraid that the attention they receive during pregnancy will disappear. Mothers have feelings that are easily hurt [10]. Factors related to pregnant women's anxiety in facing the birth process include Age, education, income, employment, and husband's support [11]—high education with a mild level of anxiety. High husband support with mild anxiety levels. There was a significant relationship between husband support and anxiety levels [12]. There is an influence of knowledge, psychology, and family support on the anxiety level of pregnant women. Still, there is no influence of income on the anxiety level of pregnant women in the third trimester in the Samalanga Public Health Center Working Area, Bireuen Regency [1].

Spiritual self-care is an activity and awareness of seeking spiritual health amid uncertainty, fear, and feelings of threat. This spiritual activity must be done to maintain a person's physical and mental health. Spirituality can also influence our meaning of life and

provide strength from within ourselves to get through complex and challenging times [13]. Spiritual self-care activities consist of attending religious studies or participating in religious activities, reading holy books, listening to music, meditating, including regular acts of kindness in daily life, and so on [14]. There is a significant correlation between spiritual health and anxiety in pregnant women [15]. Another result stated that there is an essential relationship between spiritual self-care and anxiety in third-trimester pregnant women [16].

Based on data on the number of pregnant women obtained from the registration book in 2022 from 3 Independent Midwife Practices (PMB) in Bengkulu City, it was found that the number of pregnant women in the third trimester at PMB Ocik Lestari was 54 people, PMB Fitri Andri Lestari was 47 people and PMB Ida Laina as many as 40 people. A preliminary study conducted at PMB Ocik Lestari on ten third-trimester pregnant women found that seven people said they experienced anxiety. In contrast, three other people said they did not experience anxiety. At PMB Fitri Andri Lestari, out of 10 pregnant women in the third trimester, eight people said they experienced anxiety, while two other people said they did not experience anxiety. Meanwhile, at PMB Ida Laina, from 10 third-trimester pregnant women, the results showed that all pregnant women said they experienced anxiety.

## Methods

The research design used in this research is a cross-sectional method approach. This research was carried out in Bengkulu City with locations at PMB Ocik Lestari, Fitri Andri Lestari, and Ida Laina from May 17, 2023, to June 17, 2023. The population in this study were all pregnant women in Bengkulu City, totaling 6,865 people. The research sample was selected using a purposive sampling technique. The independent variables are Age, educational status, gravidity, husband's support, and spiritual self-care, and the dependent variable is the level of anxiety in third-trimester pregnant women—data analysis using the Spearman rank correlation test.

## Results

The data (see Table 1) obtained shows that many pregnant women in the third trimester in Bengkulu City experience anxiety.

**Table 1.** Frequency distribution of each factor in the third trimester

Factors	Freq.	Percentage
Anxiety Level		
• No Anxiety	7	15.9
• Mild Anxiety	15	34.1
• Middle Anxiety	13	29.5
• High Anxiety	9	20.5
• Panic	0	0
Age		
• Risk	6	13.6

Factors	Freq.	Percentage
• No Risk	38	86.4
Education		
• Low	9	20.5
• Middle	26	59.0
• High	9	20.5
Gravidity		
• Primigravida	27	61.4
• Multigravida	17	38.6
• Grande Multi Gravida	0	0
Husband Support		
• No Supported	2	4.5
• Supported	42	95.5
Spiritual Self-care		
• Low	3	6.8
• Middle	17	38.6
• High	24	54.5
Total	44	100

Table 2 shows the results of the bivariate analysis. There are of the six respondents whose maternal Age was at risk (less than 20 and more than 35 years), one respondent (2.3%) experienced mild anxiety, one respondent (2.3%) had moderate pressure, and four respondents (9.1%) experienced mild anxiety.

**Table 2.** Relationship between age and anxiety level

Age	Anxiety Level										Total	Spearman's Rho			
	No Anxiety		Mild Anxiety		Middle Anxiety		High Anxiety		Panic			n	%	P-Value	r
	n	%	n	%	n	%	n	%	n	%					
Risk	0	0	1	2.3	1	2.3	4	9.1	0	0	6	13.6	0.012	0.375	
No Risk	7	15.9	14	31.8	12	27.3	5	11.4	0	0	38	86.4			
Total	7	15.9	15	34.1	13	29.5	9	20.5	0	0	44	100			

Meanwhile, of the 38 respondents (86.4%), the mother's Age was not at risk (20-35 years), seven respondents (15.9%) did not experience anxiety, 14 respondents (31.8%) had mild anxiety, 12 respondents (27.3%) moderate anxiety, and five respondents (11.4%) had severe anxiety. Bivariate test results using the Spearman rank test, Sig value. (2 tailed) is 0.012 (less than 0.05), then Ho is rejected, and Ha is accepted. This means that there is a significant relationship between age and anxiety levels. If we look at the degree of closeness of the Spearman rho test, the correlation value of 0.375 shows that the level of strength of the relationship between variables is in the low category. This means that age and anxiety level have a significant correlation with the low correlation category.

Age is the length of life calculated based on the birth year until the last birthday [17]. Pregnant women aged less than 20 years will usually experience higher levels of anxiety because, at this Age, there are dependency problems that are not yet mentally ready, emotions that are not yet stable, and the physical condition of the mother is not fully prepared to undergo

pregnancy and childbirth so that psychological burdens can occur and anxiety in pregnant women. Meanwhile, psychologically, pregnant women aged more than 35 years have concerns about their health condition due to being pregnant at a high-risk age and their imagination about the possibility of complications such as miscarriage, babies born imperfectly, babies born prematurely, and so on. The best Age to get pregnant is 20-35 years, taking into account that the more mature an individual is, the better prepared they are to respond to the stimuli they will face; pregnant women will also tend to be more mature in their efforts to adapt to their pregnancy [18].

Another research shows that of the 27 respondents aged at risk, seven respondents (25.9%) were mildly anxious, 11 respondents (40.7%) were moderately anxious, and nine respondents (33.3%) were anxious heavily. Meanwhile, of the 29 ages not at risk, eight respondents (27.6%) were mildly anxious, 19 respondents (65.5%) were moderately anxious, and two respondents (6.9) were seriously anxious. The statistical test results obtained a p-value = 0.037 (less than 0.05), meaning that there is a significant relationship between Age and the level of anxiety of pregnant women in facing childbirth [19]. Again, another research shows that of the 27 respondents aged at risk, namely three respondents (10%) were not anxious, six respondents (20%) were mildly apprehensive, five respondents (16.7%) were moderately anxious, one respondent (3, 3%) were nervous, and 15 respondents (50%) were very worried. Meanwhile, of the 36 respondents who were not at risk, 21 respondents (58.3%) were not anxious, two respondents (5.6%) were moderately anxious, and 13 respondents (36%) were seriously anxious. The results of statistical tests obtained a value of p = 0.000 (less than 0.05), meaning that there is a relationship between Age and anxiety among pregnant women in the third trimester before giving birth [20].

Table 3 shows the relationship between education and anxiety level for 44 respondents.

**Table 3.** Relationship between education and anxiety level

Education	Anxiety Level										Total	Spearman's Rho		
	No Anxiety		Mild Anxiety		Middle Anxiety		High Anxiety		Panic			n	%	P-Value
	n	%	n	%	n	%	n	%	n	%				
Low	0	0	2	4.5	3	6.8	4	9.1	0	0	6	13.6	0.018	0.355
Middle	4	9.1	10	22.7	8	18.2	4	9.1	0	0	26	59.1		
High	3	6.8	3	6.8	2	4.5	1	2.3	0	0	9	20.5		
Total	7	15.9	15	34.1	13	29.5	9	20.5	0	0	44	100		

The results of the bivariate analysis showed that of the nine respondents with low education, two respondents (4.5%) experienced mild anxiety, three respondents (6.8%) had moderate anxiety, and four respondents (9.1%) had severe anxiety. Of the 26 secondary education respondents, four respondents (9.1%) did not experience anxiety, ten respondents (22.7%) had mild anxiety, eight respondents (18.2%) had moderate anxiety, and four

respondents (9.1%) had high anxiety. Meanwhile, of the nine higher education respondents, three respondents (6.8%) did not experience anxiety, three respondents (6.8%) had mild anxiety, two respondents (4.5%) had moderate anxiety, and one respondent (2.3%) had severe anxiety. Bivariate test results using the Spearman rank test, Sig value. (2 tailed) of 0.018 (less than 0.05),  $H_0$  is rejected, and  $H_a$  is accepted. This means that there is a significant relationship between education and anxiety levels. If we look at the degree of closeness of the Spearman rho test, the correlation value of 0.355 shows that the level of strength of the relationship between variables is in the low category. This means that education and anxiety levels significantly correlate with the low correlation category.

Education at school is obtained regularly, systematically, and in stages consisting of lower education, secondary education, and higher education [21]. Pregnant women with higher education can respond more rationally compared to pregnant women with low education who are unable to face challenges rationally. The higher the education, the more a person can reason and control their emotions well, thereby reducing anxiety. Low education will cause pregnant women to experience anxiety due to the lack of information obtained by the mother. On the other hand, the higher a person's education, the higher the quality of his knowledge and the more intellectually mature he will be. Thus, pregnant women will tend to pay more attention to their health and have more significant opportunities to seek information and treatment from health services [22].

Ref. [12] found that of the 40 higher education respondents, 34 respondents (79.1%) experienced mild anxiety, and six respondents (33.3%) experienced moderate anxiety. Meanwhile, of the 21 respondents with low education, nine respondents (20.9%) experienced mild anxiety, and 12 respondents (66.7%) experienced moderate anxiety. The statistical test showed significant relationship between the mother's education level and the level of anxiety [12]. Another one from Ref. [23] shows that the majority of third-trimester pregnant women with low education experienced moderate anxiety and severe anxiety compared to respondents with secondary education and higher education. The statistical test results obtained that there is a relationship between education and anxiety in third-trimester pregnant women [23].

Table 4 shows the results of the bivariate analysis explaining the relationship between gravidity and anxiety level. The results of the bivariate analysis showed that of the 27 primigravida respondents, two respondents (4.5%) did not experience anxiety, nine respondents (20.5%) had mild anxiety, eight respondents (18.2) had moderate anxiety, and eight respondents (18.2) had severe anxiety. Meanwhile, of the 17 multigravida respondents, five respondents (11.4%) did not experience anxiety, six respondents (13.6%) had mild anxiety, five respondents (11.4%) had moderate anxiety, and one respondent (2.3%) had high

anxiety. Bivariate test results using the Spearman rank test, Sig value (2-tailed) of 0.026 (less than 0.05), then  $H_0$  is rejected, and  $H_a$  is accepted. This means that there is a significant relationship between gravidity and anxiety levels. If we look at the degree of closeness of the Spearman rho test, the correlation value of 0.335 shows that the level of strength of the relationship between variables is in the low category. This means that gravidity and anxiety levels have a significant correlation with the low correlation category.

**Table 4.** Relationship between gravidity and anxiety level

Gravidity	Anxiety Level										Total	Spearman's Rho			
	No Anxiety		Mild Anxiety		Middle Anxiety		High Anxiety		Panic			n	%	P-Value	r
	n	%	n	%	n	%	n	%	n	%					
Primigravida	2	4.5	9	20.5	8	18.2	8	18.2	0	0	27	61.4	0.026	0.335	
Multigravida	5	11.4	6	13.6	5	11.4	1	2.3	0	0	17	38.6			
Grande Multi Gravida	0	0	0	0	0	0	0	0	0	0	0	0			
Total	7	15.9	15	34.1	13	29.5	9	20.5	0	0	44	100			

Gravidity is the total number of pregnancies a woman has experienced. The first pregnancy is called primigravida. More than one pregnancy is called multigravida, and more than four pregnancies are called grande multigravida [24]. Primigravida pregnant women have higher levels of anxiety than multigravida pregnant women. In primigravida, the majority of pregnant women do not know various ways to deal with anxiety during pregnancy until the delivery process is easy and smooth because this is the first experience felt by pregnant women that has never been touched before. So, it requires adaptation, especially to the physical and psychological changes during pregnancy. It is what influences the anxiety of primigravida pregnant women in facing pregnancy and childbirth [18].

The results of this research are in line with research by Ref. [25], showing that of the 32 primigravida respondents, 22 respondents (68.8%) were mildly anxious, and ten respondents (31.2%) were moderately anxious. Meanwhile, of the 91 respondents, 85 respondents (93.4%) were mildly anxious, and six respondents (6.6%) were somewhat anxious. The statistical test results shows there is a significant relationship between gravida and the anxiety of pregnant women in facing childbirth [25]. Another research by Ref. [26] shows that of the 23 primigravida respondents, six respondents (26.1%) were not anxious, ten respondents (43.5%) were mildly anxious, and seven respondents (30.4%) were moderately and severely anxious. Meanwhile, of the 71 multigravida respondents, 45 respondents (63.4%) were not worried, 20 respondents (28.2%) were mildly anxious, and six respondents (8.5%) were moderately and severely anxious. The statistical test results obtained a p-value of 0.001



(less than 0.05), which means there is a significant relationship between gravida and the anxiety level of third-trimester pregnant women facing childbirth [26].

Table 5 shows the results of the bivariate analysis explaining the relationship between husband's support and anxiety level.

**Table 5.** Relationship between husband's support and anxiety level

Husband Support	Anxiety Level										Total	Spearman's Rho		
	No Anxiety		Mild Anxiety		Middle Anxiety		High Anxiety		Panic			n	%	P-Value
	n	%	n	%	n	%	n	%	n	%				
No Supported	0	0	0	0	0	0	2	4.5	0	0	2	4.5	0.038	0.313
Supported	7	15.9	15	34.1	13	29.5	7	15.9	0	0	42	95.5		
Total	7	15.9	15	34.1	13	29.5	9	20.5	0	0	44	100		

The results of the bivariate analysis showed that of the two respondents, their husbands did not support two respondents (4.5%) who experienced severe anxiety. Meanwhile, of the 42 husband respondents, seven respondents (15.9%) did not experience anxiety, 15 respondents (34.1%) had mild anxiety, 13 respondents (29.5%) had moderate anxiety, and seven respondents (15.9%) had severe anxiety. Bivariate test results using the Spearman rank test, Sig. value (2 tailed) is 0.038 (less than 0.05), then  $H_0$  is rejected, and  $H_a$  is accepted. This means that there is a significant relationship between the husband's support and anxiety levels. If we look at the degree of closeness of the Spearman rho test, the correlation value of 0.313 shows that the level of strength of the relationship between variables is in the low category. This means that the husband's support and anxiety level have a significant correlation with the low correlation category.

The husband's support is a form of attention and affection, both physical and psychological, that the husband gives to his wife during pregnancy, which will be a motivation for pregnant women [27]. The husband's support has a vital role for pregnant women. Pregnant women who receive attention and affection from their husbands will show fewer emotional and physical symptoms, adjust more easily during pregnancy, and have less risk of birth complications. It is because the pregnant woman receives signs that she is loved and appreciated, as well as the need for her husband's acceptance of her pregnancy. The forms of support from husbands include emotional support, namely the husband provides psychological support by showing concern and is sensitive to the needs and dynamic changes of the pregnant mother; instrumental support, namely the husband's support given to meet the mother's physical requirements with the help of other family members, informational support, namely providing the information he has obtained about pregnancy and assessment support, namely providing appropriate decisions for the care of his wife's pregnancy [28].



The results of this research align with research by Ref. [29], showing that of the six respondents, their husbands were less supportive. Namely, four respondents (66.7%) were not anxious, and two respondents (33.3%) were mildly anxious. Meanwhile, of the 14 husband respondents, nine (64.3%) were not worried, and 7 (35.7%) were mildly concerned. The statistical test results obtained a p-value of 0.04 with a significance level of  $\alpha$  (0.05), meaning that there is a significant relationship between the husband's support and the anxiety level of pregnant women facing childbirth [29]. Other research by Ref. [30] showed that seven husband respondents were supportive. Namely, five respondents (16.7%) were not worried, one respondent (1.1%) was mildly worried, and one respondent (3.3%) was moderately worried. Meanwhile, of the 23 respondents, their husbands were not supportive. Namely, one respondent (3.3) was not anxious, nine respondents (30%) were mildly anxious, and 13 respondents (43.4%) were moderately anxious. The statistical test results obtained a value of  $p = 0.001$  with a degree of significance ( $\alpha = 0.05$ ), which means a relationship exists between the husband's support and the anxiety of third-trimester pregnant women facing childbirth [30].

The results of the bivariate analysis (Table 6) shows that of the three low-category spiritual self-care respondents, three respondents (6.8 %) experienced severe anxiety.

**Table 6.** Relationship between spiritual self-care and anxiety levels

Spiritual Self-Care	Anxiety Level										Total	Spearman's Rho		
	No Anxiety		Mild Anxiety		Middle Anxiety		High Anxiety		Panic			n	%	P-Value
	n	%	n	%	n	%	n	%	n	%				
Low	0	0	0	0	0	0	3	6.8	0	0	3	6.8	0.000	0.687
Middle	0	0	3	6.8	9	20.5	5	11.4	0	0	17	38.6		
High	7	17.9	12	27.3	4	9.1	1	2.3	0	0	24	54.5		
Total	7	15.9	15	34.1	13	29.5	9	20.5	0	0	44	100		

Of the 17 respondents in the moderate category, three respondents (6.8%) experienced mild anxiety, nine respondents (20.5%) had moderate anxiety, and five respondents (11.4%) had severe anxiety. Meanwhile, of the 24 respondents in the high category, seven respondents (15.9%) did not experience anxiety, 12 respondents (27.3%) had mild anxiety, four respondents (9.1%) had moderate anxiety, and one respondent (2.3%) had severe anxiety. Bivariate test results using the Spearman rank test, Sig. value (2 tailed) of 0.000 (less than 0.05),  $H_0$  is rejected, and  $H_a$  is accepted. This means that there is a significant relationship between spiritual self-care and anxiety levels. If we look at the degree of closeness of the Spearman rho test, the correlation value of 0.687 shows that the level of strength of the relationship between variables is in the strong category. This means that spiritual self-care and anxiety levels have a significant correlation in the strong correlation category.

Spiritual self-care is an activity and awareness of seeking spiritual health amid uncertainty, fear, and feelings of threat. This spiritual activity must be done to maintain a person's physical and mental health. Spirituality can influence our meaning of life and provide strength from within to get through complex and challenging times [13]. Spiritual self-care activities consist of attending religious studies or participating in religious activities, reading holy books, listening to music, meditating, including regular acts of kindness in daily life, and so on [14].

The results of this research are in line with research by Ref. [16], showing that the majority of respondents have low spiritual self-care, namely 23 respondents (57.5%), and the majority of respondents have severe anxiety, 25 respondents (62.5%). The results of the correlation test showed that there was a significant relationship between spiritual self-care and anxiety in third-trimester pregnant women with a p-value of 0.038 (less than 0.05) [16]. Other research by Ref. [15] states that there is a significant correlation between spiritual health and anxiety in pregnant women with a p-value of 0.001 (less than 0.05) [15].

## Conclusion

A study conducted in Bengkulu City explored factors affecting anxiety levels in third-trimester pregnant women during childbirth. Out of 44 respondents, the majority reported mild anxiety (34.1%), low risk (86.4%), primigravida status (61.4%), secondary education (59.1%), supportive husbands (95.5%), and high spiritual self-care (54.5%). The analysis revealed notable associations between certain factors and anxiety levels. Age showed a connection, while gravidity (number of pregnancies) displayed a significant relationship. Education level also played a role, and high levels of spiritual self-care were strongly linked to lower anxiety levels. These findings emphasize the importance of considering these factors when addressing the anxiety of third-trimester pregnant women, offering insights for targeted support and intervention.

## Conflict of Interest

The authors declare that there is no conflict of interest.

## References

- [1] Dağlar, G., Bilgiç, D., & ÖZKAN, S. A. (2019). Factors affecting the quality of life among pregnant women during third trimester of pregnancy. *Cukurova medical journal*, 44(3), 772-781.
- [2] Indonesian Ministry of Health. (2020). " Pedoman Pelayanan Antenatal, Persalinan, Nifas Dan Bayi Baru Lahir Di Era Adaptasi Kebiasaan Baru. <https://repository.kemkes.go.id/book/873>
- [3] Central Statistics Agency. (2021). Number of Pregnant Women Giving Birth in Health Facilities and Death of Women During Pregnancy. <https://bengkulu.bps.go.id/statictable/2021/07/03/612/jumlah-ibu-hamil-yang-melahirkan-di-faskes-dan-kematian-perempuan-pada-saat-hamil-melahirkan-menurut-kabupaten-kota-di-provinsi-bengkulu-2020.html>
- [4] Bengkulu City Health Office. (2022). Profil Kesehatan Kota Bengkulu [Bengkulu City Health Profile in 2021]. <https://dinkes.bengkuluprov.go.id/buku-profil-kesehatan/>

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- [5] Rooks, J. P. (1999). The midwifery model of care. *Journal of Nurse-midwifery*, 44(4), 370-374.
- [6] Jangi Jahantigh, L., Latifi, Z., & Soltanzadeh, M. (2022). Effect of Self-healing Training on Death Anxiety and Sleep Quality of Older Women Living in Nursing Homes. *Iranian Journal of Ageing*, 17(3), 380-397.
- [7] Thibaut, F., & van Wijngaarden-Cremers, P. J. (2020). Women's mental health in the time of Covid-19 pandemic. *Frontiers in global women's health*, 1, 588372.
- [8] Ratiyun, R. S., Pawiliyah, P., Rahmawati, I., & Hilda, H. (2021, April). The Relationship between Knowledge of Pregnant Women in the Third Trimester with the Level of Anxiety in Dealing with Childbirth in the Working Area of Puskesmas Pasar Ikan Bengkulu City. In *AI Insyirah International Scientific Conference on Health* (Vol. 2, pp. 378-391).
- [9] Durankuş, F., & Aksu, E. (2022). Effects of the COVID-19 pandemic on anxiety and depressive symptoms in pregnant women: a preliminary study. *The Journal of maternal-fetal & neonatal medicine*, 35(2), 205-211. Available: <https://www.tandfonline.com/doi/full/10.1080/14767058.2020.1763946>
- [10] Rockliffe, L., Peters, S., Heazell, A. E., & Smith, D. M. (2021). Factors influencing health behaviour change during pregnancy: A systematic review and meta-synthesis. *Health psychology review*, 15(4), 613-632.
- [11] Wulandari, L. A., & Retno, S. N. (2022). Autogenic Relaxation on Anxiety Among Pregnant Women at Trimulyo Community Health Center, East Lampung. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*, 7(S1), 1-8.
- [12] Hassanzadeh, R., Abbas-Alizadeh, F., Meedya, S., Mohammad-Alizadeh-Charandabi, S., & Mirghafourvand, M. (2020). Fear of childbirth, anxiety and depression in three groups of primiparous pregnant women not attending, irregularly attending and regularly attending childbirth preparation classes. *BMC women's health*, 20, 1-8.
- [13] Kao, L. E., Peteet, J. R., & Cook, C. C. (2020). Spirituality and mental health. *Journal for the Study of Spirituality*, 10(1), 42-54.
- [14] Posluns, K., & Gall, T. L. (2020). Dear mental health practitioners, take care of yourselves: A literature review on self-care. *International Journal for the Advancement of Counselling*, 42, 1-20.
- [15] Dehestani, H., Moshfeghy, Z., Ghodrati, F., & Akbarzadeh, M. (2019). The relationship of spiritual health and mother's forgiveness with her anxiety in the labor of the pregnant women. *International Journal of Women's Health and Reproduction Sciences*, 7(2), 174-179.
- [16] Maasoumi, R., Dastaran, F., Faghihniya, F., Haghani, S., & Sabetghadam, S. (2023). The Effect of Spiritual Self-care Intervention with a Blended Learning Approach on Anxiety in Women with Preterm Labor: A Randomized Controlled Trial. *International Journal of Community Based Nursing and Midwifery*, 11(2), 85-95.
- [17] Buttriss, J. L., Welch, A. A., Kearney, J. M., & Lanham-New, S. A. (Eds.). (2017). *Public health nutrition*. John Wiley & Sons.
- [18] Goodman, J. H., Guarino, A., Chenausky, K., Klein, L., Prager, J., Petersen, R., ... & Freeman, M. (2014). CALM Pregnancy: results of a pilot study of mindfulness-based cognitive therapy for perinatal anxiety. *Archives of women's mental health*, 17, 373-387.
- [19] Ningsih, I. I., & Nuzuliana, R. (2021). Anxiety Level of Pregnant Mother in Facing Childbirth. *Anxiety*, 15(6), 1526-1529.
- [20] Nekoe, T., & Zarei, M. (2015). Evaluation the anxiety status of pregnant women in the third trimester of pregnancy and fear of childbirth and related factors. *British journal of medicine and medical research*, 9(12), 1-8.
- [21] Weikart, D. P. (2000). *Early Childhood Education: Need and Opportunity. Fundamentals of Educational Planning 65*. United Nations Educational, Scientific and Cultural Organization, 7 place de Fontenoy, F 75352, Paris 07 SP, France.
- [22] Meyrose, A. K., Klasen, F., Otto, C., Gniewosz, G., Lampert, T., & Ravens-Sieberer, U. (2018). Benefits of maternal education for mental health trajectories across childhood and adolescence. *Social science & medicine*, 202, 170-178.
- [23] Rinata, E., & Andayani, G. A. (2018). Maternal characteristics (age, parity, education) and family support with anxiety in third trimester pregnant women. *Medisains*, 16, 14-20, 2018, [Online]. Available: <https://jurnalnasional.ump.ac.id/index.php/medisains>
- [24] Homer, C. S. (2016). Models of maternity care: evidence for midwifery continuity of care. *Medical Journal of Australia*, 205(8), 370-374.
- [25] Hall, W. A., Hauck, Y. L., Carty, E. M., Hutton, E. K., Fenwick, J., & Stoll, K. (2009). Childbirth fear, anxiety, fatigue, and sleep deprivation in pregnant women. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 38(5), 567-576.

- [26] Zhang, T., Liu, M., Min, F., Wei, W., Liu, Y., Tong, J., ... & Chen, X. (2023). Fear of childbirth and its determinants in pregnant women in the third trimester: a cross-sectional study. *BMC psychiatry*, 23(1), 574.
- [27] Priyambada, K., Patojoshi, A., & Bakhla, A. K. (2017). A study of antenatal anxiety: comparison across trimesters. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 6(5), 1810-1814.
- [28] Dewhurst, J. (2012). *Dewhurst's textbook of obstetrics and gynaecology*. John Wiley & Sons.
- [29] Marcelina, L. A., Rachmawati, I. N., & Ungsianik, T. (2019). Dissatisfaction with the husband support increases childbirth fear among Indonesian primigravida. *Enfermeria clinica*, 29, 379-383.
- [30] Moussa, A., & Tayel, A. (2015). Anxiety through the Three Trimesters of Pregnancy. *Alexandria Scientific Nursing Journal*, 17(1), 75-90.

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