

## Factors Affecting The Level Of Anxiety Of Primigravida Mothers In Facing Labor At Batara Siang Pangkep Hospital

Ani<sup>1\*</sup>, Astri Yuliandini<sup>2</sup>, Mauren Tenine<sup>3</sup>

<sup>1,2,3</sup>Bachelor of Applied Midwifery Program, Graha Edukasi School of Health Sciences, Makassar

\*Correspondence: Astri Yuliandini, Email: [astriyuliandini07@gmail.com](mailto:astriyuliandini07@gmail.com)

Received: December 1, 2025 ○ Revised: January 1, 2025 ○ Accepted: February 1, 2025

### ABSTRACT

**Background:** Primigravida labor refers to childbirth in first-time pregnant women, who tend to experience longer labor pain compared to multigravida mothers. This prolonged pain often leads to fatigue, heightened pain perception, and increased fear, which can further intensify labor pain. As a result, primigravida mothers may suffer from severe anxiety, leading to difficulties in eating, sleeping, and even an increased risk of preterm birth.

**Objective:** This study aims to identify the factors influencing the anxiety levels of primigravida mothers during childbirth.

**Methods:** This study employs a quantitative research approach with a cross-sectional study design. The population consists of 25 primigravida mothers who gave birth at Batara Siang Pangkep Regional Hospital, selected using purposive sampling. Data collection was conducted using a questionnaire designed to assess factors influencing maternal anxiety levels during childbirth.

**Results:** Statistical analysis revealed significant associations between maternal age ( $p = 0.002 < 0.05$ ), maternal knowledge ( $p = 0.022 < 0.05$ ), and family support ( $p = 0.002 < 0.05$ ) with the anxiety levels of primigravida mothers.

**Conclusion:** The study concludes that maternal age, knowledge, and family support are significantly associated with the anxiety levels of primigravida mothers during childbirth at Batara Siang Pangkep Regional Hospital in 2022. Strengthening educational and emotional support for first-time mothers is essential to reducing anxiety and improving maternal well-being during labor.

**Keywords:** Age, Knowledge, Family Support, Childbirth

### INTRODUCTION

Primigravida labor refers to childbirth in a woman who is pregnant for the first time. The duration of labor in primigravida mothers is generally longer than in multigravida women. Primigravida mothers tend to experience heightened fear, which can increase the intensity of labor pain. Anxiety during childbirth can lead to difficulties in eating, sleeping, and excessive worrying, and severe anxiety may even result in preterm birth (Urvia, Setia Ningtyas, & Utomo, 2023).

There are two main factors that influence anxiety in pregnant women: internal and external factors. Internal factors include beliefs about childbirth and emotions experienced before labor. External factors consist of access to information, medical personnel, and support from the husband (Siti Kholifah, Ike Ate Yuviska, Nita Evrianasari, 2023).

According to data from the World Health Organization (WHO) in 2015, 532,000 women died due to childbirth-related complications. In 2016, this number increased to 542,000 deaths, and in 2017, maternal mortality further rose to 579,000 deaths, with 99% of cases occurring in developing countries. The WHO defines maternal mortality as the death of a woman during pregnancy or within 42 days after the termination of pregnancy, regardless of gestational age or the medical interventions performed to end the pregnancy (Siti Maryam, Dwi Ghita, Andi Sulfikar, 2023).

Based on the Indonesian Demographic and Health Survey (SDKI), in 2015, the maternal

mortality rate (MMR) in Indonesia was 359 per 100,000 live births, while in 2016, the rate decreased to 315 per 100,000 live births (SDKI, 2018).

At Batara Siang Pangkep Regional Hospital, the number of primigravida deliveries in 2019 was 3,028, decreasing to 1,875 in 2020, 1,792 in 2021, and from January to July 2022, there were 1,214 recorded cases.

### METHODS

The research design employed in this study is a quantitative approach with a cross-sectional study design, utilizing an observational approach (Setia, 2016). The study was conducted at Batara Siang Pangkep Regional Hospital. The population of the study comprised 25 primigravida mothers who gave birth at the hospital. The sampling technique used was purposive sampling (Etikan, 2016).

The research instrument consisted of a questionnaire designed to assess the factors influencing the anxiety levels of primigravida mothers in facing childbirth (Polit & Beck, 2008).

The data processing stages involved data editing, data coding, and data entry. The results were analyzed (Creswell & Creswell, 2017) to determine the factors that influence the anxiety levels of primigravida mothers during childbirth.

Ethical considerations in this study included informed consent, anonymity, confidentiality, and voluntary participation (WHO, 2013).

RESULTS

Tabel 1. Karakteristik Responden

1. Univariate Analysis

a. Age Factor

Table 1. Frequency Distribution Based on Age of Primigravida Mothers Facing Childbirth at Batara Siang Pangkep Regional Hospital

Age	Frequency (N)	Percentage (%)
Young age (<20 years)	16	64,0
Sufficient age (20-35 years)	9	36,0
Total	25	100,0

Source : Primary Data, 2022

b. Knowledge Factor

Table 2. Frequency Distribution Based on Knowledge of Primigravida Mothers Facing

Childbirth at Batara Siang Pangkep Regional Hospital

Knowledge	Frequency (N)	Percentage (%)
Good	16	64,0
Currently	7	28,0
Not enough	2	8,0
Total	25	100,0

Source : Primary Data, 2022

c. Family Support Factors

Table 3. Frequency Distribution Based on Family Support for Primigravida Mothers Facing Childbirth at Batara Siang Pangkep Regional Hospital

Family Support	Frequency (N)	Percentage (%)
Good	12	48,0
Not enough	13	52
Total	25	100,0

Source : Primary Data, 2022

2. Bivariate Analysis

a. Age Factor

Table 4. The Influence of Age Factors on the Anxiety Level of Primigravida Mothers in Facing Childbirth at Batara Siang Pangkep Regional Hospital

Age	Emergency Level						Amount				Mark <i>p</i>
	There isn't any		Light		Currently		Heavy				
	N	%	N	%	N	%	N	%	N	%	
Young age (<20 years)	2	12,5	7	43,8	5	31,3	2	12,5	16	64,0	0.002
	8	88,9	0	0,0	0	0,0	1	11,1	9	36,0	
Sufficient age (20-35 years)											
Total	10	40,0	7	28,0	5	20,0	3	12,0	25	100,0	

Source : Primary Data, 2022

Based on the table above, it shows that the number of respondents who were young (<20 years) and did not experience anxiety was 2 people (12.5%), 7 people experienced mild anxiety (43.8%), 5 people experienced moderate anxiety ( 31.3%), 2 people (12.5%) had severe anxiety. Meanwhile, those of

sufficient age (20-35 years) did not experience anxiety as many as 8 people (88.9%). 0 (0.0%) experienced mild anxiety, 0 (0.0%) experienced moderate anxiety, 1 person (11.1%) experienced severe anxiety. From the results of statistical tests, values are obtained  $p=0,002$

b. Knowledge Factor

Table 5. Influence of Knowledge Factors on the Anxiety Level of Primigravida Mothers in Facing Childbirth at Batara Siang Pangkep Regional Hospital

Knowledge	Emergency Level								Amount		Mark <i>p</i>
	No There is		Light		Currently		S Heavy				
	N	%	N	%	N	%	N	%	N	%	
Good	9	56,3	6	37,5	1	6,3	0	0,0	16	64,0	0,022
Currently	1	14,1	1	14,3	3	42,9	2	28,6	7	28,0	
Not enough	0	0,0	0	0,0	1	50,0	1	50,0	2	8,0	
Total	10	40,0	7	28,0	5	20,0	3	12,0	25	100,0	

Source : Primary Data, 2022

Based on the table above, it shows that the number of respondents who had good knowledge and did not experience anxiety was 9 people (56.3%), 6 people experienced mild anxiety (37.5%), 1 person experienced moderate anxiety (6.3%). ), experienced severe anxiety as many as 0 people (0.0%). Meanwhile, with moderate knowledge, 1 person (14.1%) did not experience anxiety, 1 person (14.3%) experienced mild anxiety, 3

(42.9%) experienced moderate anxiety, 2 people (28.9%) experienced severe anxiety (6%). And those with low knowledge did not experience anxiety as many as 0 people (0.0%), experienced mild anxiety as many as 0 (0.0%), experienced moderate anxiety as many as 1 person (50.0%), experienced severe anxiety as much as 1 person (50, 0%). From the results of statistical tests, values are obtained  $p=0,022$

c. Family Support Factors

**Table 6.** Influence of Family Support Factors on the Anxiety Level of Primigravida Mothers in Facing Childbirth at Batara Siang Pangkep Regional Hospital

Family Support	Emergency Level										Mark <i>p</i>
	There isn't any		Light		Currently		Heavy				
	N	%	N	%	N	%	N	%	N	%	
Good	10	83,3	0	0,0	1	8,3	1	8,3	12	48,0	0.000
Not enough	0	0,0	7	53,8	4	30,8	2	15,4	13	52,0	
Total	10	40,0	7	28,0	5	20,0	3	12,0	25	100,0	

Source : *Primary Data*, 2022

Based on the table above, it shows that the number of respondents who had good family support and did not experience anxiety was 10 people (83.3%), 0 people experienced mild anxiety (0.0%), 1 person experienced moderate anxiety (8.3 %), 1 person (8.3%) experienced severe anxiety. Meanwhile, family support was not good and 0 people (0.0%) did not experience anxiety, 7 people (53.8%) experienced mild anxiety.

5 people (20.0%) experienced moderate anxiety, 3 people (12.0%) experienced severe anxiety. From the results of statistical tests, values are obtained  $p=0,002$

DISCUSSION

The research findings indicated that the majority of respondents were young mothers (<20 years), accounting for 16 individuals (64.0%), while 9 respondents (36.0%) were in the sufficient age group (20–35 years). Regarding maternal knowledge, 16 respondents (64.0%) had good knowledge, 7 respondents (28.0%) had moderate knowledge, and 2 respondents (8.0%) had poor knowledge. In terms of family support, 12 respondents (48.0%) experienced mild levels of anxiety, while 13 respondents (52.0%) experienced moderate levels of anxiety.

When analyzing the anxiety levels of primigravida mothers based on age, knowledge, and family support factors, it was found that 10 respondents (40.0%) did not experience anxiety, 7 respondents (28.0%) experienced mild anxiety, 5 respondents (20.0%) experienced moderate anxiety,

and 3 respondents (12.0%) experienced severe anxiety.

The results of statistical tests showed that the age factor had a significant influence on anxiety levels, with a p-value of 0.002 ( $p < 0.05$ ). Similarly, maternal knowledge was significantly associated with anxiety levels, with a p-value of 0.022 ( $p < 0.05$ ), and family support also had a strong influence on anxiety levels, with a p-value of 0.000 ( $p < 0.05$ ). These findings indicate that age, knowledge, and family support all play significant roles in determining the anxiety levels of primigravida mothers facing childbirth.

These results align with the study conducted by Sulfikar & Rajab, (2024), which examined factors related to the anxiety of primigravida mothers in facing childbirth in Slendra Gegesik Sub-district, Cirebon. The study found a significant relationship between maternal knowledge and anxiety levels, with a p-value of 0.028 ( $p < 0.05$ ). Additionally, the study reported a significant relationship between spousal support and maternal anxiety, with a p-value of 0.027 ( $p < 0.05$ ). This research concluded that both knowledge and spousal support have a significant influence on the anxiety levels of primigravida mothers facing childbirth.

A similar study conducted by Ratiyun, Pawiliyah, Rahmawati, & Hilda, (2021) examined the relationship between family support and anxiety levels among pregnant women at the Budilatama Health Center, Gadung Sub-district, Boul Regency, Central Sulawesi. The study found a significant relationship between family support and maternal anxiety, with a p-value of 0.004 ( $p < 0.05$ ), further reinforcing the importance of family support in reducing anxiety during childbirth.

Based on these findings, it can be concluded that a lack of knowledge among pregnant women increases the risk of experiencing high anxiety, whereas mothers with greater knowledge tend to have lower anxiety levels. Knowledge plays a crucial role in emotional maturity, particularly in controlling anxiety, which may be less stable among primigravida mothers experiencing childbirth for the first time. Furthermore, family support is a critical factor in ensuring a smooth delivery process, as it helps pregnant women feel calmer, safer, and more cared for. The presence of strong family support contributes significantly to the well-being of both the mother and the fetus, emphasizing its essential role in maternal health.

## CONCLUSION

The research findings indicate that maternal age, maternal knowledge, and family support significantly influence the anxiety levels of primigravida mothers in facing childbirth. Health workers play a crucial role in providing information about the birth process, particularly through counseling for mothers in the third trimester. This initiative aims to help mothers prepare mentally and emotionally, thereby preventing and reducing anxiety before childbirth. Additionally, it is essential for both mothers and their families to recognize the importance of family support during the birthing process. Strong family support can contribute to a smoother delivery experience and help alleviate maternal anxiety, ensuring a more positive childbirth experience.

## REFERENCES

- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5, 1. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice*. Lippincott Williams & Wilkins.
- Ratiyun, R. S., Pawiliyah, P., Rahmawati, I., & Hilda, H. (2021). 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. *Al Insyirah International Scientific Conference on Health*, 2, 378–391. Retrieved from <https://jurnal.stikes-alinsyirah.ac.id/index.php/aisch/article/view/1532>
- Setia, M. S. (2016). Methodology Series Module 3: Cross-sectional Studies. *Indian Journal of Dermatology*, 61(3), 261–264. <https://doi.org/10.4103/0019-5154.182410>
- Siti Kholifah, Ike Ate Yuviska, Nita Evrianasari, F. P. (2023). Factors Affecting Anxiety Levels In Pregnant Women During, 112–116.
- Siti Maryam, Dwi Ghita, Andi Sulfikar, I. R. B. (2023). View of The Relationship Of Prolonged Party In Particular Women And The Incident Of Neonatorum Asphyxia At Rskdia Pertiwi, Makassar City.pdf.
- Sulfikar, A., & Rajab, M. A. (2024). Evaluation of the feasibility of digital health applications based on best practice guidelines for diabetes management: A scoping review. *Informatics in Medicine Unlocked*, 51(19), 101601. <https://doi.org/10.1016/j.imu.2024.101601>
- Urvia, M., Setia Ningtyas, W., & Utomo, B. (2023). Anxiety and Readiness Differences Between Primigravida and Multigravida Mothers Towards Childbirth in the Covid-19 Pandemic. *Indonesian Midwifery and Health Sciences Journal*, 7(1), 45–52. <https://doi.org/10.20473/imhsj.v7i1.2023.45-52>
- WHO. (2013). World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. *Jama*, 310(20), 2191–2194.