International Journal of Health Science (IJHS)

E-ISSN: 2827-9603
P-ISSN: 2827-9603

Research Article

The Relationship Between the Anxiety Level of Primiparous Mothers Who Are Not Accompanied by Their Husbands and the Duration of Labor

Dian Shofia Reny Setyanti [1]*, **Nurhayani** [2]

[1] Sekolah Tinggi Ilmu Kesehatan Bakti Utama Pati; dianshofiareny@gmail.com
[2] Sekolah Tinggi Ilmu Kesehatan Bakti Utama Pati; yhani2121@gmail.com
* Corresponding Author : Dian Shofia Reny Setyanti

Abstract: In Indonesia, the main causes of maternal mortality are sepsis, abortion problems, prolonged labor, eclampsia, and hemorrhage. These causes of death have varying contributions, with sepsis (10%), hemorrhage (28%), which is often unpredictable and occurs suddenly, and prolonged labor (9%) contributing each. Psychological illness in pregnant women during pregnancy, environmental factors that trigger labor, and the high maternal mortality rate in Indonesia are contributing factors. This is undeniably due to the lack of support from various parties during pregnancy and childbirth, especially in the role of the family who inspires motivation during the labor process. It is very important to help mothers relax mentally. The purpose of this study was to investigate the correlation between the duration of labor and the level of anxiety experienced by first-time mothers who are not supported by their partners. A cross-sectional methodology was used in this study. A direct random sampling approach was used for sample collection. The relationship between the duration of labor and the level of anxiety was analyzed using the Spearman rank formula, which uses an ordinal scale for anxiety. The results of this study revealed a strong correlation between the level of anxiety experienced by first-time pregnant women who were not accompanied by their partners and the length of the labor process {Spearman rank: 0.515, p value: 0.004, OR: 4.867 (95% CI: 4.74-5.00)}.

Keywords: Anxiety; Childbirth; Duration of Labor; Pregnant; Support

Received: September 15, 2025
Revised: October 21, 2025
Accepted: November 14, 2025
Published: November 17, 2025
Curr. Ver.: November 17, 2025

1. Introduction

In Indonesia, 107,000 (28.7%) pregnant women experience anxiety during childbirth (Mandagi, Pali, and Sinolungun, 2020). Maternal and newborn health services play a crucial role in determining overall health. Currently, the maternal mortality rate (MMR) in Indonesia remains very high. The 2021 Indonesian Demographic and Health Survey (SDKI) showed that the MMR reached 228 deaths per 100,000 live births. Indonesia ranks third in maternal mortality rates in the South and Southeast Asia region.

The main causes of maternal death in Indonesia include severe bleeding, eclampsia, prolonged labor, complications from abortion, and sepsis. The most common cause of death is severe bleeding, which often occurs suddenly and rapidly (28%), followed by prolonged labor (9%) and sepsis (10%) (Rofiqoh, 2019).

Another factor contributing to the high maternal mortality rate in Indonesia is the presence of mental health issues in mothers during pregnancy and childbirth, which are influenced by the surrounding environment and a lack of family involvement, especially in providing support during labor. It is important to recognize that support from various individuals during pregnancy and childbirth is crucial for calming the mother's mental state (Mu'minah, 2018).

Generally, a woman giving birth for the first time often feels excited and more interested in the changes occurring in her body and her baby's growth. However, she may also feel anxious during pregnancy (Shodiqoh and Syahrul, 2018).

Anxiety is a confusing feeling of fear that isn't based on real events. Anxious people feel uneasy or afraid but don't really understand why they feel that way. Anxiety has no clear cause (Videbeck and Sheila, 2019).

Support from the husband can help reduce anxiety, so that the mother-to-be feels more relaxed and mentally prepared for childbirth (Shodiqoh, 2020).

According to Nisman's theory (2021), feelings of anxiety have a significant effect on physical processes in the body. When a person is anxious, their blood vessels can constrict, meaning blood doesn't flow properly throughout the body. This can significantly impact organ function; for example, the organs involved in labor may not function properly. This can lead to weaker pushing power and reduced natural urges, making labor more difficult.

Kristina (2020) found that mothers who were accompanied by a friend or family member (especially their husband) during labor were less likely to experience complications requiring medical attention than those who were alone. Women with support tended to experience quicker and smoother labors.

However, mental health issues are often overlooked by birth attendants. This aligns with Kartini Kartono's view, stating that doctors and midwives typically have little time to address women's emotional well-being because they are more focused on physical issues. They often believe their job is complete once the baby is safely delivered and the mother shows no health problems (Kartono, 2022).

Signs of anxiety can include symptoms such as cold fingers, stomach problems, a rapid heartbeat, sweating, difficulty sleeping, loss of appetite, dizziness, and shortness of breath. These can naturally cause discomfort during pregnancy. Anxiety can also affect labor, as it can cause labor to last longer due to psychological factors that lead to weaker contractions and slower dilation (Prawirohardjo, 2014).

Preliminary research suggests that prolonged labor and mental health issues are among the causes of maternal mortality in Indonesia, which may also be linked to a lack of husband involvement, particularly during childbirth. The aim of this study was to explore how anxiety levels in first-time mothers giving birth without a husband are associated with labor duration.

2. Preliminaries or Related Work or Literature Review

2.1. The Effect of Husband's Support on Anxiety Levels During the First Stage of Labor in Primigravida Mothers

The sample of this observational analytical study, which used a cross-sectional methodology, consisted of 60 primigravida mothers who gave birth in the first stage. The sample was divided into two groups: the first group consisted of mothers who gave birth accompanied by their husbands, and the second group consisted of mothers who gave birth without their husbands. The research instruments included a questionnaire about husband support and an anxiety questionnaire from the Hamilton Anxiety Rating Scale (HARS). The research findings showed a P value of less than $0.000 < 0.05$, indicating that the level of husband support influenced the level of anxiety of primigravida mothers during the first stage of labor at the Pulosari Community Health Center (UPT). Husband support during labor plays an important role in reducing maternal anxiety during labor, ensuring the availability of all types of assistance from the beginning to the end of the process. The end of labor can provide constructive guidance to ensure the delivery procedure runs successfully and the health and safety of the mother and child.

2.2 The Influence of Husband's Support "Ma Lembo Ade" on the Mother's Anxiety Level During the Childbirth Process

This study used a quasi-experimental design that took place from April to May 2023 in the Bolo Community Health Center (Puskesmas) working area, Bima Regency. A total of 30 participants were selected through purposive sampling. Maternal anxiety during labor was assessed using the PRAQ-R2 questionnaire. Data were analyzed using the Mann-Whitney test. The study findings showed that the average anxiety level of mothers giving

birth accompanied by their husbands was significantly lower (mean score of 8) compared to mothers who were not accompanied by their husbands (mean score of 23), with statistically significant results (p = 0.000). This study concluded that the presence of a husband, known as "ma lembo ade," impacts the level of maternal anxiety during labor.

3. Proposed Method

This study used a single-shot approach. The focus group included all 90 first-time pregnant women in the Rembang I Community Health Center area. The study sample included 30 first-time pregnant women who came without a partner. The researchers evaluated the data using basic statistics and comparisons using the Spearman rank correlation test.

4. Results and Discussion

The research findings are presented in the table below:

Tabel 1 Distributed Respondence Frequency Based On Anxiety Level

Anxiety Level	Frequence	Percentage (%)
No Worries	26	86,7
Mild Anxiety	4	13,3
Moderate Anxiety	0	0
Severe Anxiety	0	0
Panic	0	0
Total	30	100

Respondents with moderate levels of anxiety numbered 4 people (13.3%) of the total, as determined by their level of worry.

Tabel 2 Distributed Frequence Respondence Base on Duration of Labor

Duration of Labor	Frequence	Percentage (%)
Abnormal (>24 hours)	11	36,7
Normal (13-24 hours)	19	63,3
Total	30	100

Based on the length of labor, 11 participants (36.7%) experienced labor lasting more than 24 hours, which is considered unusual.

Table 3.
Cross Tabulation of Respondents Based on Anxiety Level and Duration of Labor

Duration of Labor	Anxiety Level		Total	*Spearman Rank*	P Value	OR (95% CI)
	Mild Anxiety	No Worries				
Abnormal (>24 hours)	4 (100.0%)	7 (26.9%)	11 (36.7%)	.515	.004	4,867 (4.74-5.00)
Normal (13-24 hours)	0 (0%)	19 (73.1%)	19 (63.3%)			
Total	4 (100.0%)	26 (100.0%)	30 (100.0%)			

5. Comparison

Anxiety Level

Anxiety comes from a mixture of various emotions that a person feels when under pressure or facing challenges, such as frustration and inner struggle (Prasetyo, 2007).

Prolonged labor can be caused by mental factors that cause weak contractions and slow dilation. Ineffective emotional responses can cause the uterus to malfunction. This

problem is more common in first-time mothers than in those who have given birth before (Prawirohardjo, 2014).

Table 1 shows the level of anxiety, which shows that 4 respondents (13.3%) experienced mild anxiety.

It's important to take appropriate action to reduce or even eliminate the anxiety a mother feels before giving birth. Support from various parties, especially her husband, is crucial for mothers during pregnancy and childbirth. A husband is the person a mother relies on most for support during labor. Involving him in the labor process will significantly contribute to a smooth delivery.

Duration of Labor

Childbirth refers to the process of delivering a full-term fetus and placenta, both of which can survive outside the uterus, through the birth canal or by other methods, whether with or without the assistance of labor (Suliswaty and Nugraheny, 2010).

Typically, the longest labor occurs in first-time mothers, averaging around 12 to 14 hours. Furthermore, labor continues for about 7 hours. Generally, the lighter the contractions, the longer the labor will last. Rapid labor usually begins with gradual but prolonged contractions and continues to develop in a similar manner (Stoppart, 2008).

As stated by Prawirohardjo (2014), stage I lasts for 13 hours, stage II lasts for 1.5 hours, stage III lasts for 0.5 hours, and stage IV lasts for 2 hours, so the total duration of labor is 17 hours.

Table 2 shows the duration of labor. Eleven participants (36.7%) experienced labor that lasted longer than 24 hours, which is considered abnormal.

Prolonged labor can occur for a variety of reasons and may be considered "normal" for some individuals. Avoidable factors include mental stress and physical problems that can lead to prolonged labor and inadequate uterine contractions (Llewellyn Derek-Jones, 2022).

The Anxiety Level of Primiparous Mothers Who Are Not Accompanied by Their Husbands and the Duration of Labor

The results of the research analysis in Table 3 show that of the 30 participants who experienced mild and severe anxiety, with labor lasting more than 24 hours (which is unusual), there were four individuals (100%) with a correlation coefficient of 0.515 and a p-value (sig) of 0.004. This value indicates a fairly good correlation, in the same direction, and of moderate strength.

Therefore, it can be concluded that there is a significant and positive relationship between the level of anxiety of first-time mothers who are not accompanied by their partners and the length of labor at Rembang I Health Center.

Support during labor can ease pain and increase comfort. Ideally, support should be straightforward, efficient, and cost-effective. This approach can reduce labor-related risks and speed up labor progression. Tension and anxiety during labor contribute to this pain to some extent.

One key element of empathetic maternal care is the participation of partners and family members during labor. Numerous studies have shown that when mothers receive care and support during this time, along with adequate information about the stages of labor and the support they will receive, they tend to feel safer and have better outcomes.

6. Conclusions

Based on research conducted at Rembang I Health Center on the relationship between the anxiety level of mothers giving birth for the first time without their husbands and the length of labor, the following conclusions can be drawn: 1) Among these mothers, 4 people (13.3%) experienced anxiety. 2) In terms of the length of labor, 11 people (36.7%) experienced an unusually long labor, which was more than 24 hours. 3) There is a significant relationship between mothers giving birth for the first time who were not accompanied by their husbands during labor and the length of labor at Rembang I Health Center {Spearman Rank: 0.515, p value: 0.004, OR: 4.867 (95%CI: 4.74-5.00)}.

Author Contributions: Conceptualization: Dian Shofia Reny Setyanti and Nurhayani; Methodology: Dian Shofia Reny Setyanti; Software: Nurhayani; Validation: Dian Shofia Reny Setyanti and Nurhayani; Formal analysis: Dian Shofia Reny Setyanti; Investigation: Nurhayani; Resources: Nurhayani; Data curation: Dian Shofia Reny Setyanti; Writing—original draft: Dian Shofia Reny Setyanti; Writing—review and editing: Nurhayani; Visualization: Dian

Shofia Reny Setyanti; Supervision: Nurhayani; Project administration: Dian Shofia Reny Setyanti; Funding acquisition: Dian Shofia Reny Setyanti and Nurhayani.

Funding: This research did not receive external funding.

Data Availability Statement: The information used in this research is publicly accessible.

Acknowledgments: The author would like to express his gratitude to all parties who have assisted during this research, especially to colleagues and organizations who have provided in-depth technical assistance, help, and guidance in writing this work.

Conflicts of Interest: The authors declare that they have no conflicts of interest related to this research. The funding agencies had no influence on the study design, data collection, analysis, interpretation, preparation of the manuscript, or the decision to publish the findings.

References

Arikunto, Suharsimi, 2012. Prosedur Penelitian Suatu Pendekatan Praktek. Jakarta; Rineka Cipta

Budiarto, Eko. 2002. Biostatistika untuk Kedokteran dan Kesehatan Masyarakat. Jakarta : EGC.

Carpenito, Lynda Juall. 2001. Buku Saku Diagnosa Keperawatan. Jakarata : EGC.

Chapman, Vicky. 2006. Asuhan Kebidanan Persalinan dan Kelahiran. Jakarta : EGC.

Chaplin, J, P. 2009. Kamus Lengkap Psikologi. Jakarta : Rajawali Press.

Dep.Kes.RI. 2006. Buku 3 Catatan Tentang Perkembangan Dalam Praktik Kebidanan. Jakarta : DirJen BinKesMas.

Dep.Kes.RI. 2005. Catatan Tentang Perkembangan Dalam Praktek Kebidanan. Jakarta : DirJen BinKesMas.

Dep.Kes.RI. 2007. Kurikulum dan Modul Pelatihan Bidan Poskesdes dan Pengembangan Desa Siaga. Jakarta : DirJen BinKesMas.

Hawari, Dadang. 2008. Manajemen Stress, Cemas Dan Depresi. Jakarta : Universitas Indonesia.

Hidayat, A Alimul. 2008. Riset Keperawatan dan Teknik Penulisan Ilmiah Edisi 2. Jakarta : Salemba Medika.

JNPK – KR. 2007. Asuhan Persalinan Normal.

Kartini, Kartono. 2007. Psikologi Wanita Jilid 2 Mengenal Wanita Sebagai Ibu dan Nenek. Bandung : CV. Mandar Maju.

Llewellyn, Derek-Jones, 2002. Dasar-dasar Obstetri & Ginekologi. Jakarta : Hipokrates.

Mandagi , D. V., Pali, C., & Sinolungan, J. S. 2013. Perbedaan Tingkat Kecemasan pada Primigravida dan Multigravida di RSIA Kasih Ibu Manado. Jurnal e-Biomedik, 1.

Manuaba, Ida Gede. 2014. Ilmu Kebidanan, Penyakit Kandungan, Dan Keluarga Berencana untuk Bidan. Jakarta : EGC.

Mu'minah, I., &Mawarti, R. 2013. Hubungan Dukungan Sosial Dengan Tingkat Kecemasan Ibu Bersalin Kala I Di Puskesmas Mergangsang Kota Yogyakarta (Doctoral Disertation, Stikes 'Aisyiyah Yogyakarta).

Nevid, Jeffrey, dkk. 2005. Psikologi Abnormal. Jakarta : Erlangga

Noor, Juliansyah, 2011. Metode Penelitian, Skripsi, Tesis, Disertasi, Dan Karya Ilmiah, Jakarta; Kencana Prenada Media Group

Nisman , A, W. 2011. Ternyata Melahirkan Itu Mudah Dan Menyenangkan. Jogyakarta : Andi Offset

Notoatmodjo, Soekidjo. 2003. Pendidikan dan Prilaku Kesehatan. Jakarta : Rineka Cipta.

Notoatmodjo, Soekidjo. 2018. Metodologi Penelitian Kesehatan. Jakarta : EGC.

Nursalam. 2020. Konsep Penerapan Metodologi Penelitian Ilmu Keperawatan. Jakarta : Salemba Raya.

Prasetyono, Dwi Sunar. 2007. Metode Mengatasi Cemas & Depresi. Yogyakarta : ORY ZA

Prawirohardjo, Sarwono. 2014. ILMU KANDUNGAN. Jakarta : Yayasan Bina Pustaka Sarwono Prawirohardjo.

Purwaningsih, Wahyu et all. 2010. Asuhan Keperawatan Jiwa. Yogyakarta : Nuha Medika.

Saifudin, A. B. 2014. Buku Panduan Praktis Pelayanan Maternal dan Neonatal. Jakarta : EGC

Shodiqoh, E.R, & Syahrul, F. 2014. Perbedaan Tingkat Kecemasan Dalam Menghadapi Persalinan Antara Primigravida Dan Multigravida. Jurnal Berkala Epidemiologi 2

Sholihah, Lutfiatus. 2008. Panduan Lengkap Melahirkan. Yogyakarta : Diva Press.

Stopard, William. 2008. Buku Pintar Kehamilan & Persalinan Modern. Yogyakarta : Quills Book Publishers.

Stuart, W. Gail. 2013. Buku Saku Keperawatan Jiwa. Jakarta : EGC.

Sugiyono, 2015. Statistik Untuk Penelitian. Bandung : Alfa Beta.

Suliswati, et all. 2005. Kosep Dasar Keperawatan Kesehatan Jiwa. Jakarta : EGC.

Sumarah, 2009. Perawatan Ibu Bersalin. Yogyakarta : Fitramaya.

Videbeck, Sheila (2012). Buku AjarKeperawatan Jiwa (Renata Komalasari, Penerjemah). Jakarta : EGC

Wiknjosastro, Hanafi. 2016. ILMU KEBIDANAN. Jakarta : Yayasan Bina Pustaka Sarwono Prawirohardjo.