

The Relationship Between Maternal Age and Gravidity Status and Anxiety Levels Toward Childbirth Among Pregnant Women in the Working Area of the Kairatu Community Health Center

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ABSTRACT

Background: Pregnancy is the most important event and an unforgettable moment in a woman's life, although it is associated with many positive feelings, it can also be one of the most stressful events. Many somatic and psychological issues, including fear, anxiety, and depression related to pregnancy. Objective: This study aims to determine the relationship between age and gravida status with the level of anxiety facing childbirth among pregnant women in the Kairatu Health Center Work Area. Method: Using a cross-sectional design and a sample size of 39 respondents with total sampling technique, utilizing instruments in the form of questionnaires and analysis using the Spearman Rank test. Results: The Spearman correlation test yielded a correlation coefficient of $\rho = -0.497$ with a significance value of $p = -0.000$, indicating a significant relationship with a negative direction and moderate strength. Meanwhile, between gravida status and anxiety, a correlation of $\rho = -0.587$ and $p = 0.000$ was obtained, also showing a negative and significant relationship with very strong strength. Conclusion: There is a relationship between age and the level of anxiety in facing childbirth among pregnant women in the working area of Kairatu Health Center.

INTRODUCTION

Pregnancy is one of the most important events and unforgettable moments in a woman's life, although it is associated with many positive feelings, it can also be one of the most stressful events. Pregnancy can be an emotional crisis for some women, and if not managed well, it can lead to maternal and neonatal complications. There is a lot of evidence showing that many somatic and psychological issues, including fear, anxiety, and depression related to pregnancy (Hassanzadeh et al., 2020).

Anxiety during pregnancy is one of the psychological disorders that can negatively impact the health of both the mother and the fetus, as well as increase the risk of obstetric complications (Firrahmawati et al., 2025). According to Cafiero and Zabala (2024), maternal mental health issues during pregnancy, childbirth, and postpartum are a challenge for public health. Failure to recognize these issues hinders timely diagnosis and treatment, and affects the mother and the formation of the fundamental bond between mother and child. We must recognize risk factors such as age and gravidity status, mental health history, family dysfunction, and unfavorable environments. There is evidence that the effects of stress, anxiety, and depression during pregnancy negatively impact fetal neural development and affect child developmental outcomes. Based on the study by Yesilcinar, Acavut, and Guvenc (2023), it shows that anxiety during the perinatal period causes premature birth and negatively impacts both the mother and the fetus. Understanding prenatal anxiety and related factors can help develop strategies to identify high-risk pregnant women who need pregnancy interventions. Factors that influence anxiety in pregnant women include age and gravidity status.

Mothers aged < 20 years and > 35 years will have an impact on feelings of fear and anxiety leading up to the delivery process. Because if a mother gives birth at that age, her delivery falls into the high-risk category, and an older mother has a high potential to give birth to a baby with congenital disabilities. Parity can also affect anxiety because it is related to psychological aspects (Hastanti, Budiono, and Febriyana, 2019). Support models that can be applied to reduce anxiety in facing childbirth include partner support, social support, antenatal care support, and healthcare worker support (Rahmawati, Puspasari, and Fitria, 2024).

Beside age, anxiety during pregnancy is also influenced by the status of the pregnancy (gravida). The third trimester of pregnancy is from 29 to 40 weeks, during which this period is a preparation for childbirth. Pregnant women's anxiety during this period is due to concerns about the end of labor as well as the change in responsibility to become a mother once the baby is born.

WHO data (2020) shows that around 5% of non-pregnant women experience anxiety, which increases to 8-10% during pregnancy, and rises again to 13% as labor approaches. Based on the Sustainable Development Goals (SDGs) targets for 2015 – 2030, it was found that 15,000 out of 4.5 million women giving birth reported feelings of fear and anxiety. In developing countries, it is estimated that 100,000 to over 1,000 per birth report feelings of

anxiety, while in developed countries, it ranges from 7-15 per 100,000 live births reporting feelings of anxiety during childbirth.

According to the Indonesian Ministry of Health (2023), the incidence of anxiety among pregnant women in Indonesia reaches 107,000,000 or 28.7%, with anxiety occurring among pregnant women approaching childbirth. In Maluku in 2020, the prevalence of anxiety among pregnant women showed that 43.3% experienced mild anxiety, 43.3% moderate anxiety, and 13.4% severe anxiety (Maluku Provincial Health Office, 2020). In the West Seram District in 2022, the prevalence of anxiety among pregnant women showed that 19.5% experienced mild anxiety, 18.9% moderate anxiety, 11.5%, and 10.4% severe anxiety. In 2023, the prevalence of anxiety among pregnant women showed that 20.3% experienced mild anxiety, 26.2% moderate anxiety, 15.5%, and 9.4% severe anxiety. In 2024, the prevalence of anxiety showed that 21.2% experienced mild anxiety, 28.2% moderate anxiety, 17.2%, and 11.2% severe anxiety (West Seram District Health Office, 2024).

Based on the initial data collected, from January to April 2025, there were 93 pregnant women who visited the Kairatu Health Center for check-ups. Meanwhile, for pregnant women in their second and third trimesters, from June to July, there were 39 pregnant women, including 10 respondents in Kairatu Village, 8 respondents in Uraur Village, 5 respondents in Talaga Ratu Hamlet, 3 respondents in Siompo Hamlet, 4 respondents in Waisari Hamlet, 4 respondents in Kalapa Dua Hamlet, 3 respondents in Waralohi Hamlet, and 2 respondents in Air Buaya Hamlet.

Based on interviews with 7 pregnant women in their second and third trimesters, six of them expressed concerns about facing childbirth. Among these six women, three were under 20 years old and three were over 35 years old. Of these six women, three were primigravida (first-time mothers) and three were multigravida. One pregnant woman was not worried about childbirth because she was 30 years old and was a multigravida.

Based on the phenomenon of anxiety levels among third-trimester pregnant women mentioned above, it is very important to conduct research on "The Relationship Between Age and Gravida Status with Anxiety Levels in Facing Labor Among Pregnant Women in the Working Area of Kairatu Health Center."

LITERATURE REVIEW

Facing pregnancy and childbirth is one of the factors that can cause anxiety. During pregnancy, hormonal conditions tend to create instability in the body and mind, making mothers more prone to panic, quick to anger, irrational, and feeling anxious and worried. Many factors influence the thoughts of pregnant women, leading to anxiety during pregnancy, such as myths about frightening childbirth, the condition of the baby in the womb, and the physical changes that occur during pregnancy (Dhinny Novryanthi and Eni Haryati, 2023).

The levels of anxiety include; mild anxiety, which is related to everyday life concerns, the individual is aware, moderate anxiety, which allows someone

to focus on important matters and disregard others, severe anxiety, which is characterized by a very narrow perception, where a person can only focus on details and nothing else, and panic, which is a loss of control, where a person experiencing panic is unable to do anything even with guidance (Leni Tri Wahyuni et al., 2025).

According to Mauren (2022), there are age factors that influence pregnancy and childbirth. Mothers under 20 years old and over 35 years old have a high risk that may pose a threat to the health and life of both the mother and the fetus she is carrying during pregnancy, childbirth, and the postpartum period. And gravida status. Primigravida are more likely to experience anxiety during pregnancy because they have no prior experience with pregnancy and childbirth. Primigravida pregnancy is the first pregnancy experienced, so entering the third trimester will cause anxiety as it gets closer to the delivery process. Mothers with their first pregnancy usually still experience difficulties in adapting to their pregnancy. In addition, the knowledge and experience regarding pregnancy that they possess is still less compared to women with high parity. In primigravida mothers, it is usually difficult to recognize the changes occurring in their bodies, leading to discomfort during pregnancy. Whereas mothers who have been pregnant and given birth before. yes (multigravida), the feeling of anxiety experienced is only related to past experiences during pregnancy and childbirth (Mauren, 2022).

The conceptual framework is a relationship or bond between one concept and another from the problem that is intended to be studied thru the research that will be conducted (Nursalam, 2018).

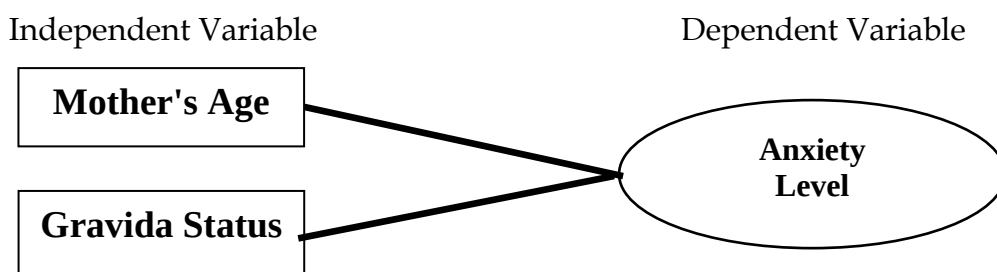


Figure 1. Conceptual Framework: Age and Gravida Status (Independent Variables) and Anxiety Level (Dependent Variable)

METHODOLOGY

The type of research used is quantitative with a cross-sectional research design. This research was conducted in the Working Area of the Kairatu Health Center. The population of this study consists of pregnant women in their second and third trimesters during June – July 2025, totaling 39 respondents, including 10 respondents in Kairatu Village, 8 respondents in Uraur Village, 5 respondents in Talaga Ratu Hamlet, 3 respondents in Siompo Hamlet, 4 respondents in Waisari Hamlet, 4 respondents in Kalapa Dua Hamlet, 3 respondents in Waralohi Hamlet, and 2 respondents in Air Buaya Hamlet. Based on the trimester, there are 18 respondents in the second trimester and 21 respondents in the third trimester.

The sample taken is equal in number to the population. The sampling method used in this research is total sampling. Data processing is carried out in stages of editing, scoring, coding, entry, clearing, processing, and tabulating. The research instrument uses a questionnaire on the Perinatal Anxiety Screening Scale (Astuti, 2020), which consists of 31 questions that include excessive worry and specific fears. The assessment of this questionnaire consists of a scale where never = 0, sometimes = 1, often = 2, and always = 3. The total score assessment is 0 – 20: no anxiety, 21 – 40: mild anxiety, moderate anxiety, and 61 -93: severe anxiety. The data obtained were then analyzed using the Chi Square test.

RESEARCH RESULT

From the data analysis results, the following respondent characteristics data were obtained:

Table 1. Respondent Characteristics		
Respondent Characteristics	n	%
Education Level		
Elementary School	8	20.5
Junior High School	8	20.5
Senior High School	14	35.9
Higher Education	9	23.1
Occupation		
Housewife	30	76.9
Civil Servant	4	10.3
Contract Employee	5	12.8
Gestational Age		
First Trimester	18	46.2
Second Trimester	21	53.8
Total	39	100

Based on the table above, the majority of respondents have a high school education, with 14 respondents (35%), while the lowest education level is S1 with 3 respondents (7.7%). Based on occupation, the majority of respondents work as housewives (IRT) with 31 respondents (79.5%), and those working as honorary staff / civil servants (PNS) with 8 respondents (20.5%). Based on the mother's gestational age, the majority are in the third trimester with 21 respondents and the second trimester with 16 respondents (46.2%).

Table 2. Distribution of Respondent Characteristics Based on Anxiety Levels in Pregnant Women in the Working Area of Kairatu Health Center

Dependent Variable	n	%
Anxiety Level		
No Anxiety	0	0.0

Mild Anxiety	0	0.0
Moderate Anxiety	18	46.2
Severe Anxiety	21	53.8
Total	39	100.0

Based on the table above, the majority of respondents in the Kairatu Health Center Work Area have a high level of anxiety, with 21 respondents (53.8%) categorized as having severe anxiety, while 18 respondents (46.2%) have a moderate level of anxiety. There are no respondents with no anxiety or mild anxiety.

Table 3. Distribution of Respondents According to Age Relationship with Levels in the Working Area of Kairatu Health Center

Age	Anxiety										Sign
	No Anxiety		Mild		Moderate		Severe		Total		
	N	%	N	%	N	%	N	%	N	%	
At Risk	0	0	0	0	9	23,1	17	43,6	26	66,7	0,000
Not at Risk	0	0	0	0	9	23,1	4	10,3	13	33,3	
Total	0	0	0	0	7	17.9	23	59	39	100	

Based on Table 3, it shows that respondents with at-risk age who have moderate anxiety number 9 respondents (23.1%), respondents with at-risk age who have severe anxiety number 17 respondents (43.6%), while respondents with non-at-risk age who have moderate anxiety number 9 respondents (we,1%), respondents with at-risk age who have severe anxiety number 17 respondents with non-at-risk age who have severe anxiety number 4 respondents (10.3%).

Based on the results of the Spearman correlation test, a correlation coefficient value between age and anxiety level was obtained with a significance value of $p = 0.000$, which means there is a significant relationship. Thus, it can be concluded that age is significantly related to the level of anxiety of pregnant women facing childbirth in the Kairatu Health Center area.

Table 4. Distribution of Respondents According to the Relationship Between Gravida Status and Anxiety Level Facing Labor in Pregnant Women in the Working Area of Kairatu Health Center

Gravida Status	Anxiety										Sign
	No Anxiety		Mild		Moderate		Severe		Total		
	N	%	N	%	N	%	N	%	N	%	
Primigravida	0	0	0	0	4	10,3	17	43,6	21	53,8	0,000
Multigravida	0	0	0	0	14	36,9	4	10,3	18	46,2	
Grandemulti	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	18	46,2	21	53,8	39	100	

Based on the table above, it shows that respondents with a primigravida status who have moderate anxiety number 4 respondents (10.3%), respondents with a primigravida status who have severe anxiety number 17 respondents (43.6%), while respondents with a multigravida status who have severe anxiety number 14 respondents (35.9%), and respondents with a multigravida status who have severe anxiety number 4 respondents (10.3%).

Based on the results of the Spearman correlation test, the correlation coefficient between gravida status and anxiety level was obtained with a significance value of $p = 0.000$, which means there is a significant relationship. Thus, it can be concluded that gravida status is significantly related to the anxiety level of pregnant women facing childbirth in the Kairatu Health Center area.

DISCUSSION

The results of the Spearman correlation yielded a correlation coefficient between age and anxiety level with a significance value of $p = 0.000$, which means there is a significant relationship. Thus, it can be concluded that age is significantly related to the anxiety levels of pregnant women facing childbirth in the Kairatu Health Center area.

The mother's age significantly determines maternal health because it is related to anatomical and physiological conditions during pregnancy, childbirth, and the postpartum period. Additionally, from a psychological perspective, an adult's anatomy has the ability to solve problems they face calmly and emotionally, especially when facing childbirth (Wardani et al., 2021). Based on the research by Tenriani, R (2024), pregnant women of advanced maternal age have a 10.5 times greater chance of experiencing moderate to severe anxiety.

Based on the above description, the researcher assumes that the age of pregnant women has a significant relationship with the level of anxiety in facing childbirth. Pregnant women who are classified as too young (< 20 years) or too old (> 35 years) are estimated to be more vulnerable to experiencing anxiety compared to pregnant women with a healthy reproductive age (20 – 35 years). This is because at a young age, pregnant women often do not yet have the mental readiness and experience, while at an older age, there are concerns about the risk of pregnancy and childbirth complications.

The results of the Spearman correlation test showed a correlation coefficient between gravida status and anxiety levels with a significance value of $p = 0.000$, indicating a significant relationship. Therefore, it can be concluded that gravida status is significantly related to the anxiety levels of pregnant women facing childbirth in the Kairatu Health Center area. This indicates that the lower the gravida, or in this case, primigravida, the higher the level of anxiety experienced. Primigravida is the first pregnancy.

According to Siregar et al. (2021), anxiety during primigravida pregnancy is due to the first-time experience of being pregnant and will increase as the delivery process approaches. This new experience, combined with worries about what will happen to her during the pregnancy, gives her a

mixed feeling of happiness and hope. This fear can occur due to the long wait for childbirth alongside the frightening imagery of the delivery process, which is full of uncertainty, even tho what is imagined does not always happen.

Similarly, in the study conducted by Ridayanti et al. (2023), there is a tendency for primigravida mothers to experience anxiety compared to multigravida mothers, because most multigravida mothers already have an understanding of pregnancy and the childbirth process from previous pregnancies, while primigravida mothers still do not have a clear picture of what will happen during childbirth and often feel fear due to hearing stories about what will happen as they approach childbirth.

Based on the above description, the researcher assumes that there is a relationship between gravida status and anxiety levels. This is caused by several factors, including: the mother's lack of experience in the delivery process, making her more prone to anxiety and uncertainty, the fear the mother feels when facing delivery, and the worry about potential complications. On the other hand, multigravida mothers are more likely to experience lower anxiety levels compared to primigravida mothers because they have experience in the delivery and childbirth process, making them more accustomed and prepared. Mothers with more than one child have better knowledge about the delivery and childbirth process and strong support from their families.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results and discussion conducted regarding the relationship between age and gravida status with the level of anxiety facing childbirth among pregnant women in the Kairatu Health Center Work Area, it can be concluded that: The majority of pregnant women in the Kairatu Health Center Work Area are of high-risk age, the majority of pregnant women in the Kairatu Health Center Work Area have primigravida status, and the majority of pregnant women in the Health Center Work Area have moderate anxiety levels.

There is a relationship between age and the level of anxiety facing childbirth among pregnant women in the Kairatu Health Center Work Area.

There is a relationship between gravida status and the level of anxiety facing childbirth among pregnant women in the Kairatu Health Center Work Area.

ADVANCED RESEARCH

It is hoped that pregnant women, especially those in their teenage years (< 20 years) and older age (> 35 years), as well as first-time mothers (primigravida), can be more proactive in seeking information about pregnancy and childbirth. Attending prenatal classes, regularly consulting with midwives or healthcare professionals, and involving family as emotional supporters are very important to help reduce anxiety before childbirth.

This research is still limited to age and gravidity status as factors of anxiety. Future researchers are advised to include other variables such as education, family support, trauma experience, and knowledge about pregnancy to obtain a more comprehensive picture.

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