



## Association Between Husband Support and Anxiety Levels Toward Childbirth Among Third-Trimester Primigravida Women

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### Abstract

**Research Objective:** Anxiety commonly occurs among primigravida women as childbirth approaches. This study aimed to examine the association between husband support and anxiety levels among third-trimester primigravida women in the working area of Purbaratu Public Health Center. **Methodology:** This quantitative study used a cross-sectional design and total sampling of 30 eligible participants. Husband support was measured using a modified Guttman-scale questionnaire, while anxiety was assessed using the Hamilton Anxiety Rating Scale (HARS). Descriptive analysis and the Fisher-Freeman-Halton exact test for a  $2 \times 3$  contingency table were used, with Cramér's V reported as an effect-size measure. **Results:** Most respondents received husband support and experienced mild anxiety. Husband support was significantly associated with anxiety level ( $p = 0.001$ ), with a Cramér's V of 0.66, indicating a strong association in this sample. **Conclusion:** Husband support was associated with lower anxiety levels among third-trimester primigravida women. Because the study was cross-sectional, the findings do not establish causality. Involving husbands in antenatal education may support maternal psychological preparedness for childbirth.

**Keywords:** *anxiety, childbirth, husband support, primigravida, third trimester.*

### INTRODUCTION

Anxiety is a common emotional response that may arise when an individual faces a situation perceived as threatening or stressful (Stuart, 2016). Anxiety may become maladaptive when it is excessive, persistent, and disproportionate to the actual threat (American Psychiatric Association, 2022). Women are particularly vulnerable to anxiety during major life transitions, including pregnancy and preparation for childbirth.

Pregnancy is accompanied by physiological and psychological changes that may affect maternal emotional well-being. Antenatal anxiety may manifest as excessive worry, sleep disturbance, palpitations, and muscle tension. Screening and early support are important because persistent anxiety may affect maternal well-being and adaptation during pregnancy (American College of Obstetricians and Gynecologists, 2023).

Anxiety may be particularly prominent during a first pregnancy. Primigravida women often report concerns regarding the childbirth process, fetal health, pain, and their new maternal role (Putri et al., 2021). The absence of previous childbirth experience may increase uncertainty as labor approaches (Evareny et al., 2022). Anxiety may also continue into the postpartum period and interfere with maternal adjustment and mother-infant bonding (Fawcett et al., 2019).

In addition to its psychological effects, anxiety may also influence the physiological condition of pregnant women. Long-term anxiety may induce the body's stress-response pathways, including the sympathetic nervous system and the hypothalamic-pituitary-adrenal (HPA) axis, resulting in greater production and release of cortisol and adrenaline. This condition may affect uteroplacental blood flow

and increase the risk of fetal growth restriction, preterm birth, and low birth weight (American College of Obstetricians and Gynecologists, 2023). Maternal anxiety has also been reported to be associated with childbirth complications, including prolonged labor due to inadequate mental preparedness for childbirth (Pakaja et al., 2025).

Support from the immediate family is important in helping pregnant women manage childbirth-related anxiety. Previous research has shown that family support is associated with lower anxiety among pregnant women, particularly during the third trimester (Eravianti et al., 2023). Within the family, husbands may provide emotional reassurance, information, practical assistance, and appreciation, all of which may support maternal confidence and psychological readiness (Wicaksana et al., 2024).

Husband support may include accompanying the mother during antenatal visits, helping to meet practical needs, discussing childbirth preparation, and providing emotional reassurance. Such involvement may promote feelings of safety and confidence. However, occupational demands and other family circumstances may limit the support received by some pregnant women (Hasanah et al., 2025). Previous findings indicate that third-trimester primigravida women who receive stronger husband support tend to report lower anxiety levels (Wahyuni et al., 2022).

A preliminary assessment in the working area of Purbaratu Community Health Center identified childbirth-related concerns among third-trimester primigravida women, including insomnia, restlessness, and fear of facing contractions or emergency signs without their husbands' assistance. Therefore, this study examined the association between husband support and anxiety levels toward childbirth among third-trimester primigravida women in this setting.

## **METHODS**

### **Research Type and Design**

This study used a quantitative cross-sectional analytic design to examine the association between husband support and anxiety levels toward childbirth among third-trimester primigravida women in the working area of Purbaratu Community Health Center, Tasikmalaya City. Both variables were measured during the same study period without follow-up; therefore, the design was intended to identify association rather than causation.

Husband support was treated as the independent variable and anxiety level as the outcome variable. The cross-sectional approach enabled the distribution of both variables and their association to be assessed at one point in time (Nursalam, 2020).

### **Research Location and Duration**

The study was carried out in the working area of Puskesmas Purbaratu, between March 9 and March 28, 2026.

### **Population and Sample**

The population comprised third-trimester primigravida women in the working area of Purbaratu Community Health Center. Total sampling was used because the accessible population was small. A total of 30 eligible women participated and were included in the analysis.

The inclusion criteria were third-trimester primigravida women who agreed to participate, could read and write, could communicate clearly, and had no severe obstetric or medical complications. Women who developed bleeding, labor contractions, severe abdominal pain, or other acute conditions during the study period were excluded and referred for appropriate clinical assessment.

### **Data Collection Technique**

Data were collected using closed-ended questionnaires completed during the same study visit. The instruments were a modified Husband Support Questionnaire using a Guttman response format and

the Hamilton Anxiety Rating Scale (HARS). Questionnaires were checked for completeness before data entry.

### **Research Instrument**

The study used two instruments. The Husband Support Questionnaire assessed emotional, informational, instrumental, and appraisal support. Each Guttman item was scored according to the study protocol, with higher total scores indicating stronger support; respondents were then classified into supportive and non-supportive categories using the predetermined instrument cutoff. Anxiety was assessed using HARS and classified as mild, moderate, or severe according to the scoring protocol used in the study.

- a. Husband Support Questionnaire: The questionnaire covered emotional, informational, instrumental, and appraisal support. It had previously undergone validity and reliability testing among 30 primigravida women in the working area of Cibeureum Community Health Center. The original validation record should be consulted for the exact item-validity and reliability coefficients.
- b. Anxiety Level Questionnaire: Anxiety was assessed using HARS, a structured scale for anxiety symptoms. The total score was classified into mild, moderate, and severe anxiety according to the study scoring protocol. The same administration and scoring procedure was applied to all participants.

### **Research Ethics**

This study was conducted in accordance with ethical principles for research involving human participants. Ethical approval was obtained from the Health Research Ethics Committee (KEPK) of Poltekkes Kemenkes Tasikmalaya, Ministry of Health, Indonesia (No. DP.04.03/F.XVIII.1.3.1/514/2026). The approval date should be verified against the original ethics certificate before submission because the date stated in the initial manuscript was later than the reported data-collection period.

Informed consent was obtained from all participants after they received a complete explanation of the study objectives and procedures. Respondents participated voluntarily and could withdraw from the research at any time without experiencing any adverse consequences. Confidentiality and anonymity were ensured through coding the questionnaires and reporting data in aggregate form. All participants were treated fairly and equally without discrimination. This study adhered to the principles of beneficence and non-maleficence to ensure that participation posed no physical or psychological harm to the respondents.

### **Data Analysis Technique**

Data were analyzed using SPSS. Univariate analysis described respondent characteristics, husband support, and anxiety levels using means, standard deviations, frequencies, and percentages, as appropriate.

For bivariate analysis, the Fisher-Freeman-Halton exact test, an extension of Fisher's Exact Test for a  $2 \times 3$  contingency table, was used because several expected cell counts were small. Statistical significance was set at  $\alpha = 0.05$ . Cramér's V was calculated from the contingency table to describe the strength of association.

## **RESULTS**

### **Univariate Analysis**

#### **Respondent Characteristics**

This study involved 30 primigravida women in their third trimester of pregnancy residing within the service area of Puskesmas Purbaratu.

**Table 1. Respondent Characteristics Based on Age**

| Age   |         |       |                  |    |
|-------|---------|-------|------------------|----|
| Mean  | Min-Max | SD    | 95% CI           | N  |
| 24,87 | 19 - 29 | 2,145 | 24,07 –<br>25,67 | 30 |

Based on Table 1, the mean age of respondents was 24.87 years (SD = 2.145), with a range of 19-29 years and a 95% confidence interval of 24.07-25.67 years.

**Table 2. Respondent Characteristics Based on Work**

| Work                  | n  | %    |
|-----------------------|----|------|
| Not Working/Housewife | 21 | 70,0 |
| Working               | 9  | 30,0 |

Based on Table 2, most respondents were not employed or were housewives (21 respondents; 70.0%), while 9 respondents (30.0%) were employed.

**Table 3. Respondent Characteristics Based on Education**

| Education                                  | n  | %    |
|--------------------------------------------|----|------|
| Elementary/ Junior High School             | 2  | 6,7  |
| Senior High School/ Vocational High School | 23 | 76,7 |
| Diploma/Bachelor's Degree                  | 5  | 16,7 |

Based on Table 3, most respondents had completed senior high school or vocational high school (23 respondents; 76.7%). Five respondents (16.7%) had a diploma or bachelor's degree, and two (6.7%) had elementary or junior high school education.

## **Husband's Support for Primigravida Pregnant Women in the Third Trimester**

**Table 4. Distribution of Husband's Support**

| Husband's Support | n         | %            |
|-------------------|-----------|--------------|
| Support           | 25        | 83,3         |
| Not Support       | 5         | 16,7         |
| <b>Total (n)</b>  | <b>30</b> | <b>100,0</b> |

Based on Table 4, 25 respondents (83.3%) were classified as receiving husband support, while 5 respondents (16.7%) were classified as not receiving husband support.

## **Anxiety Levels Facing Childbirth**

**Table 5. Distribution of Anxiety Levels**

| Anxiety Levels   | n         | %            |
|------------------|-----------|--------------|
| Mild             | 16        | 53,3         |
| Medium           | 10        | 33,3         |
| Weight           | 4         | 13,3         |
| <b>Total (n)</b> | <b>30</b> | <b>100,0</b> |

Based on Table 5, 16 respondents (53.3%) experienced mild anxiety, 10 (33.3%) experienced moderate anxiety, and 4 (13.3%) experienced severe anxiety.

## Bivariate Analysis

### The Relationship Between Husband's Support and Anxiety Levels in Facing Childbirth

**Table 6 The Relationship Between Husband's Support and Anxiety Levels in Facing Childbirth**

| Husband's Support | Anxiety Level      |                    |                   | Total n (%)         | P Value |
|-------------------|--------------------|--------------------|-------------------|---------------------|---------|
|                   | Mild (n)           | Medium (n)         | Weight (n)        |                     |         |
| Support           | 16 (53,3 %)        | 8 (26,7 %)         | 1 (3,3 %)         | 25 (83,3 %)         | 0,001   |
| Not Support       | 0 (0 %)            | 2 (6,7 %)          | 3 (10,0 %)        | 5 (16,7 %)          |         |
| <b>Total (n)</b>  | <b>16 (53,3 %)</b> | <b>10 (33,3 %)</b> | <b>4 (13,3 %)</b> | <b>30 (100,0 %)</b> |         |

The percentages displayed in Table 6 are percentages of the total sample. Within the supported group, 16 of 25 women (64.0%) had mild anxiety, 8 (32.0%) had moderate anxiety, and 1 (4.0%) had severe anxiety. Within the non-supported group, none had mild anxiety, 2 of 5 women (40.0%) had moderate anxiety, and 3 (60.0%) had severe anxiety.

The Fisher-Freeman-Halton exact test showed a significant association between husband support and anxiety level ( $p = 0.001$ ). Cramér's  $V$  was 0.66, indicating a strong association in this sample. Women who reported husband support more frequently had mild anxiety, whereas moderate or severe anxiety was more common among women who did not report husband support. These results describe an association and do not establish a causal effect.

## DISCUSSION

### Univariate Analysis

#### Respondent Characteristics Affecting Husband Support and Anxiety in Third-Trimester Primigravida Pregnant Women

##### Age

The mean age of respondents was 24.87 years ( $SD = 2.145$ ), with a range from 19 to 29 years and a 95% confidence interval of 24.07–25.67 years. The findings showed that most respondents were within an age range generally regarded as healthy for reproduction.

Age is an important factor influencing an individual's ability to manage stress and employ coping mechanisms. According to Sutejo (2020), more mature age is associated with better emotional regulation and adaptive coping strategies. However, anxiety may still occur in primigravida women despite being within the healthy reproductive age group because they were facing childbirth for the first time.

This finding is consistent with Wicaksana et al. (2024), who reported that primigravida women of productive age remain at risk of anxiety due to inexperience and concerns regarding maternal and fetal safety. Early adulthood is also a period of psychological adaptation to new maternal roles, which may increase emotional vulnerability.

The predominance of respondents within the healthy reproductive-age range may partly explain the relatively high proportion of mild anxiety. However, all respondents were primigravida and were preparing for childbirth for the first time. Age should therefore be considered a possible confounding factor when interpreting the association between husband support and anxiety.

## **Work Status**

The majority of respondents were not employed or were housewives, accounting for 21 respondents (70.0%), while 9 respondents (30.0%) were employed. Employment status may influence maternal psychological conditions during pregnancy. According to Tyastuti and Wahyuningsih (2016), third-trimester pregnant women generally experience increased anxiety due to concerns about childbirth, maternal safety, and fetal condition, which may be influenced by daily activities and roles.

This finding is consistent with Hasanah et al. (2025), who reported that unemployed pregnant women tend to experience higher anxiety levels than those who are employed, as they have more time to focus on pregnancy-related concerns. In this study, the predominance of housewives may increase vulnerability to anxiety due to greater focus on physiological and psychological adaptations that occur during pregnancy and anticipation of childbirth.

However, most respondents in this study experienced mild anxiety. This suggests that despite being more susceptible to anxiety based on employment status, adequate husband support may have contributed to reducing worries, enhancing feelings of safety, and improving psychological readiness for childbirth. Therefore, anxiety levels in this study may not only be influenced by husband support but also by respondents' employment status, which should be considered as a potential confounding factor in interpreting the relationship between husband support and anxiety among third-trimester primigravida women.

## **Education Level**

The majority of respondents had a secondary education level (senior high school/vocational school), accounting for 23 respondents (76.7%). Respondents with higher education (diploma/bachelor's degree) numbered 5 respondents (16.7%), while those with basic education (elementary/junior high school) accounted for 2 respondents (6.7%).

According to Sutejo (2020), individuals with higher educational attainment tend to have better rational thinking abilities and more adaptive coping mechanisms when facing stressful situations. In contrast, limited education may affect an individual's understanding of health conditions and potentially increase anxiety levels.

In this study, the predominance of respondents with secondary education suggests that most mothers had sufficient ability to understand health education related to pregnancy and childbirth. This understanding may help them prepare mentally for their first childbirth and reduce uncertainty that can trigger anxiety. In addition, higher educational attainment may facilitate better comprehension of information provided by healthcare professionals and support from husbands during pregnancy.

Therefore, the relatively low anxiety levels found among most respondents may not only be influenced by husband support but also by educational background. Education should thus be considered as a potential confounding factor when interpreting the relationship between husband support and anxiety among third-trimester primigravida pregnant women.

## **Husband Support Among Third-Trimester Primigravida Pregnant Women**

Most respondents were classified as receiving husband support, including emotional, informational, instrumental, and appraisal support. Such support may enhance feelings of safety, comfort, and confidence when women face physiological and psychological changes during pregnancy. Social support theory proposes that assistance from close family members can improve adaptation to stressful situations (Friedman et al., 2010).

## **Anxiety Levels in Facing Childbirth Among Third-Trimester Primigravida Women**

The results showed that most respondents experienced mild anxiety in facing childbirth. This condition may occur because although the respondents were primigravida women without previous childbirth experience, most of them had received adequate support from their husbands and surrounding environment. Such support can help reduce fear and increase maternal confidence in facing the childbirth process. Anxiety among primigravida women generally arises from uncertainty regarding the childbirth process, the baby's condition, pain, and changes in the maternal role (R. D. Putri et al., 2021).

According to Stuart (2016), mild anxiety is still considered an adaptive response that increases an individual's alertness toward upcoming situations. However, if not properly managed, anxiety may progress to a more severe level and affect both the physiological and psychological adaptations that occur during pregnancy.

## **Bivariate Analysis**

### **The Relationship Between Husband's Support and Anxiety Levels in Facing Childbirth**

The bivariate analysis identified a significant association between husband support and anxiety level toward childbirth ( $p = 0.001$ ; Cramér's  $V = 0.66$ ). Mild anxiety was more common among women who reported husband support, while moderate and severe anxiety were proportionally more frequent among women without such support. This pattern is consistent with previous studies reporting an association between family or husband support and lower antenatal anxiety (Eravianti et al., 2023; Wicaksana et al., 2024).

Emotional reassurance, practical assistance, information, and companionship from a husband may help a pregnant woman feel safer and more confident as childbirth approaches. Nevertheless, the observed relationship may also be influenced by age, education, employment, family circumstances, previous mental-health conditions, and access to antenatal information.

The findings support the inclusion of husbands in antenatal education and childbirth-preparation activities. Such programs should complement, rather than replace, routine anxiety screening and professional support for women with moderate or severe symptoms.

## **Limitations**

This study had a cross-sectional design, a small sample, and a single health-center setting, which limit causal interpretation and generalizability. Husband support and anxiety were measured using self-reported instruments, and potential confounding variables were not controlled statistically. In addition, the exact instrument cutoffs and validation coefficients should be checked against the original study records before final submission.

## **CONCLUSION**

Most third-trimester primigravida women in the working area of Puskesmas Purbaratu reported husband support and experienced mild anxiety toward childbirth. Husband support was significantly associated with anxiety level ( $p = 0.001$ ; Cramér's  $V = 0.66$ ). Women who reported support were more likely to have mild anxiety, whereas moderate or severe anxiety was more common among women who did not report support. Because this was a cross-sectional study, the findings cannot establish that husband support directly reduces anxiety. Antenatal services may nevertheless involve husbands in education and childbirth preparation while continuing routine anxiety screening and referral when needed. Future research should include larger and more diverse samples, use validated instrument cutoffs reported in full, and apply longitudinal or multivariable designs to assess temporal relationships and potential confounding factors.

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**Informed Consent Statement:** Informed consent was obtained from all participants involved in this study.

**Data Availability Statement:** The dataset supporting the findings of this study can be obtained from the corresponding author upon reasonable request. Public access to the data is restricted in order to protect ethical standards and participant privacy.

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**Conflicts of Interest:** The authors declare no conflict of interest.

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