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Characteristics Associated With Anxiety in Primigravida Mothers Facing Labor in Cianjur District

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Abstract.

Anxiety in primigravida mothers can arise in the third trimester and can harm pregnant women and their babies by leading to stunted fetal growth, weakening of uterine muscle contractions, increased risk of giving birth to premature babies, and affecting the growth and development of children. High levels of anxiety in pregnant women can be caused by several factors including the characteristics of the mother. Midwives must know the causal factors and how to overcome them. The purpose of this study was to determine the level of anxiety in primigravida mothers in the third trimester in the face of childbirth and the factors that influence this. An analytic observational design was used with a cross-sectional approach. The sample included 35 pregnant women in the third trimester, recruited by consecutive sampling. Data were collected by questionnaires. The univariate data analysis looked at the frequency distribution and the bivariate analysis used the Chi-square test. The results showed that 60.0% of the women had mild anxiety and 40.0% had moderate anxiety. There was a significant relationship between the characteristics of age (p = 0.001; OR: 3.672; 95% CI: 0.20-0.85), education (p = 0.005; OR: 2.552; 95% CI: 0.30-0.75) and economic status (p = 0.003; OR: 1.552; 95% CI: 0.56-3.75) with anxiety of primigravida pregnant women in facing childbirth. It is recommended that pregnant women routinely carry out prenatal check-ups at health facilities to help mothers obtain information related to their pregnancy, so they can control the anxiety that arises during their pregnancy.

Keywords: maternal characteristics, anxiety, primigravida

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1. Introduction

Anxiety in primigravida pregnant women can arise in the third trimester before labor, during this period pregnant women feel anxious about various things such as normal or abnormal babies being born, pain that will be felt, and so on [1]. With the labor approach, especially in your first pregnancy, it's natural to feel anxious or afraid because pregnancy is a new experience [2]. This anxiety can hurt pregnant women such as stunted fetal

growth, weakening uterine muscle contractions, the risk of giving birth to premature babies, and affecting the growth and development of children [3]. A study in Indonesia showed that pregnant women with high levels of anxiety had a risk of giving birth to premature babies and even miscarriages [4].

Anxiety is an emotional state characterized by feelings of fear (apprehension), tension (tension), and an increase in autonomic nervous activity. The intensity of this activity is thought to vary and fluctuate over time as a function of stress or pressures that arise in the individual. Anxiety disorders are one of the most common psychiatric disorders. According to a report by The National Comorbidity Study, one in four people meets the diagnostic criteria for at least one anxiety disorder. Anxiety disorders were also more common in women (30.5%) than men (19.2%) [5]. The World Health Organization (WHO) report in 2005 explained that the global mental health status showed that 25% of the world's population had experienced emotional and behavioral disorders, but only 40% were diagnosed. The proportion of the world's population who experience emotional and behavioral disorders is around 10% of adults and about 20% are identified as having mental disorders. Emotional disorders that often occur are anxiety, stress, or even depression. In Indonesia, there are 107,000 (28.7%) pregnant women who experience anxiety in facing childbirth [6]. A study conducted by Astria (2009) showed that anxiety was more experienced in primigravida pregnant women (first pregnancy) as much as 66.2%, compared to anxiety in multigravida pregnant women as much as 42.2% [3].

In addition to having an impact on the delivery process, anxiety in pregnant women can also affect the growth and development of children. Anxiety that occurs especially in the third trimester can result in decreased birth weight and increased HHA (Hypothalamic-Pituitary-Adrenal) activity which causes changes in steroid hormone production, impaired social behavior, and fertility rates as adults. In addition, anxiety during pregnancy is associated with emotional problems, hyperactivity disorders, decentralization, and impaired cognitive development in children [5].

A primiravida mother in general will fell happy and the higher the curiosity about the changes in themselves and the development of the fetus. But at the same time there is also anxiety in pregnant women. These change cause psychological and emotional conditions to become unstable so that it fosters continuous worries until the end of her pregnancy. If the anxiety is not handled seriously, it will have a negative impact on the quality of life for the mother and the cognitive development of her child.

The purpose of this study was to determine the level of anxiety in third-trimester primigravida mothers in the face of childbirth and the factors that influence it.

2. Method

2.1. Study design

This study used an analytic observational design with a cross-sectional approach in the Practice of Independent Midwives NY U in Cianjur district in March 2021.

2.2. Sample

In this study, the anxiety level of third-trimester primigravida pregnant women will be assessed based on the characteristics of age, educational status, employment status, economic status, and living environment in facing childbirth at Practice of Independent Midwives NY U in Cianjur district in March 2021.

The population is primigravida pregnant women in the third trimester of gestational age 28-40 weeks at Practice of Independent Midwives NY U in Cianjur district in March 2021.

The sample is a population that meets the inclusion criteria taken by consecutive sampling, 35 samples meet the inclusion criteria of the study, namely pregnant women who have their contents checked at Practice of Independent Midwives NY U in Cianjur district in March 2021, Mothers who are pregnant in the third trimester and are pregnant for the first time and give birth. And the exclusion criteria included: Mothers who were proven to have complications in pregnancy, Mothers who said they had suddenly resigned.

2.3. Instruments

The instrument that will be used in this research is a questionnaire consisting of two parts. The first part is data on the characteristics of respondents. (third - trimester primigravida pregnant women) consisting of name/initials, age, educational status, employment status, economic status, and living environment status. The second part is the HRS-A (Hamilton Rating Scale for Anxiety) questionnaire consisting of 14 questions which are groups of anxiety symptoms, each symptom group is given a score between 0-4 which means if: 0 = no symptoms at all,1 = one of the symptoms present, 2 = moderate/half of the symptoms present, 3 = severe/more than of the symptoms present, 4 = very severe all the symptoms present. Determination of the degree of anxiety by adding up the scores and items 1-14 with the results and dividing them into 2 categories: Not anxious

(if the total score is < 6), Mildly anxious (if the total score is 7-14), Moderately anxious (if the total score is 15- 27), and severe anxiety (if the total score > 27).

2.4. Data collection procedure

Start from ethical approval, permission to study, and how to get sample inform consent, instrument distribution until returning the questionnaire.

2.5. Data analysis

Univariate data analysis looked at the frequency distribution and bivariate analysis using the chi-square test. program *software Microsoft Excel 2010* atau IBM SPSS Statistik 20.

3. Results

Table 1: Frequency Distribution Based on Anxiety Levels of Third Trimester Primigravida Pregnant Women at PMB NY. U Cianjur District

Anxiety Level	Frequency (n)	Percentage (%)
There is not any	0	0
Mild Anxiety	21	60
Moderate Anxiety	14	40
Severe Anxiety	0	0
Total	**35**	**100**

Table 1. above shows the distribution of the number of respondents based on the level of anxiety of the respondents. The number of respondents who have a mild level of anxiety is 21 respondents (60%), and those who have a moderate level of anxiety are 14 respondents (40%).

In general, anxiety that occurs in women who are about to give birth is caused by pregnant women having to adjust to physical and psychological changes [1]. In addition, anxiety arises because of the fear of losing the baby who was born, such as the fear that the baby born will die or be born with disabilities. Anxiety can also arise due to feelings of inability to meet the needs of the baby to be born, as well as the emergence of suspicions that childbirth will hinder daily activities [7].

Table 2. above shows the distribution of anxiety levels among respondents based on age, mostly in the low-risk age group (20-35 years old) as many as 22 respondents (63%). The distribution of the level of anxiety in respondents based on educational

Table 2: Frequency Distribution of the Characteristics of Third Trimester Primigravida Pregnant Women in PMB NY. U Cianjur District.

Characteristics	Frequency (n)	Percentage (%)
Age		
High Risk (<20th, >35th)	13	37
Low Risk (20-35th)	22	63
Education		
Low (SD, SMP)	20	57
Height (high school, PT)	15	43
Job-status		
Does not work	25	71
Work	10	29
Economic Status		
Low	21	60
Tall	14	40
Environmental Status		
Live with Husband	12	34
Living with Family	23	66
Total	**35**	**100**

status was mostly in higher education (SMA, PT) as many as 20 respondents (57%). The distribution of the level of anxiety among respondents based on work status was mostly in unemployed mothers as many as 25 respondents (71%). The distribution of the level of anxiety among respondents based on economic status was mostly in mothers with low economic status as many as 21 respondents (60%). The distribution of the level of anxiety among respondents based on the status of the home environment was mostly for mothers who lived with their families as many as 23 respondents (66%).

Table 3: The Relationship between Age Characteristics and Anxiety Levels of Third Trimester Primigravida Pregnant Women in PMB NY. U Cianjur District.

Age Characteristics	Anxiety Level		Total	P-Value	OR
	Light	Currently			(IK 95%)
High risk	3	10	13	0,001	3,672
Low Risk	20	2	22		(0,20-0,85)
Total	**23**	**12**	**35**		

Anxiety is a vague worry related to feelings of uncertainty and helplessness. Anxiety is different from fear, where anxiety is an emotional response to the assessment. In primigravida pregnant women, especially in the third trimester of pregnancy, the

Table 4: The Relationship between Educational Characteristics and Anxiety Levels of Third Trimester Primigravida Pregnant Women in PMB NY. U Cianjur District.

Educational Characteristics	Anxiety Level		Total	P-Value	OR
	Light	Currently			(IK 95%)
Low	2	18	20	0,005	2,552
Tall	5	10	15		(0,30-0,75)
Total	**7**	**28**	**35**		

Table 5: Correlation between Characteristics of Occupational Status and Anxiety Levels of Third Trimester Primigravida Pregnant Women in PMB NY. U Cianjur District.

Characteristics of Employment Status	Anxiety Level		Total	P-Value	OR
	Light	Currently			(IK 95%)
Does not work	7	18	25	0,780	1,785
Work	9	1	10		(043-2,75)
Total	**16**	**19**	**35**		

Table 6: Correlation between Characteristics of Employment Status and Anxiety Levels of Third Trimester Primigravida Pregnant Women in PMB NY. U Cianjur District.

Characteristics of Economic Status	Anxiety Level		Total	P-Value	OR
	Light	Currently			(IK 95%)
Low	4	17	21	0,003	1,552
Tall	8	6	14		(0,56-3,75)
Total	**12**	**23**	**35**		

Table 7: The Correlation of Characteristics of Environmental Status with Anxiety Levels of Pregnant Women in the Third Trimester Primigravida in PMB NY. U Cianjur District.

Characteristics of Environmental Status	Anxiety Level		Total	P-Value	OR (IK 95%)
	Light	Currently			
Live with Husband	12	0	12	0,451	0,256 (0,45-1,95)
Living with Family	3	20	23		
Total	**15**	**20**	**35**		

mother's psychological changes are more complex and increased compared to the previous trimester, due to the growing condition of pregnancy and excessive anxiety

[8]. If pregnant women do not have preparation for giving birth, they will feel more worried and anxious by showing fear in a silent behavior until they cry. Even though birth is a normal physiological phenomenon the delivery process for mothers with high levels of anxiety will have an impact on childbirth complications such as bleeding, excruciating pain, and can cause fear and even death for both mother and baby [9].

In Table 3. There is a significant relationship between age and anxiety level of primigravida pregnant women before delivery with the chi-square test results of 0.001 and the OR value of the 95% confidence level, the results are 3.672 (0.20-0.85).

Age can affect a person's psychology, the higher the age, the better the level of one's emotional maturity and the ability to physically deal with pregnancy because the reproductive organs are fully formed. Pregnant women who are of sufficient age also have the mental readiness to take care of their pregnancy carefully [10].

According to Tobing (2007) pregnancy at the age of fewer than 20 years can cause problems, because the physical condition is not 100% ready. The age that is considered the safest to undergo pregnancy and childbirth is 20-35 years. In this age range, women's physical condition is in prime condition. Meanwhile, after the age of 35 years, some women are classified as having a high-risk pregnancy for congenital abnormalities and the presence of complications at the time of delivery. At this age, maternal and infant mortality rates increase, so it will increase anxiety [4]. The results of this study are in line with research conducted by Astria (2009) which states that there is a significant relationship between age and anxiety of pregnant women.

In Table 4. It shows that there is no relationship between maternal education and anxiety levels with the results of the chi-square test of 0.005 with an OR value of 2.552 (0.30-0.75). A person's level of education is influential in responding to something that comes both from within and from outside. People who have higher education will give a more rational response than those who are less educated or those who are not educated. Anxiety is a learned response [10]. Lack of information from various media such as magazines and so on, about pregnancy, either from close people or family. Education helps pregnant women and their families control sources of stress and helps to choose adaptive coping[11].

According to Notoatmodjo (2003), education is a basic human need that is needed for self-development and increasing one's intellectual maturity. This intellectual maturity affects a person's insight and thinking, both in visible actions and in the way decisions are made. The level of education is also one of the factors that influence a person's perception of being more receptive to new technological ideas. The higher a person's education, the higher the quality of his knowledge and the more mature intellectually.

They tend to pay more attention to the health of themselves and their families [6]. The same thing was also expressed by Purwatmoko (2001), where the higher a person's education level, the greater the opportunity to seek treatment from health services. Conversely, low education will cause a person to experience stress, where stress and anxiety occur due to the lack of information obtained by that person[4].

In Table 5. There is no relationship between work status and anxiety levels of primigravida pregnant women before delivery with chi-square test results of 0.780. Activities or light exercise that pregnant women do will help maintain pregnancy. Pregnant women who do light activities have been shown to reduce the risk of premature birth. The experience and information that a person has will add informal information. This can be obtained when someone interacts when someone is working or during social interactions [7].

In this study, there was no relationship between work status and maternal anxiety according to a field survey, this could be caused by other factors, such as age and parity so that the level of working and non-working mothers would not significantly affect the anxiety of primigravida mothers before delivery.

In Table 6. There is a significant relationship between economic status and anxiety levels of primigravida pregnant women before delivery with the chi-square test results of 0.003 and the OR value of the 95% confidence level, the results are 1.552 (0.56-3.75). Good socio-economic conditions can guarantee the physical and psychological health of pregnant women which can prevent anxiety in dealing with pregnancy because they are better able to have access to health services, as well as sufficient income, will be better in a relatively open selection process to prevent anxiety in pregnant women [12].

For primigravida mothers, the pregnancy they experienced was the first time, so the third trimester was felt to be more and more anxious because it was getting closer to the delivery process. Mothers will tend to feel anxious about their pregnancy, feel anxious, and afraid to face childbirth, considering that ignorance is a contributing factor to the occurrence of anxiety. Meanwhile, mothers who have been pregnant before (multigravida), may have anxiety related to past experiences that they have experienced [4]

Pregnant women who do not work with low economic status have heavier demands than mothers who have a high economy. Economically disadvantaged pregnant women are likely to be more stressed because they have greater demands on the needs of the mother and baby in the future, which will require money to give birth and raise their child. One form of mental unpreparedness that appears when mothers face childbirth is maternal anxiety. Therefore, a health worker or practitioner has an important role in

providing optimal services to mothers by facilitating mothers to use health insurance, BPJS, or other government assistance programs to reduce maternal delivery costs.

In Table 7. There is no relationship between environmental status and anxiety levels of primigravida pregnant women before delivery with a chi-square test result of 0.451. Environmental factors include moral support from the closest people. Moral support from family or husband can cause a sense of pleasure and tension in the wife so that it can affect the mother's anxiety. Husbands or close people can provide physical and moral encouragement for mothers who give birth so that mothers will feel more at ease [2].

In multigravida mothers, it is also natural to experience anxiety, where anxiety is anxiety about the shadow of the pain she suffered during childbirth. Especially for mothers who have experienced high-risk pregnancies, their anxiety levels will also increase. Where this pregnancy has a high risk both during pregnancy and during the delivery process [9].

4. Conclusion

Mild anxiety level is 60.0%, moderate anxiety is 40.0%. There is a significant relationship between age (p = 0.001), education p = 0.005, and economic status (p = 0.003) with the anxiety level of primigravida pregnant women in the third trimester before delivery in PMB NY. U, Cianjur District. Pregnant women are expected to routinely carry out prenatal check-ups at health facilities, to help mothers obtain information related to their pregnancy, so that mothers can control the anxiety that arises during their pregnancy. Pregnant women under the age of 20 years and above 35 years can maintain their physical and emotional during pregnancy because that age is a high-risk age that can cause abnormalities and disorders in the fetus so that it can cause anxiety in pregnant women themselves. It is also hoped that pregnant women will get sufficient material support from family members to provide emotional benefits. Self and family readiness as well as maternal health and economic ability are the things that must be considered to reduce anxiety.

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