



## The Relationship between Parity and Anxiety Levels of Pregnant Women in the Third Trimester

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### Abstract

Anxiety during pregnancy can lead to an increased risk for pregnancy outcomes such as uterine inertia, prolonged labor, and post-labor hemorrhage. Many studies highlighted the factors associated with anxiety including maternal age, maternal education level, and parity. This study explores the relationship between parity and maternal anxiety during pregnancy during the third trimester in the Primary Health Care Center of Jetis, Yogyakarta. Methods cross-sectional approach has been used in this study. The independent variable was parity, while the dependent variable was the anxiety level. The population was mothers in the third trimester who visited the Jets Health Center to have routine antenatal care. Out of 77 samples were drawn from about 344 pregnant women who met the inclusion criteria as this sampling using a purposive sampling technique. Chi-square was applied to analyze the data using SPSS. Result for the p-value was  $.009 < .05$  showing a significant relationship between parity and maternal anxiety in the late stage of pregnancy. Conclusion there is a significant relationship between two variables which are maternal anxiety and parity among expectant mothers at the Jetis Health Center of Yogyakarta. Therefore, We provided some suggestions on an individual basis.

### Keywords

anxiety; pregnancy; parity

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## Introduction

Anxiety is a natural emotional disorder (affective) which is characterized by feelings of fear or worry that are deep and continuous, do not experience disturbances in assessing reality (Reality Testing Ability/RTA, still good), personality is still intact (does not experience personality cracks/splitting of personality), behavior may be disturbed but still within normal limits (Hawari, 2011).

Anxiety in pregnancy is an emotional state that is similar to anxiety in general, but this occurs in pregnant women which is related to the welfare of the baby, the birth process and experiences in caring for the pregnancy and changes in the role of being a parent. (Dunkel, 2011).

Anxiety can trigger bodily responses, both physical and psychological, in pregnant women. The physical response to anxiety causes an increase in the sympathetic nervous system (Budi Setyawan, 2017). The endocrine system, which consists of glands such as the adrenal glands, thyroid and pituitary glands (the control center for the glands), releases their respective hormones into the bloodstream. (Setiawati et al., 2022). As a result, the autonomic nervous system activates the adrenal glands, which function to provide energy to the mother and prepare her physically and psychologically (Horhoruw et al., 2018). The presence of adrenaline and non-adrenaline hormones causes dysregulation of the body's biochemistry, resulting in physical tension in pregnant women (Siregar et al., 2021). The impact of this process will arise psychological changes in pregnant women, namely becoming anxious, irritable, unable to concentrate, doubtful, and even the desire to run away from the realities of life. (Yuliani & Aini, 2020). Ultimately, this condition causes further anxiety and tension, forming a feedback cycle that can increase overall emotional intensity (Siregar et al., 2021).

High stress and disturbed mood during pregnancy can result in babies with LBW

(low birth weight), preterm birth, chromosomal birth, spontaneous abortion, low APGAR score, neuro endocrine dysregulation. (Notoatmodjo, 2018). Meanwhile, the impact on the mother can occur hyperemesis gravidarum, heart problems, hypertension, pre-eclampsia and eclampsia (Hasdianah Hasan Rohan, 2013). Other impacts on the mother include prolonged labor, uterine inertia, postpartum hemorrhage, in babies there can be death at birth, hyperactivity, mental decline (Wikjnsastro, 2006). Apart from that, an unsupportive psychological atmosphere can make childbirth difficult. Mothers who are in a state of excessive anxiety, worry and fear for no reason, which ultimately leads to stress (Yona Desni Sagita, 2018). This stressful condition causes the muscles to tighten, especially the muscles in the birth canal which also become stiff and hard, making it difficult to expand. Besides that, unstable emotions will only make the mother feel more severe pain (Laili, 2010).

## Methods

This research is a quantitative research with a cross-sectional time approach. Data analysis used the Chi Square statistical test with computerized SPSS. The population was third trimester pregnant women who underwent Antenatal care (ANC) at the Jetis Health Center, Yogyakarta City in 2015, with a total of 344 people with a sample size of 77 respondents. The sampling technique used in this research was purposive sampling.

## Results and Discussion

The characteristics of respondents observed in this study were based on their level of anxiety. The results of research on the level of maternal anxiety in facing childbirth in third trimester pregnant women at the Jetis Health Center, Yogyakarta City showed that 42 respondents experienced mild anxiety (54.5%), 31 respondents experienced moderate anxiety (40.3%) and There were 4

respondents who experienced severe anxiety (5.2%). The number of respondents who experienced moderate and severe anxiety generally occurred among primigravida respondents. This was caused by the respondent's experience of a first pregnancy that had never been experienced before, so that the respondents became anxious because they did not know what to prepare for.

According to (Bobak, 2007) Generally, during pregnancy, mothers experience psychological changes consisting of 3 phases (Herlina et al., 2022). The first phase, namely at the beginning of pregnancy, the center of the mother's mind focuses on herself and the reality of pregnancy, most mothers think that the fetus is not real during the early period of pregnancy. In the second phase the mother accepts the growing fetus as something separate from herself and as a person who needs to be cared for. In the third phase the mother begins to prepare herself to give birth and raise her child. Feelings of anxiety often occur during pregnancy, especially in mentally unstable mothers who will reach their climax during childbirth. Anxiety can arise due to concerns about a safe birth process for herself and her baby as well as pain during the birth process. Several studies have proven that women who experience anxiety during pregnancy are more likely to experience abnormal labor (Kasmiati, 2023).

There are 2 ways a person's psychological response in dealing with anxiety, namely coping mechanisms and adaptation. According to experts, coping is the process an individual goes through in resolving a stressful situation. Coping is an individual's response to situations that threaten him, both physically and psychologically. Every time there is a stressor that causes an individual to experience anxiety, efforts automatically appear to overcome it with various coping mechanisms. Meanwhile, adaptation is adjusting to new needs or demands; namely a way to find balance to return to a normal state (Rasman, 2006).

In pregnant women, the third trimester is often called a period of vigilant waiting.

A number of fears arise in the third trimester. Women may feel anxious about the baby's life and their own life, such as: whether the baby will be born abnormally, related to labor and birth (pain, loss of control, and other unknowns), whether she will realize that she is in labor, or her baby. unable to get out, or whether his vital organs would be injured (Isnaini et al., 2020).

According to Sari (2006), in her research, factors that can cause anxiety in the first pregnancy include fear of her own thoughts or the pregnant woman's feelings about pregnancy and herself during pregnancy, personality type, environment and education. (Oktapianti & Triyanti, 2021).

The results of this study are supported by research (Zamriati et al., 2013) which shows that pregnant mothers generally experience anxiety, where 26% of mothers experience mild anxiety, 62% moderate anxiety and 12% severe anxiety. (Litsmanasari & Warsiti, 2013).

The results of this study showed that 31 respondents (40.3%) had characteristics of multigravida parity, who experienced mild anxiety, 13 respondents (16.9%) who experienced moderate anxiety, and 1 respondent (1.3%) who experienced severe anxiety. Furthermore, among respondents of primigravida parity, there were 11 respondents (14.3%) who experienced mild anxiety, 18 respondents (23.4%) who experienced moderate anxiety and there were 3 respondents (3.9%) who experienced severe anxiety. The results of the cross tabulation in table 1, the majority of pregnant women experienced mild anxiety in the multigravida group, 31 people or 40.3%, while 18 people experienced moderate anxiety, 23.4% in the primigravida group. Only one person was detected as experiencing severe anxiety in this study, namely a respondent in the multigravida group, and as many as 3 people or 3.9% in the primigravida group. The results of this research are supported by research conducted by (Shodiqoh & Syahrul, 2014) which shows a significant level of difference between the anxiety faced by pregnant women in primigravidas

Table 1. Cross Tabulation of the Relationship between Maternal Anxiety Levels in Facing Childbirth in Pregnant Women

Mother's Anxiety							
Parity	Mild Anxiety		Moderate Anxiety		Severe Anxiety		P value
	n	%	n	%	n	%	
Multigravida	31	(40.3%)	13	(16.9%)	1	(1.3%)	0.009
Primigravida	11	(14.3%)	18	(23.4%)	3	(3.9%)	
Amount	42	(54.5%)	31	(40.3%)	4	(5.2%)	

and multigravidas(Permatasari, 2020). Other studies also show the same results, there are differences in anxiety levels between primigravida and multigravida mothers(Güler et al., 2019). In this study, the researchers invited 60 primigravida pregnant women and 65 multigravida pregnant women. Maternal anxiety was measured using the State and Trait Anxiety questionnaire which was distributed to pregnant women with a gestational age of more than 37 weeks.

Based on table 2, it can be seen that the chi square test results produce a significant value (p) of 0.349. A p value of less than 0.05 identifies that there is a significant relationship between the two variables.

The research results show that the chi square correlation test results produce a significant value (p) of 0.009. A p value of less than 0.05 identifies that there is a significant relationship between parity and the level of maternal anxiety in facing childbirth in third trimester pregnant women at the Jetis Health Center, Yogyakarta City. This is indicated by the p-value = 0.009.

Table 2. Relationship between Parity and anxiety of pregnant women

Value	Significance	Information
0.009	0.349	There is a Relationship

### Conclusion

Based on the results of the research and discussion previously presented, it can be concluded that the majority of respon-

dents experienced moderate anxiety and only one person was detected as experiencing severe anxiety. There is a very close relationship between maternal parity or number of births and anxiety levels. Therefore, researchers provide suggestions to several parties. Jetis health center midwives, to be able to carry out initial screening regarding the mother's mental well-being, especially regarding anxiety in the third trimester of pregnancy and collaborate with a psychologist if necessary. To policy makers at the Jatis II community health center to implement a fixed protocol for ANC examinations so that routine screening can be carried out on pregnant women in the third trimester regarding anxiety levels. For future researchers, they should explore more deeply other factors that contribute to anxiety and conduct experiments to reduce anxiety levels in pregnant women in the third trimester. Apart from that, it is necessary to develop experiments or interventions to overcome or reduce the level of anxiety in third trimester pregnant women. For Aisyiyah University, Yogyakarta, it can be used as an additional reference.

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