### AGE AND ANXIETY AMONG PRIMIGRAVIDA PREGNANT WOMEN IN NGANJUK, EAST JAVA

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#### ABSTRACT

**Background:** Pregnancy is a natural experience faced by every woman who with healthy reproductive organs. During pregnancy, the mother experiences significant changes in physiological and psychological functions. The process of adjusting to this new situation often creates anxiety. Pregnancy can be a source of stressor anxiety, especially in primgravida mothers. The level of anxiety of pregnant women increases before the delivery process. This study aimed to determine the relationship between age and anxiety level in third trimester primigravida pregnant women.

**Subjects and Method:** This was a cross-sectional study conducted in July - August 2020 at Community Health Center in Jatikalen, Nganjuk Regency. A total of 32 primigravida women with gestational age  $\geq$  32 weeks were enrolled in this study. The independent variable in this study was age. The dependent variable was the anxiety level. The data were collected using questionnaire and analyzed using the Spearman Rank test.

**Results:** A total of 6 primigravida women aged <20 years experienced mild anxiety (76.92%) and 20 primigravida women aged aged 20-35 years experienced moderate anxiety. There was a relationship between age and anxiety level in third trimester primigravida women (p= 0.002).

Conclusion: Age is associate with anxiety level among third trimester primigravida women.

Keywords: age, anxiety level, third trimester primigravida, pregnant women

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### Background

Pregnancy is one of the key events in the life of women where during pregnancy mothers experience changes physically, psychologically and socially. These changes cause mood disorders in the mother during pregnancy (Nicholson et al., 2006; Bussel et al., 2009).

About 10% -15% of pregnant women experience stress or anxiety before childbirth. Anxiety is an indicative reaction to danger that alerts people "from within" – instinctively - there is danger and the person concerned may lose control in the situation. The cause of anxiety is a feeling of guilt as a result of an action that someone does by producing something unexpected, besides that the fear of something happening to oneself causes a person to become anxious (Sondakh, 2013). It is feared that anxiety during pregnancy has an impact on the health conditions of the mother and fetus (Schetter and Tanner, 2012; Askarizadeh et al., 2017).

Age, parenting style, body image, selfesteem, socioeconomic status, social support, concern about fetal health, fear of miscarriage, and fear of childbirth and labor pain are some of the factors that influence anxiety (Nicholson et al., 2006; Bussel et al., 2009; Kalayil et al., 2015). Stduy reports that high levels of anxiety in pregnancy can be detrimental to the health of the mother and fetus so it needs to be handled within the scope of prenatal care (Schetter and Tanner, 2012; Glover, 2014; Bayrampour et al., 2016; Huizink et al., 2016; Bann et al., 2016; Koelewijn et al., 2017; Askarizadeh et al., 2017). Anxiety in pregnancy can result in low birth weight, low Apgar Score, preterm labor, prolonged

The 7th International Conference on Public Health Solo, Indonesia, November 18-19, 2020 | 226 https://doi.org/10.26911/the7thicph-FP.03.39 labor and increased use of analgesics (Bussel et al., 2009; Koelewijn et al., 2017). Anxiety experienced especially in the prenatal period can persist in the postnatal period and cause postpartum depression and post-partum stress disorder in mothers (Bann et al., 2016; Koelewijn et al., 2017). Early diagnosis, prevention and management of anxiety during pregnancy will support midwives' efforts to deal with anxiety in pregnant women before delivery (Askarizadeh et al., 2017).

The causes of pregnancy-related anxiety differ between regions according to individual and cultural characteristics. However, pregnancy-related anxiety is a universally recognized phenomenon for all pregnant women worldwide (Askarizadeh et al., 2017). One of the factors that influence anxiety in pregnant women is the age of the pregnant women. A study states that maternal age <20 years and  $\geq$  35 will have an impact on feelings of fear and anxiety before childbirth. Because if the mother is pregnant at that age, her pregnancy is included in the high-risk pregnancy category and a mother who is more advanced will have high potential to give birth to a birth defect (Handayani, 2015).

The age that is considered the safest for pregnancy and childbirth is between 20-35 years. In this age range, the physical condition of women is in prime condition. The uterus has been able to provide protection, mentally it is ready to care for and maintain the pregnancy carefully. Pregnancy at the age of less than 20 years can cause problems, because the physical condition is not 100% ready. Some of the risks that can occur in pregnancy at this age are the tendency to increase blood pressure and stunted fetal growth. Meanwhile, after the age of 35 years, some women are classified as having high risk of congenital abnormalities and complications at the time of delivery. With the complications and complications that may occur in pregnancies <20 years and> 35 years, it can affect the psychology of pregnant women before delivery at that age. One of them can cause anxiety and stress in dealing with pregnancy (Pasaribu, 2014). With the above background, it is necessary to conduct study on age and anxiety in pregnant women. The purpose of this study was to determine the relationship between age and anxiety level among third trimester primigravida pregnant women.

### SUBJECTS AND METHOD

# 1. Study Design

Center in Jatikalen, Nganjuk Regency. A total of 32 primigravida women with gestational age ≥32 weeks were enrolled in this study.

# 2. Population and Sample

The population of this study was primigravida pregnant women with gestational age ≥32 weeks. The number of samples in this study were 32 study subjects. The sampling technique used was simple random sampling.

### 3. Study Variables

The independent variable in this study was age and the dependent variable was the anxiety level.

# 4. Study Instruments

The study instrument was questionnaire. The data were collected in the form of primary data, namely age and level of anxiety with an ordinal data scale.

### 5. Data Analysis

The data were analyzed using Spearman Rank test.

### RESULTS

# 1. Characteristics of Study Subjects

Characteristics of study subjects were presented in Table 1.

The 7th International Conference on Public Health Solo, Indonesia, November 18-19, 2020 | 227 https://doi.org/10.26911/the7thicph-FP.03.39 Table 1. Characteristics of Study subjects

Characteristics n %		
	n	%
Level of Education		
College	4	12:50
of Secondary Education	10%	31.25%
Basic Education	18	56.25%
Work		
Housewife	20	62.50%
Farmer	2	6:25
Private	8%	25%
Civil servant	2	6.25%
Age		
<20 years	6	18.75%
20-35 years	26	81.25%
> 35 years	0	0%
Anxiety Level		
Not Anxious	3	9.38%
Mild Anxious	8	25%
Moderate Anxiety	21	65.62%
Severe Anxiety	0	0

## 2. Results

The results showed half (50%) of study subjects aged <20 years experienced mild anxiety, as many as 6 study subjects, almost all (76.92%) aged 20-35 years experienced moderate anxiety, namely as many as 20 study subjects. Data on age and anxiety level in third trimester primigravida pregnant women.

Based on the results of statistical tests using the correlation test Spearman Rank (Rho) on the variable age (X) and anxiety level (Y), the value of  $\rho$  value = 0.002 with a confidence level of  $\alpha$  = 0.05 can be concluded that  $\rho < \alpha$  then H<sub>0</sub> is rejected and H<sub>1</sub> accepted means that there is a relationship between age and anxiety level in third trimester primigravida pregnant women.

The strength of correlation is stated by the correlation coefficient of 0.52 which means the level of the relationship between ages with the level of anxiety in the third trimester primigravida pregnant women in a rather low category with a positive relationship direction (+) means that the older the age, the higher the anxiety level of the third trimester primigravida pregnant women in facing childbirth. The results are presented in table 6 below.

Table 2. Spearman correlation test results

Variable	Age Correlation Coefficient	р
Anxiety level	0.52	0.002

Discussion

Based on the results of the study showed that almost all study subjects (81.25%) were aged

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20-35 years. Age has an important influence on the health behavior of pregnant women, especially in the third trimester of pregnant women. This is in accordance with the theory put forward by Handayani (2015), that a person's ability to respond to anxiety, one of which can be influenced by age. A good coping mechanism is more widely applied by someone with a mature age and mindset compared to younger age groups. If the woman is pregnant during the reproductive period, it is less likely to experience complications than women who are pregnant under or above the reproductive age. Anxiety in pregnancy can be related to the mother's age which has an impact on feelings of fear and anxiety, namely under the age of <20 years because the physical condition is not 100% ready and over> 35 years of age have a higher risk of experiencing obstetric complications as well as perinatal morbidity and mortality. The safe ages for pregnancy and childbirth are> 20 years and <35 years. In this age range, a woman's physical condition is in prime condition, her uterus has been able to provide protection, she is mentally ready to care for and maintain her pregnancy carefully.

Based on the results of statistical tests using the correlation test, the Spearman Rank (Rho) results obtained  $p < \alpha$  so that it can be concluded that there is a relationship between age and anxiety level in third trimester primigravida pregnant women. Anxiety during pregnancy varies from woman to woman. The level of stress experienced by pregnant women will affect their pregnancy. The results of this study are consistent with study conducted in England and Sweden. A cross-sectional descriptive survey conducted on 650 third trimester pregnant women aged 17-46 years revealed that 25% of anxiety before delivery in each mother is different and one of the factors that influence it is age (Hall et al., 2012).

Henderson and Maggie (2013) reported 14% prevalence of antenatal anxiety from 5,332 samples in a maternity clinic in the UK experienced by young pregnant women. This indicates that the age of pregnant women who are too young is a risk factor for anxiety during pregnancy (Henderson and Redshaw, 2013).

A population-based community study conducted in Sweden on 916 pregnant women found that 15.6% of pregnant women under the age of 25 experienced anxiety (Rubertsson et al., 2014). Another study conducted in the US with a sample size of 311 pregnant women by investigating their sociodemographic to determine predictors of pregnancy anxiety also showed similar results. It was found that a younger age, nulliparous status can increase anxiety in pregnancy (Arch, 2013).

Study conducted by Madhavanprabakaran (2015) also shows that nullipara, young age and family support are risk factors that influence the high anxiety in pregnancy (Kalayil et al., 2015). Other studies also show similar results that there is a relationship between age, parity, education, and family support and anxiety in third trimester pregnant women (Rinata, 2018). Age 20-35 years is the age that is considered safe for pregnancy and childbirth. Because at the age of <20 years, the physical conditions, especially the reproductive organs and psychological, are not 100% ready for pregnancy and childbirth. Meanwhile, pregnancy at the age of> 35 years is a condition that is categorized as having a high risk of congenital abnormalities and complications during pregnancy and childbirth (Sulistyawati, 2011). From the results of this study, it can be concluded that there is a relationship between age and third trimester anxiety of primigravida pregnant women at Community Health Center of Jatikalen, Nganjuk Regency. The recommended suggestion, namely the need for antenatal

The 7th International Conference on Public Health Solo, Indonesia, November 18-19, 2020 | 229 https://doi.org/10.26911/the7thicph-FP.03.39 examinations to identify any anxiety in pregnancy, can be used as part of routine examinations. In addition, the provision of structured childbirth education for pregnant women as part of routine antenatal care so that pregnant women will get information about pregnancy and childbirth, which can reduce the anxiety they experience before childbirth. Suggestions for future researcher are expected to investigate other factors that influence anxiety in pregnant women.

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