



PROCEEDING  
**CHALLENGES, STRATEGY AND HEALTH TREATMENT APPROACH  
TO NUTRITION AND MOLECULAR GENETICS**



**STIKES SU**  
Sekolah Tinggi Ilmu Kesehatan Sumatera Utara



**INTERNATIONAL SEMINAR**

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# THE INFLUENCE OF ANTENATAL CLASS TOWARDS III<sup>RD</sup> TRIMESTER PRIMIGRAVIDA MOTHERS' LEVEL OF ANXIETY IN FACING CHILD BIRTH

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## ABSTRACT

**Background:** Anxiety is most experienced by primigravida mothers in III<sup>rd</sup> trimester. This could possibly be the cause of obstetrics complication which happens when the hormone (adrenalin dan noradrenalin) were release due to anxiety. The complication can be in form as pre-eclampsia, eclampsia, hypertension risk during pregnancy, premature birth, miscarriage. It can also be the reason of time taking-child birth in phase II. This complication such an antenatal treatment as antenatal class can facilitate the needs of service during pregnancy. This research's purpose is to figure out III<sup>rd</sup> trimester primigravida mothers' level of differences in facing child birth before and after taking the antenatal class.

**Method:** This research is a quantitative research with pre-experiment design and only group posttest plan. It takes 15 people as a sample and uses questionnaire and observation sheet to collect data. The sample was taken by using simpel random sampling. Data collection was taken in Government Clinic on Merdeka Street-Palembang during November 20<sup>th</sup> to December 3<sup>rd</sup> 2013.

**Result:** The result shows the following characteristic of respondents: the greatest number of age range <20 and >30 years are 9 respondents (60%), unemployed mothers are 11 respondents (73.3%), mothers with adequate income are 8 respondents (53.3%), and moderate-educated mothers are 11 respondents (66.7%). Statistic proves that there is a significant influence between III<sup>rd</sup> trimester primigravida mothers who participate in antenatal class and who do not in terms of anxiety level when facing child birth in Merdeka Local Government Clinic in Palembang ( $p$  value=0,000;  $\leq 0,05$ ).

**Conclusion:** Based on the research, the Antenatal class is expected to be implemented as antenatal services during pregnancy. Furthermore, the research is also expected to be able to conduct analysis towards other factors that can influence mothers' anxiety level during pregnancy.

Keywords : Primigravida Mothers, III<sup>rd</sup> Trimester, Antenatal Class, Anxiety

## INTRODUCTION

Maternal and perinatal death remains a major problem in developing countries with a mortality rate of approximately 98-99 %.<sup>8</sup> The number of maternal deaths in Indonesia itself is still relatively high among other ASEAN countries which is 223 per 100,000 live births, while the number of deaths in South Sumatra has increased compared to previous years, as many as 11 deaths from 29, 305 in 2012 to 13 maternal deaths from 29, 415 in 2013.<sup>1,5</sup> the mortality rate can be caused by obstetric complications and were aggregated by psychological state during pregnancy such as feelings of worry and anxiety.<sup>4</sup>

Pregnancy will cause numerous changes in the body due to hormone secretion by placenta. It

can trigger changes that require adaptation in every pregnancy, especially first pregnancy not only physical changes but also psychological changes may disrupt and influence. The newly future mothers are sometimes are difficult to overcome by the mothers alone. This may be the explanation why primigravida possess higher level of anxiety compared to multigravida. Another reason in that primigravida may be easier to fear for child birth process due to myths and awful stories developed in society. This is in accordance with the research conducted by Utami and Lestari that stated that the anxiety level in primigravida is higher than that of multigravida..

In the third trimester, the majority of pregnant women will experience severe anxiety due to

the labor? Anxiety can affect the psychological and physical well-being of the pregnant woman. In the third trimester, high levels of anxiety can lead to complications such as pre-eclampsia, colic, and the risk of hypertension in pregnancy and risk of preterm birth even miscarriage. Severe anxiety can also cause prolonged second stage of labor.

Classes are attempted to help the mothers to overcome this problem, then nurses have an important role in this case. Nurses must be able to recognize the symptoms of anxiety and provide correct information to the pregnant woman. Hence, antenatal class is an effective way to address this problem. Through antenatal class, mothers may increase knowledge and may even able to control their personal feelings or problems.

Based on the results of preliminary studies on the First Health Center Palembang from interviews with midwives at health centers it was known that there are already antenatal classes but only once or twice a year. The midwife also stated that many pregnant women complain of difficulty sleeping because of worrying about labor process. It is also supported by the results of interviews conducted with 3 and 2 primigravida mother multigravida, which indicates that the primigravida showed more severe anxiety symptoms compared to multigravida mother. Based on this background the researcher is interested in studying about how Effect of Antenatal classes influences the level of anxiety in the third trimester primigravida Facing Labor at Merdeka Health Center Palembang.

**MATERIALS AND METHOD**

This research is a quantitative study using the methods of experimental research with pre-experimental research design; group pretest - posttest only. The goal is to determine the differences in levels of anxiety in the third trimester primigravida face of labor before and after attending classes at the health center antenatal Merdeka Palembang. The sample in this study amounted to 15 respondents and the sampling technique is simple random sampling, which is done by the way of lottery. In order to prevent data deviation, we determine the inclusion and exclusion criteria.

Research respondents are those who are primigravida, are age 17-40, 1st trimester pregnancy for not having complications and chronic, and they stopped classes after experience pain in labor process. The total number of attending the class at the time of a questionnaire distribution (during 2nd trimester) 15 (100%). Lottery used in determining the final list with representative level of 0.05.

**RESULT**

- 1. Characteristics Analysis
- 1.1 Characteristics of Respondents
- A. Reproductive Age

Table 1.1  
Primigravida Frequency Distribution by Reproductive Trimester III  
n = 15

Reproductive Age	Frequency	Percentage
Healthy	6	40%
reproductive age		
Reproductive age is not healthy	9	60%
Total	15	100%

**B. Jobs**

Table 1.2  
Frequency distribution of the third trimester primigravida Based Jobs  
n = 15

Jobs	Frequency	Percentage
Does not work	11	73.3%
Work	4	26.7%
Total	15	100%

**C. Income**

Table 1.3  
Frequency distribution of the third trimester primigravida Based Income  
n = 15

Income	Frequency	Percentage
Less	7	46.7%
Enough	8	53.3%
Total	15	100%

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**D. Education** **Table 1.4**  
Frequency distribution of the third trimester primigravida by Education  
n = 15

Education	Frequency	Percentage
Sedang	10	66,7%
Tinggi	5	33,3%
<b>Total</b>	<b>15</b>	<b>100%</b>

**D. Anxiety levels primigravida IIIrd Trimester Before Following Antenatal Classes**

**Table 1.5**  
Frequency Distribution Anxiety Level Results primigravida in the third trimester Cast Confronting Before Childbirth Antenatal Classes

Anxiety level Before Antenatal Classes	Frequency	Percentage
mild anxiety	8	53,3%
Moderate anxiety	5	33,3%
severe anxiety	2	13,3%
<b>Total</b>	<b>15</b>	<b>100%</b>

**E. The anxiety level of the third trimester primigravida After Following Antenatal Classes**

**Tabel 1.6**  
Results Frequency Distribution Level IIIrd trimester primigravida Anxiety in the Face of Delivery After Antenatal Class

Anxiety level Before Antenatal Classes	Frequency	Percentage
not to worry	12	80%
mild anxiety	2	13,3%
Moderate Anxiety	1	6,7%
<b>Total</b>	<b>15</b>	<b>100%</b>

**F. Bivariate analysis**

**Table 1.7**  
Differences Anxiety Level III trimester primigravida in the Face Before Following Childbirth Antenatal and Postnatal Classes Following Antenatal Classes

Anxiety level Before Antenatal Classes	Anxiety level After Antenatal Classes			Total P Value
	not Anxious	mild anxiety	Moderate anxiety	
mild anxiety	8	0	0	8 0,000
Moderate anxiety	4	1	0	
severe anxiety	0	1	1	
<b>Total</b>	<b>12</b>	<b>2</b>	<b>1</b>	

**1. Characteristics of Respondents**

**A. Reproductive Age**

The results showed that the majority of pregnant women who were not in reproductive age were 6 people (40%) to severe. In the other hand, the reproductive age showed only mild level. It is thought that women who experience pregnancy, thus increasing stress level. Meanwhile women who 35 years of age may have increased level due to their own health. Pregnant women who are above 35 age are more likely to develop problems, such as miscarriage, section or delivering babies with chromosomal abnormalities. These may increase their anxiety level.<sup>6</sup>

**B. Occupations.**

The results showed that the majority respondents with no occupation were found in 11 people (73.3%). The anxiety level in this group varied from moderate to severe. While in the other hand, mothers who are on occupation showed only mild level anxiety. This may be explained by the fact that those respondents with no occupation to be more focused on fears and worries give birth compared to those who still involved in certain job.<sup>4</sup>

**C. Income**

The results showed that the level of anxiety respondents with less earning (46.7%) ranged from moderate to severe while the remaining 53.3% respondents with sufficient income only showed mild to moderate anxiety level. This may be due to the fact that pregnancy and child bearing require proper preparation and cost a lot of money which in turn causes worry and anxiety for those who earn less.

**D. Education**

The results showed that the majority respondents had completed medium/secondary level of education (66.7%). Less educated respondents experienced more severe anxiety level compared to highly educated one. This may be explained by the fact that the level of education influences the way of thinking

self development and both in taking action or decision.<sup>15</sup> Lower level of education will cause individual to experience more stress due to the lack of information.<sup>2</sup>

#### **E. Level III trimester primigravida Anxiety in the Face Before Following Childbirth Antenatal Classes**

Pre-test showed that out of 14 symptoms frequently complained by respondents, 60% is anxiety and feeling of depression and 53.3% complained of depressed mood. This may be due to the condition of the respondents who were all at first time experiencing pregnancy. In another hand, physical state changes and the fact that the mothers are tend to become more tired also contribute to increased level of anxiety.<sup>4</sup> Respondents also showed concerns over labor process and their fetus development.

Symptoms of too much complained of feeling depressed by the third trimester primigravida before attending antenatal classes as many as 53.3%. This is due to the physical state of the mother's third trimester to be getting tired ditambah with concerns over labor process that arise as a result of a complaint with the enlargement janin.<sup>3</sup> This situation results in feelings of mothers who become depression.<sup>13</sup> Pre-test results also showed slight symptoms complained of by primigravida is a somatic symptom / physical or sensory. This is because the symptoms of somatic / physical usually appear in anxiety levels and heavy weight, while the results of the study only 13.3% primigravida who experience severe anxiety and other than that there are no heavy anxiety levels, so that the sympathetic nervous system is not very active and not too showed symptoms sensorik.<sup>18,9</sup>

#### **F. The anxiety level of the third trimester primigravida in the Face After Following Childbirth Antenatal Classes**

Post -test showed that primigravida experienced not only symptom of anxiety but also depression. This is because the degree of anxiety also affects the degree of depression. More severe anxiety will result in more severe emotional changes as well.<sup>18</sup> In third trimester of pregnancy, mothers appear to feel more physical discomfort and tend to be more exhausted and dispirited. These lead to feelings of depression which can be reduced

even after attending antenatal classes.<sup>18,10</sup> After attending antenatal classes, respondents showed improvements on anxiety symptoms. Through antenatal classes, mothers were able to share their experience to fellow participants or health workers in addition to learn and get more knowledge. Both somatic/sensory symptoms also were decreased after participating in antenatal classes. We found that there is no single participant who experiences severe anxiety anymore after attending the classes. Somatic symptoms are not found anymore for it only appears to happen in severe anxiety.<sup>12,16</sup>

#### **G. Differences primigravida Anxiety Levels Before and After Antenatal Classes**

Results showed that there is a significant difference of anxiety level between those who participated in the classes and those who didn't. As mentioned before, through classes participants may also learn and get knowledge. This provision may improve the knowledge of pregnant women so that they can adapt to both physiological and psychological changes.<sup>17</sup> In case of participants who did not improve even after attending the classes, memory and cognitive limitation and lack of interest in learning may be able to explain that fact.<sup>16</sup>

#### **CONCLUSION**

1. Characteristics of the third trimester primigravida by age varied from 20-30 years of age as 6 people (40%), and were aged > 30 years were 9 people (60%). Third trimester primigravida job consists of primigravida who work as many as 4 people (26.7%) and that did not work as many as 11 people (73.3%). Family income level of income varies quite as much as 8 people (53.3%) and who earn less by 7 people (46.7%). Educational level primigravida third trimester consist of highly educated primigravida by 3 people (33.3%), and the educated were as many as 10 people (66.7%).
2. Levels of anxiety in the face of anxiety primigravida prior to attending the course consists of 8 persons (53.3%) experienced mild anxiety, 5 (33.3%) people experiencing moderate anxiety and 2 (13.3%) experienced severe anxiety.
3. Primigravida level of anxiety in the face of anxiety after following a course consist of 12 persons (80%) did not experience

anxiety, 2 ( 13.3 % ) experienced mild anxiety and 1 person ( 6.7 % ) experienced moderate anxiety .

4. There is a significant difference in the level of anxiety in the face of labor primigravida before and after attending antenatal classes at the health center with the Merdeka P value ( 0.000 ) .

### REKOMENDATION

It is expected for freedom health center to implement antenatal class as a routine program for it can reduce the risk of pregnant women from getting anxiety which is dangerous. It is also expected that this research will trigger many more future studies to investigate not only the effect of ANC but also the effect of pregnancy exercise on anxiety level and other factors that may also contribute to anxiety level using control group and wider sample.

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