



# The Importance of Autogenic Relaxation in Reducing Anxiety Levels for Pregnant Women

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## ABSTRACT

Abstract – Anxiety is one of the causes of prolonged labor and fetal death. Autogenic relaxation is a non-pharmacological method for treating anxiety in pregnant women. The purpose of this study was to determine the effect of autogenic relaxation techniques on cortisol levels in third trimester pregnant women. The research was conducted at Pembina Public Health Center in Palembang City with a total sample of 21 people with one group pretest and posttest design. The anxiety level measuring instrument used is HARS scale (Hamilton Anxiety Rating Scale). And measuring cortisol levels using a biomarker examination. And the statistical analysis used in this study is the Wilcoxon test. The results of statistical analysis showed that the mean cortisol level before the intervention was 1.434. And after the intervention was 1.367. And there are differences in the anxiety of pregnant women before and after autogenic therapy with  $p = 0.001$ . And there is no correlation between cortisol levels before and cortisol levels after autogenic relaxation  $p = 0.138$ .

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## 1. INTRODUCTION

During the pregnancy phase, pregnant women also have various kinds of pregnancy problems. One of these problems is a psychological problem or pregnancy psychology in the form of anxiety (Ira Kusumawaty; Yunike, 2021; Kusumawaty, Ira; Yunike; Hartati, 2021)

Anxiety is one of the causes of prolonged labor and fetal death. Long parturition contributes 5% to the causes of maternal death in Indonesia. The anxiety experienced by pregnant women can also be caused by the increase in the hormone progesterone. In addition to making pregnant women feel anxious, the increase in hormones also causes emotional disturbances and makes pregnant women tired quickly, resulting in antepartum bleeding. The hormone that increases during pregnancy is the hormone adrenaline. Adrenaline hormones can cause biochemical dysregulation in the body so that there is physical tension in pregnant women such as irritability, restlessness, inability to concentrate, doubts, and may even want to run away from the reality of life. 2

Handling of anxiety that occurs in primigravida mothers can be done with pharmacological and non-pharmacological therapy. So far, most of the anxiety management uses pharmacology. With pharmacology, of course, it has a bad impact if it is used continuously, one of which will trigger what is called dependence. Of course, non-pharmacological treatment is also needed, for example yoga therapy, meditation therapy, thai chi therapy, progressive muscle relaxation, one of which is autogenic relaxation.

Autogenic relaxation is a technique that comes from oneself in the form of words or short sentences that can make the mind peaceful. Autogenic relaxation is done by imagining yourself in a peaceful and calm state, focusing on regulating your breath and heart rate so as to reduce physiological tension in pregnant women.

Research conducted in Kotakulon, Bondowoso Regency, showed that the level of anxiety before the autogenic relaxation technique all 14 respondents (100%) experienced anxiety with the category of mild anxiety 10 people (71.4%) and the rest were moderate anxiety. After autogenic relaxation technique, 10 people (71.45%)

experienced mild anxiety and the rest did not experience anxiety. Based on data processing through SPSS 16, it was found that the p-value  $(0.01) < (0.05)$  which means  $H_0$  is rejected. Based on these data, it is known that there is a significant effect between autogenic relaxation techniques on anxiety levels in third trimester primigravida pregnant women.

## 2. RESEARCH METHOD

The design in this study is a one group pretest and posttest design. The dependent variable in this study was cortisol levels and anxiety levels in pregnant women and the independent variable was autogenic relaxation. Observations were carried out 2 times, namely before the experiment (O1) it was called the pretest and after the experiment (O2) it was called the posttest.

The study was conducted in October – November 2019 at Pembina Palembang Health Center with a sample of 21 primigravida pregnant women, third trimester, normal and uncomplicated pregnancies, mild and moderate levels of anxiety.

The anxiety level measuring instrument used is HARS scale (Hamilton Anxiety Rating) and assessing cortisol levels in pregnant women. Statistical analysis used in this study using the Wilcoxon test.

## 3. RESULTS AND ANALYSIS

Table 1. Characteristics of Respondents

Characteristics	n	%
<b>Mother's Education</b>		
- Elementary School	4	19
- Junior High School	5	23.8
- Senior High School	11	52.4
- College	1	4.8
<b>Mother's Age</b>		
- Old	2	9.5
- Young	19	90.5
<b>Mother's Work</b>		
- IRT	21	100
<b>Anxiety Before</b>		
- Light	13	61.9
- Currently	8	38.1
<b>Anxiety After</b>		
- There isn't any	6	28.6
- Light	14	66.7
- Currently	1	4.8

Based on table 1 above, it is known that the majority of maternal education is high school as many as 11 people (52.4%), young age is 19 people (90.5%), household work is 21 people (100%), maternal anxiety before intervention is mild as many as 13 people (61.9%), maternal anxiety after the intervention was mild as many as 14 people (66.7%).

Table 2. Results of Descriptive Analysis of Cortisol Levels

Variable	Mean	SD	Min	Max
Cortisol levels before	1.434	1,630	4,991	13,011
Cortisol levels after	1.367	1,536	3,573	66,132

Based on table 2 above, it is known that the average cortisol level before the intervention was 1.434. Meanwhile, the mean cortisol level after the intervention was 1.367.



Table 3. Differences in Anxiety of Pregnant Women Before and After Autogenic Therapy

		Anxiety after			Total	<i>p</i>
		There isn't any	Light	Currently		
Anxiety before	Light	5 38.5%	8 61.5%	0 0%	13 100%	0.001
	Currently	1 12.5%	6 75%	1 12.5%	8 100%	
	Amount	6 28.6%	14 66.7%	1 4.8%	21 100%	

Based on table 3, it is known that the majority of respondents had mild anxiety before the intervention, as many as 13 respondents and there were differences in the anxiety of pregnant women before and after autogenic therapy with  $p = 0.001$

Table 4. Cortisol levels before and after autogenic therapy

		Cortisol levels after	
Cortisol levels before	<i>r</i>	0.335	
	<i>p</i>	0.138*	
	<i>n</i>	21	

Table 4 shows that there is no correlation between cortisol levels before and cortisol levels after autogenic relaxation  $p = 0.138$ .

#### 4. DISCUSSION

In this study, autogenic relaxation was carried out for 20 minutes for 21 participants, the results were very significant in reducing the anxiety level of pregnant women in the third trimester ( $p$  value 0.001) where from 13 respondents who experienced mild anxiety after the autogenic relaxation intervention became less anxious as many as 5 respondents, and 8 respondents. who experienced moderate anxiety after autogenic relaxation decreased to mild anxiety as many as 6 respondents.

This study is in line with research by Marc, et al (2011) in an RCT of 133 pregnant women who stated that respondents who were trained in effective autogenic techniques by processing their bodies and minds could reduce women's anxiety before giving birth.<sup>6</sup>

This study states that autogenic relaxation is very significant in making the blood pressure of pregnant women who were previously low as many as 16 respondents to normal blood pressure as many as 12 people and their blood pressure remains low as many as 4 respondents ( $p$  value 0.002). This study is in line with Awad et al (2019) research on 40 pregnant women aged 20 weeks who had hypertension, there was a significant decrease in systolic blood pressure in both groups after autogenic relaxation ( $p$ value 0.166) wherethe relaxing effect in reducing blood pressure can be related to its effect in reducing the hypothalamic sympathetic response which is expected to lower blood pressure<sup>7</sup>

StudySaputri, F., D (2016. P. 55-56) conducted in Yogyakarta. Prior to relaxation, the results showed that the percentage of anxiety for primigravida mothers was 2.9% of respondents experiencing severe anxiety, 64% with moderate anxiety and 20.6 with mild anxiety. . The largest percentage experienced by third trimester mothers with moderate anxiety. After relaxation, the results showed that the percentage of anxiety for primigravida pregnant women in the third trimester was 2.95 respondents experienced severe anxiety, 26.5% experienced moderate anxiety, and 0.6% mild anxiety. The largest percentage experienced by primigravida pregnant women in the third trimester is moderate anxiety and there is a decrease in anxiety levels after relaxation. It is known that by using the Wilcoxon test, statistics are obtained with a  $p$ -value of 0.001  $p < 0$ ,

#### 5. CONCLUSION

From the results of the research conducted, it is known that there is no correlation between cortisol levels before and cortisol levels after autogenic relaxation.

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