# The Effectiveness of Prenatal Yoga in Reducing Anxiety in Third-Trimester Pregnant Women Facing Childbirth

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#### ABSTRACT

During pregnancy and before delivery, this fear often occurs in pregnant women. Anxiety is a feeling of worry, fear, or uncertainty, usually manifesting as an unclear emotional condition related to specific objects or situations. Among primigravida mothers, the incidence of anxiety is 66.2%, compared to 42.2% among multigravida mothers. Anxiety during pregnancy can negatively impact the growth and development of the fetus. Prenatal yoga can help pregnant women focus their minds, regulate their breathing techniques, and provide comfort, security, calm, and relaxation. This study aimed to determine the effectiveness of prenatal yoga in reducing anxiety among pregnant women facing childbirth. The research design employed a pre-experimental one-group pre-test and post-test design. Purposive sampling was used to select a sample of 32 third-trimester pregnant women who met the inclusion criteria of experiencing anxiety. Data was collected directly using the STAI questionnaire instrument. The research results were analyzed using the Wilcoxon test. The findings showed that all respondents experienced a decrease in their anxiety levels from moderate to mild after participating in prenatal yoga. The analysis yielded an Asymp.Sig. (2-tailed) value of 0.000 < 0.05, indicating a significant correlation between prenatal yoga and reduced anxiety in pregnant women facing labor. In conclusion, the study found that prenatal yoga can effectively reduce anxiety in pregnant women. Therefore, it is recommended that pregnant women routinely practice prenatal yoga to avoid stress during pregnancy.

## INTRODUCTION

Fear often occurs during pregnancy and before delivery, especially before delivery. Anxiety is a feeling of worry, such as feelings of fear or uncertainty, as well as unclear personal emotional conditions toward specific objects (Veftisia et al., 2020). A pregnant woman will experience hormonal fluctuations. Fluctuations in pregnancy hormones, including estrogen, progesterone, and prolactin hormone, are an adaptation in the body's metabolism in pregnant women who require good nutritional intake as well as body resilience and resilience in mental and psychosocial health. If the body's adaptation is hampered, it can cause a decrease in the immune system of pregnant women so that pregnant women are easily exposed to viruses (Laela & Wahyuni, 2021).

United Nations International Children's Emergency Fund (UNICEF) states that 30% of problems that occur in pregnant women are due to anxiety. Based on data from the Anxiety and Depression Associations of America (ADAA), it is stated that 52% of pregnant women report an increased level of anxiety during pregnancy (Yuanti et al., 2021).

Based on Indonesia's Health Profile in 2020, the coverage of services for pregnant women has decreased compared to 2019, namely from 88.54% to 84.6% (Kemenkes RI, 2020). The coverage of pregnant

women's services decreased in East Java, from 91.2% in 2019 to 90.9% in 2020 (Dinas Kesehatan Provinsi Jawa Timur., 2020). In Banyuwangi Regency, the coverage of services for pregnant women in 2020 has decreased from 2019 by 92.1% to 88.7% (Dinas Kesehatan Kabupaten Banyuwangi, 2019). Anxiety feelings are more experienced by first-time pregnant women or primigravidas, approximately 66.2% higher than the anxiety of multigravida pregnant women, as much as 42.2%. According to Zainiyah's research, 31.4% of pregnant women reported having severe anxiety, 12.9% of pregnant women reported having severe anxiety, and the other pregnant women reported having no anxiety (Zainiyah & Susanti, 2020).

Factors that can cause anxiety in pregnant women are age, social support, environment and situation, education, occupation, economic status, parity, physical condition, threats to self-integrity, and self-system threats. Anxiety felt by a mother who is pregnant until the 3rd trimester. If not treated properly, it will impact fetal growth and development, resulting in premature birth, low birth weight, long birth process, mental disorders, and motor movements in the baby. The impact of excessive anxiety on pregnant women is so significant that it affects the mother's and fetus' health, and it is necessary to have a plan to deal with stress in pregnant women (Dewi et al., 2019).

Prenatal yoga is one method pregnant women can use to combat their anxiety. Practicing prenatal yoga is a good solution for expectant mothers who experience anxiety. Prenatal yoga helps pregnant women focus on regulating breathing and feeling comfortable, safe, and calm while practicing yoga. Prenatal yoga is a combination of balance between the body, mind, and soul, and these three elements will help pregnant women physically flex their bodies because of the physical changes that occur in pregnant women and the discomfort felt by pregnant women's bodies and can help calm the mind. Prenatal yoga has five essential aspects: the first exercise of the body, breathing techniques (pranayama), body positions (mudra), and meditation techniques with deep relaxation. Prenatal yoga benefits pregnant women in several ways, including lowering stress, anxiety, and discomfort during pregnancy and easing labor pain (Wulandari et al., 2018).

#### **METHOD**

This kind of study used experimental methods and statistical tests to determine the effect of the independent variable (treatment/treatment) on the dependent variable (results) with conditions that can be controlled. (Sugiyono, 2017)This study aimed to analyze prenatal yoga's effectiveness on pregnant women's anxiety at Nimas Ayu Asmarani Independent Midwife Practice, Glenmore District, in 2022.

This research method used a pre-experimental research design, namely One Group Pre Test and Post Test Design (Pre Test and Post Test in one group). The sample in this study were pregnant women in their third

trimester, on average 32 pregnant women, according to the inclusion criteria, namely pregnant women who are willing as respondents and who experience anxiety and exclusion criteria, namely pregnant women who experience pregnancy complications or pregnancy comorbidities determined by the researcher.

Variables measurement used the STAI sheet before and after practicing prenatal yoga. The results of completing the STAI sheet will be totaled and then grouped with the criteria of mild/low anxiety with a score of <40, moderate anxiety with a score of 40-60, and high anxiety with a score of> 60. Data analysis used the Wilcoxson statistical test.

#### **RESULT**

The research results indicated that the variable being measured is

Table 1. Frequency Distribution of Respondents' Characteristics with STAI Values Before Practicing Prenatal Yoga for Pregnant Women

STAI Value Before Yoga (Pre-Test)	Frequency	Percentage (%)		
Mild Anxiety	0	0		
Moderate anxiety	32	100		
Severe Anxiety	0	0		
Total	32	100		

Source: Primary Data 2022

As seen in the table above showed that all respondents before prenatal yoga experienced moderate anxiety with a frequency of 100%; 32 respondents in total.

Table 2. Characteristics of Respondents by Frequency with STAI Values After Prenatal Yoga for Pregnant Women

STAI Value After Yoga (Post-Test)	Frequency	Percentage (%)		
Mild Anxiety	32	100		
Moderate anxiety	0	0		
Severe Anxiety	0	0		
Total	32	100		

Source: Primary Data 2022

All respondents after prenatal yoga experienced mild anxiety with a frequency of 100%, namely 32 respondents.

Table 3. Distribution of Prenatal Yoga's Efficiency in Reducing Labor-Related Anxiety in Pregnant Women

Anxiety Level with STAI -	Pre-Z	Test	Pos	tTest	7	P-Value
	F	%	F	%	L	
Mild	0	0	32	100	-4,988	0,000
Moderate	32	100	0	0		
Severe	0	0	0	0		
Total	32	100	32	100		

Source: Primary Data 2022

The data in the table above has an Asymp value. Sig. (2-tailed) 0.000 <0.05 means that Prenatal Yoga effectively reduces anxiety in third-trimester pregnant women facing labor.

#### **DISCUSSION**

## Anxiety Levels Before Prenatal Yoga

Table 1 showed that all respondents before doing prenatal yoga experienced moderate anxiety with a frequency of 100%, namely 32 respondents. Anxiety or anxiety is a disturbance in the conscious (practical) person with signs of continuous and deep fear or worry, has a disturbance in assessing a reality or (Reality Testing Ability/RTA), does not experience a personality split (Splitting Of Personality), behavior can be impaired but still within normal limits (Dadang, 2011). Special events or situations can accelerate the emergence of anxiety. Two factors influence anxiety: internal factors (age, social support, environment and situation, education, employment, economic status, parity, and physical condition) and external factors (threats to self-integrity and system threats).

Observations made by the researchers found that all pregnant women experienced moderate anxiety. This information was derived from respondents' responses to the STAI questionnaire before participating in prenatal yoga, and respondents' readiness for childbirth may have impacted it. The number of parity also affects the anxiety level of pregnant women; as many as 14 respondents, or 43.8% of respondents, are primigravidas, so they experience more anxiety during pregnancy. Anxiety in primigravidas is higher than in multigravidas because primigravidas who are pregnant with their first child have not had previous pregnancy experience. Hence, anxiety in dealing with their pregnancy is higher.

Anxiety experienced in third-trimester pregnant women will be more substantial before the birth process. If the pregnant woman cannot control this feeling of anxiety before delivery, the mother's body will release catecholamine hormones or stress hormones and increase.

## Anxiety Levels After Prenatal Yoga

In Table 2 above, it is found that all respondents experienced a decrease in anxiety to mild with a frequency of 100%, namely as many as 32 respondents after doing prenatal yoga practice. This pregnancy yoga adapts to the physical condition of pregnant women with gentle and slow movements (Sindhu Pujiastuti, 2015). Pregnant women benefit from yoga because it lessens their tension, anxiety, pain, and discomfort during pregnancy and childbirth (Field et al., 2013). The practice of yoga in the third trimester is to create a vast space for the position of the fetus and with breathing techniques that will help the fetus get more oxygen so that it can breathe comfortably, help the elasticity of the pelvic muscles to be better prepared in facing the labor process, and perform movements with restorative postures and relaxation (Sindhu Pujiastuti, 2015).

Prenatal yoga exercises help muscle flexibility, reducing pelvic, hip, and back tension. Stretching exercises help the parasympathetic nervous system to be active again, providing a relaxed, calm effect, regular heart rate, stable blood pressure, and smooth breathing. According to Fauziah, in her research, primigravida mothers who practice prenatal yoga show a decrease in anxiety during childbirth, increase

their ability to deal with the birth process and reduce complaints that are felt during the pregnancy process (Fauziah et al., 2016). It is in line with the results of research by Ashari stating that prenatal yoga intervention reduces anxiety levels in third-trimester pregnant women at the Tamalate Community Health Center in Makassar (Ashari et al., 2019).

The Effectiveness of Prenatal Yoga with Reducing Anxiety in Pregnant Women

Table 3 above showed that all respondents before doing prenatal yoga experienced moderate anxiety with a frequency of 100%, namely 32 respondents, and all respondents after doing prenatal yoga experienced mild anxiety with a frequency of 100%, namely 32 respondents. The results of the Wilcoxson test with SPSS obtained the Asymp.Sig value. (2-tailed) 0.000 <0.05, the conclusion is that prenatal yoga effectively lowers the fear of childbirth experienced by expectant women at PMB Nimas Ayu Asmarani. Anxiety or anxiety for the mother facing the birth process is very closely related to the mother's emotional condition; during pregnancy, the emotional condition of pregnant women is unstable and changes. Facing childbirth is sometimes frightening for pregnant women, causing excessive anxiety, such as not being able to sleep, which will affect the health of the pregnant woman. It can be done by applying alternative methods to reduce anxiety, namely Prenatal. This pregnancy yoga is a modification of classic yoga that adapts to the physique of pregnant women by applying slower and more movements.

The important principles in Prenatal Yoga are breathing, gentle movements, relaxation, and meditation. Deep and regular breathing techniques can have a calming effect so that the mother can control her mind and body. In the relaxation stage and the meditation process later, between the body or physically, the mind and soul will experience a relaxed, calm condition and feel happy. Prenatal yoga benefits pregnant women in several ways, including lowering stress, anxiety, and discomfort during pregnancy and easing labor pain (Muria, 2017).

This is consistent with Ridha Ariani's (2018) findings, which obtained the results of Asymp 0.00 <0.05, which means Pregnancy Yoga is effective in Reducing Anxiety in Mothers after giving birth at Eka Sri Wahyuni and Pratama Niar Clinics. The results of another study conducted by researcher Ni Komang Ayu Tri Muria (2017) obtained an Asymp value of 0.035 <0.05; It implies that the has an impact. Prenatal yoga in reducing the level of anxiety of pregnant women dealing with the delivery process at Kulon Progo Regency Independent Practice Midwives (Muria, 2017).

The statistical test conducted by the researcher, the A. Symp value is 0.000 <0.005, which means that there is a relationship between the effectiveness of prenatal yoga in reducing the anxiety of pregnant women in Trimester 3 in facing childbirth at PMB Nimas Ayu Asmarani Glenmore District Banyuwangi Regency in 2022. This can be caused by three essential prenatal yoga principles: mindful breathing, gentle and slow movements, relaxation, and meditation. Deep and regular breathing is healing and calming. Through proper breathing techniques, the mother will be better able to control her mind and

body, and with relaxation and meditation, her whole body and mind will be relaxed, calm, and peaceful. So, the level of anxiety of mothers who, before doing prenatal yoga, was in the classification of moderate anxiety fell to mild anxiety after doing prenatal yoga. Limitations in this study Researchers did not examine more deeply the factors that caused mothers to experience anxiety.

#### **CONCLUSION**

The research results conducted by Nimas Ayu Asmarani, an Independent Practice Midwife, in 2022 can be concluded that all pregnant women who are respondents experience moderate anxiety before carrying out Prenatal yoga exercises. After carrying out the Prenatal yoga exercises, the respondents experienced a decrease in moderate to mild anxiety. The data analysis and statistical test results revealed that prenatal yoga is very effective on the anxiety of pregnant women facing childbirth, especially in Trimester 3 pregnant women. It will innovate midwifery services in Independent Practice Midwives to help pregnant women reduce anxiety before birth so that the labor process runs smoothly without any complications and the mother feels comfortable and happy facing labor.

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