



THE EFFECT OF ANTENATAL YOGA ON THE LEVEL OF ANXIETY OF PREGNANT WOMEN IN FACING THE LABOR PROCESS

Warlinda

Institut Kesehatan dan Bisnis Kurnia Jaya Persada, Jl. Dr. Ratulangi No.172, Salobulo, Wara Utara, Palopo, Sulawesi Selatan 91913, Indonesia
warlindamegarezky@gmail.com

ABSTRACT

One of the main causes of maternal death is hypertension in pregnancy, which is often triggered by anxiety before childbirth. This study aims to determine the effect of antenatal yoga on the level of anxiety of pregnant women in facing the labor process. Using a quasi-experimental design with a one group design approach, the study involved 30 pregnant women in the third trimester in the Malangke Health Center work area in the period August-September 2024. The sampling technique used total sampling, and the data were analyzed using the Wilcoxon statistical test. The results showed that all respondents experienced a decrease in anxiety levels after the antenatal yoga intervention, with a significant p-value of 0.000 ($p < 0.05$). The average decrease in anxiety had a mean rank of 15.00 and a positive sum of ranks of 435.00. These findings are in line with previous studies which stated that antenatal yoga is effective in reducing anxiety in pregnant women approaching labor. In conclusion, antenatal yoga has a significant effect in reducing anxiety levels in pregnant women, so it can be a recommended intervention to improve the mental health of pregnant women.

Keywords: antenatal yoga; anxiety; childbirth; mental health; pregnant women

How to cite (in APA style)

Warlinda, W. (2024). The Effect of Antenatal Yoga on the Level of Anxiety of Pregnant Women in Facing the Labor Process. *Indonesian Journal of Global Health Research*, 6(6), 4429-4434. <https://doi.org/10.37287/ijghr.v6i6.5910>.

INTRODUCTION

Maternal Mortality Rate (MMR) is one of the key indicators in assessing the health level of a country. MMR reflects the number of women who die from causes related to pregnancy, childbirth, or the postpartum period (42 days after delivery), regardless of the duration of pregnancy, per 100,000 live births (Kemenkes RI, 2022). According to World Health Organization (WHO) data in 2020, the global maternal mortality rate reached 810 per day, with the main causes related to complications of pregnancy and childbirth (WHO, 2022). In Indonesia, the Indonesian Demographic and Health Survey (SDKI) reported that the MMR in 2022 was still at 305 per 100,000 live births, far from the government's target of 183 per 100,000 live births in 2024 (Kemenkes RI, 2023).

South Sulawesi Province also recorded a fairly high maternal mortality rate, namely 94.29 per 100,000 live births in 2021. Of this number, 22% occurred during pregnancy, 25% during childbirth, and 53% during the postpartum period (Dinkes Sul-Sel, 2022). Meanwhile, North Luwu Regency recorded a decrease in MMR from 8 cases in 2022 to 7 cases in 2023 (Dinkes Luwu Utara, 2023). One of the main causes of maternal death is hypertension in pregnancy, which is often triggered by anxiety before childbirth. According to the Anxiety and Depression Association of America (ADAA), about 52% of pregnant women who experience anxiety are at risk of hypertension, while 65% experience prolonged labor due to ineffective uterine contractions (Aswitami, 2022).

Anxiety in pregnant women, especially in the third trimester (28-40 weeks), is often caused by hormonal changes and fear of facing the labor process. Hobel explains that prolonged anxiety can activate the sympathetic nervous system, increasing heart rate and blood flow to the fetus, potentially causing premature birth (Arlym & Pangarsi, 2021). Antenatal exercise or prenatal yoga is one solution to reduce anxiety in pregnant women. This exercise combines physical movements, breathing meditation, and a holistic approach to improve physical, mental, and spiritual health. Prenatal yoga movements are specifically designed to strengthen uterine muscles, support fetal development, and create a sense of relaxation in pregnant women (Malinda, 2024). Previous research by Wulansari (2021) in the Kahuripan Health Center Work Area showed that antenatal exercise is effective in reducing anxiety in primigravida pregnant women in the second and third trimesters. Similar findings were reported by Widiyarti et al. (2024) at the Lubuk Pinang Health Center, who found that prenatal yoga significantly reduced anxiety in pregnant women approaching childbirth with a p value = 0.000. This study aims to determine the effect of antenatal yoga on the level of anxiety in pregnant women in facing the childbirth process.

METHOD

This study used a quasi-experimental design with a one group design approach. The population in this study included all pregnant women in the third trimester in the Malangke Health Center working area in the period August-September 2024, totaling 30 people. The research sample was taken from the same population, namely all pregnant women in the third trimester in the Malangke Health Center working area in the specified period, with a sample size of 30 people. The sampling technique used was total sampling, where all members of the population were used as research samples. For data analysis, this study used the Wilcoxon statistical test to test for significant differences or effects before and after the intervention.

RESULT

Table 1.
Respondent characteristics

Characteristics	f	(%)
Age		
<20 Years	2	6.7
20-35 Years	27	90.0
>35 Years	1	3.3
Education		
Junior High School	6	20.0
Senior High School	19	63.3
Diploma/Bachelor	5	16.7
Work		
Housewife	18	60.0
Employee	3	10.0
Self-employed	6	20.0
Honorary/Civil Servant	3	10.0

Table 1 shows that the majority of respondents are in the 20-35 age group, which is 27 people (90.0%), while only 1 respondent (3.3%) is over 35 years old. In terms of education level, most respondents have a high school education background, which is 19 people (63.3%), while respondents with Diploma/Bachelor's education are 5 people (16.7%). In terms of employment, most respondents work as housewives (IRT), which is 18 people (60.0%), while 3 people (10.0%) work as civil servants.

Table 2.

Anxiety of pregnant women facing childbirth before being given antenatal yoga intervention		
Anxiety	f	%
Pre Test		
Mild Anxiety	3	10.0
Moderate Anxiety	15	50.0
Severe Anxiety	12	40.0
Post Test		
No Worries	2	6.7
Mild Anxiety	20	66.7
Moderate Anxiety	8	26.7

Table 2 shows that before being given antenatal yoga intervention, out of 30 respondents, 15 people (50.0%) experienced moderate anxiety, 12 people (40.0%) experienced severe anxiety, and 3 people (10.0%) experienced mild anxiety. After the antenatal yoga intervention, there was a significant change where 20 respondents (66.7%) experienced mild anxiety, 8 respondents (26.7%) experienced moderate anxiety, and 2 respondents (6.7%) did not experience any anxiety at all.

Table 3.

The effect of antenatal yoga on pregnant women's anxiety in facing childbirth

		N	Mean Rank	Sum of Ranks	P value
Anxiety of pregnant women before antenatal yoga intervention - Anxiety of pregnant women after antenatal yoga intervention	Negative Ranks	0 ^a	0.00	0.00	
	Positive Ranks	29 ^b	15.00	435.00	0,000
Ties		1 ^c			

Table 3 shows that out of 30 respondents, the results of the Wilcoxon statistical test showed a positive ranks value of 29, which means that all samples experienced a decrease in anxiety levels after antenatal yoga intervention. The average decrease in anxiety had a mean rank of 15.00 with a positive sum of ranks of 435.00, while only 1 value did not change (Ties). There was no increase in anxiety after the intervention, as indicated by the insignificant negative ranks value. The p-value of 0.000 ($p < 0.05$) indicates that H1 is accepted, so it can be concluded that antenatal yoga has a significant effect in reducing anxiety in pregnant women in facing the labor process.

DISCUSSION

In the last months before giving birth, the emotions of pregnant women often change and are difficult to control. These changes arise due to worries, fears, and doubts about the condition of the pregnancy and the inability to carry out the role of a mother after giving birth (Jenni, 2020). During pregnancy until delivery, pregnant women are faced with various feelings, such as anxiety, tension, happiness, and worry about miscarriage, appearance, or ability to give birth. In the first month of pregnancy, anxiety usually does not arise because the mother is still filled with feelings of happiness. However, entering the end of the second to third month, anxiety begins to arise, often triggered by information from the media or other people who say that the first trimester is prone to miscarriage. This makes pregnant women anxious, think about the adequacy of nutritional intake, and worry about various other things that might happen in the first trimester (Wulansari, 2021).

The results of the statistical test showed a p-value of 0.000, which is much lower than the significance standard of 0.05 ($p < 0.05$). This means that the H1 hypothesis is accepted, so it can be concluded that antenatal yoga has a significant effect on reducing anxiety in pregnant

women in facing the labor process. This finding is in line with the research of Sandy and Sulistyorini (2024), which also found a decrease in anxiety scores before and after prenatal yoga with a p-value of 0.000 ($p < 0.05$). This shows that prenatal yoga is effective in reducing anxiety before labor.

The "Positive Ranks" value shows that all samples ($n=29$) experienced a decrease in anxiety levels after antenatal yoga intervention, with an average decrease of 15.00 and a total sum of positive ranks of 435.00. Meanwhile, there was no increase in anxiety after the intervention, as indicated by the insignificant negative ranks value. Thus, it can be concluded that antenatal yoga is effective in reducing anxiety scores in pregnant women. The prenatal yoga intervention lasts for 60 minutes, where pregnant women are taught the correct breathing and movement techniques to achieve psychological calm and physical comfort. Each yoga movement helps reduce muscle tension, so that the benefits of yoga can be felt to the maximum. This session also includes a break time which is often filled with questions and answers guided by the instructor. Topics discussed include nutritional intake during pregnancy, the labor process, and good sleeping positions for pregnant women.

Primigravida is a woman's first pregnancy, so they have no experience or picture of pregnancy and childbirth. This condition makes primigravida more susceptible to worry, anxiety, and fear in facing pregnancy and childbirth. On the other hand, multipara has had previous experience, so they are better able to control anxiety in facing childbirth (Dewi et al., 2024). The research of Sulistiyaningsih and Rofika (2020) also supports this finding, with a result of $p = 0.000$ ($p < 0.05$), which means H_1 is accepted. This shows that prenatal yoga has a significant effect on reducing anxiety in pregnant women in facing the labor process.

CONCLUSION

Antenatal yoga is effective in reducing the level of anxiety of pregnant women in facing the labor process, with a p-value of 0.000 ($p < 0.05$) indicating statistical significance. All respondents experienced a decrease in anxiety after the intervention, supported by a significant positive ranks value. For further research, it is recommended to expand the scope of the sample and research location to increase the generalizability of the results, as well as explore other factors that influence the effectiveness of antenatal yoga, such as family support and environmental conditions.

REFERENCES

- Arlym, & Pangarsi. (2021). The Effect of Prenatal Yoga on Anxiety Facing Childbirth in Pregnant Women in the Second and Third Trimesters at the BidanJeanne Depok Clinic. *Jurnal Ilmiah Kesehatan Dan Kebidanan, X No. 1*, 11.
- Aswitami. (2022). The Effect of Antenatal Yoga on Anxiety Levels in Pregnant Women in Third Period in Facing the Childbirth Process at the Bumi Sehat Foundation Clinic. *Jurnal Kesehatan Terpadu, 1*(1), 1–5. <https://doi.org/10.36002/jkt.v1i1.155>
- Dewi, A. R., Andarini, A. S., Ilmu, I., Bhakti, K., Kediri, W., & History, A. (2024). *JURNAL PROMOTIF PREVENTIF Effectiveness Of Prenatal Yoga on Anxiety During Labor of Primigravida Pregnant Women Article Info ABSTRACT / ABSTRACT* (Vol. 7, Issue 1). <http://journal.unpacti.ac.id/index.php/JPP>
- Dinkes Luwu Utara. (2023). *North Luwu Health Profile*.
- Dinkes Sul-Sel. (2022). Profile of the South Sulawesi Provincial Health Office. South Sulawesi Health Office, 1–118.

Jenni. (2020). *Midwifery care for pregnancy*. In Media.

Kemendes RI. (2022). *Indonesia Health Profile*. Kemendes RI.

Kemendes RI. (2023). *Indonesia Health Profile 2021*. 48(1), 6–11.

Malinda. (2024). The Effect of Prenatal Gentle Yoga on Pregnant Women's Anxiety During Pregnancy. *PubHealth Jurnal Kesehatan Masyarakat*, 2(3), 123–127. <https://doi.org/10.56211/pubhealth.v2i3.473>

Sandy, D. M., & Sulistyorini, S. (2024). The Effect of Prenatal Yoga on Maternal Anxiety Facing Childbirth. *Jurnal Kesehatan Tambusai*, 5(2), 2881–2886.

Sulistiyaningsih, S. H., & Rofika, A. (2020). The Effect of Prenatal Gentle Yoga on Anxiety Levels of Primigravida Pregnant Women in the Third Trimester. *Jurnal Kebidanan*, 34–45.

WHO. (2022). Maternal Mortality Evidence Brief. *Maternal Mortality Ration (MMR)*, 1, 1–4.

Widiyarti, Ronalen, Situmorang, & Sari. (2024). The Effect Of Prenatal Yoga Exercises On Anxiety In Pregnant Women In Facing The Delivery Process At The Lubuk Pinang Care Health Center. *Journal Of Midwifery*, 12(1), 1–23.

Wulansari. (2021). The Effect of Prenatal Yoga on Anxiety of Primigravida Pregnant Women in the Second and Third Trimesters in the Kahuripan Health Center Work Area in 2020. *JoMI (Journal of Midwifery Information)*, 1(2), 96–105.

