



EFFECTS OF PRENATAL YOGA ON THE ANXIETY OF PREGNANT WOMEN BEFORE BIRTH

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Abstract

Background: Anxiety in the last trimester of pregnancy will be different from anxiety in the previous trimester. Stress during pregnancy will affect the growth and development of the fetus. Anxiety is three times more likely to increase fear of childbirth and 1.7 times more likely to require a cesarean section. Stress during pregnancy can be reduced by exercising. One of the recommended sports is prenatal yoga. Practicing prenatal yoga during pregnancy is more effective in reducing stress and depression. Because in yoga, in addition to practicing, pregnant women also receive positive affirmations so that they can respond to physical changes during pregnancy and childbirth. The research aims to determine the effect of pregnancy yoga on the anxiety of pregnant women before birth. **Method:** A study uses a quasi-experimental design to examine the impact and effectiveness of treatment. The design of this study uses groups of subjects. Observations will be made before and after treatment. The sample for this study was pregnant women between 14 and 40 weeks of gestation. The instrument used to measure anxiety levels is the standard Hamilton Anxiety Rating Scale questionnaire (HARS). This research was carried out in the working area of Puskesmas Ngletih, Kediri Regency. The study population included all pregnant women who attended a yoga class for pregnant women at Puskesmas Ngletih Workspace, Kediri Regency, for a total of 12 people. **Result:** The results of a study conducted at Ngletih Community Health Center, Kediri Town, in 2023. **Result :** Practicing gentle yoga before giving birth has an effect on pregnant women's anxiety about labor, with a p value of <0.001 ($p < 0.05$). **Conclusion :** It is hoped that all pregnant women with a gestational age of 14–40 weeks can do prenatal yoga.

keyword : anxiety, pregnant, yoga

INTRODUCTION

Anxiety is related to a state of worry in the form of fear, a feeling of uncertainty or helplessness, and an emotional state of uncertainty about certain things. During your first pregnancy, this fear often arises, especially before giving birth. A pregnant mother's mental load usually occurs in the third month of pregnancy. Women who are stressed during pregnancy will have a difficult job and





may experience problems that can lead to the death of the mother and the fetus (Ashari, Pongsibidang and Mikhrunnisai, 2019). During the third trimester, pregnant women who want to give birth may fear whether the birth will be successful or whether a cesarean section will be performed, which can cause anxiety that may occur. as they worry about themselves regnant women experience various psychological changes, including mood swings, feelings of fatigue, emotions, a need for more attention, anxiety, depression, anxiety, and stress Women who experience anxiety and stress during the third trimester of pregnancy will have a greater chance of suffering from birth defects in the form of failure to close the mouth, the risk of cesarean section, delivery of equipment, premature birth, and low birth weight (LBW) is long-term associated with behavioral and emotional problems in children (Ashari, Pongsibidang and Mikhrunnisai, 2019) (Maharani and Hayati, 2020).

The United Nations International Children's Emergency Fund (UNICEF) reports data on pregnant women experiencing problems in the third trimester. A total of 12,230,142 million people, and 30% of them are worried. According to data from the Anxiety and Depression Association of America (ADAA), 52% of pregnant women reported feeling more anxious during pregnancy (Anxiety & Depression Associations of America, 2016).The incidence of anxiety among pregnant women in Indonesia is 107 million (28.7%) out of 373 million pregnant women with anxiety disorder (IDHS). In 2016, the risk of depression or anxiety was 10–15%, occurring in women aged 20–44. Depression and anxiety affect fertility by 10–15% (Syafrie, 2017).

Pregnancy anxiety is higher before giving birth than during the first and second trimesters. Stress related to pregnancy will affect the growth and development of the fetus. Anxiety is three times more likely to increase fear during childbirth and 1.7 times more likely to increase the risk of a cesarean section (Rubetsson, 2014). Stress during pregnancy can be reduced through exercise. One of the recommended sports is yoga because it is inexpensive, easy to do, and very beneficial for physical and mental health. Yoga during pregnancy is more effective in reducing stress and depression. because in yoga, in addition to exercise, pregnant

women also receive positive affirmations so that mothers can respond to physical changes during pregnancy and childbirth (Einion, 2016).

Yoga movements reduce anxiety levels in pregnant women by increasing blood flow to the hypothalamus, affecting the parasympathetic nervous system, affecting the heart organs, and normalizing blood pressure and breathing. Puskesmas Ngletih, Kediri City, offers antenatal classes for pregnant women held at the Ngletih Community Health Center. We hold regular monthly classes for pregnant women. So far, pregnant women are doing pregnancy gymnastics only in pregnancy classes. Therefore, researchers would like to conduct a study on prenatal yoga. Prenatal yoga is expected to revolutionize the way pregnant women can perform their own prenatal care.

METHOD

A study uses a quasi-experimental design to examine the impact and effectiveness of treatment. The design of this study uses group of subjects. Observations will be made before and after treatment. The sample for this study was pregnant women between 14 and 40 weeks of gestation. The instrument used to measure anxiety levels is the standard Hamilton Anxiety Rating Scale questionnaire (HARS). In this study, respondents took a pre-test to assess their anxiety levels using the HARS questionnaire and received yoga-style therapy. Then, an exploratory analysis was conducted in the form of an assessment of anxiety using the HARS questionnaire. Childbirth yoga is taught by prenatal yoga teachers. This research was carried out in the working area of Puskesmas Ngletih, Regenc of Kediri. The research population was all pregnant women who took part in the pregnant women's yoga class in the working area of the Puskesmas Ngletih, Kediri Regency, totaling 12 people. The sampling technique in this research was carried out using the total sampling method. Data obtained from respondent response questionnaires were processed using a computer program and then analyzed in two forms, namely univariate analysis and bivariate analysis. The statistical test used is the unpaired t-test. This test is used to determine whether there is an influence between the requested frequency distribution and the expected frequency distribution at the 0.05 confidence level.

RESULT AND DISCUSSION

Based on the data collected and analyzed, the study "The influence of prenatal yoga on decision-making fear in pregnant women" found the following results:

Table 1. Characteristics of respondents

| Age | Frequency | Precentage (%) |
|------------------------|------------------|-----------------------|
| 26-34 | 10 | 83,33 |
| 35-49 | 2 | 16,67 |
| Total | 12 | 100 |
| Gestational Age | Frequency | Precentage (%) |
| 15-28 week | 4 | 33,33 |
| 29-40 week | 8 | 66,67 |
| Total | 12 | 100 % |
| Paritas | Frequency | Precentage (%) |
| Primigravida | 3 | 25 |
| Multigravida | 9 | 75 |
| Total | 12 | 100 % |

According to the survey results in the table above, it was found that the largest number of respondents were between the ages of 26 and 34, with 10 (83,33%). Most gestational ages were between 29 and 40 weeks, with 8 respondents (66,67%). Among the respondents, the highest equality was among multiparous women, with 9 respondents (75%).

Table 2. Distribution of Pre-Test and Post-Test Results for Pregnant Women's Anxiety Levels

| Pre-Test | | |
|-----------------------|------------------|-----------------------|
| Anxiety Levels | Frequency | Persentase (%) |
| High | 7 | 58,33 |
| Medium | 3 | 25 |
| Low | 2 | 16,67 |
| Post-Test | | |
| Anxiety Levels | Frequency | Persentase (%) |
| Medium | 2 | 16,67 |
| Low | 9 | 75 |
| not anxious | 1 | 8,33 |

Based on the findings in the table above, 7 (58.33%) of the respondents provided data that pregnant women suffered from severe anxiety before practicing pregnancy

yoga. According to the survey results in the table above, pregnant women felt mild anxiety after practicing maternity yoga, with 9 respondents (75%).

The level of anxiety is a response to the threat of pain or that the outside world is not ready to deal with it and serves to warn the individual of danger. According to the data obtained, we found that 7 respondents reported a moderate level of anxiety. This is not expected, as it will affect the health and development of the fetus. And 7 respondents said the factors that worried them were complex, including age, environment, and circumstances. The results of the qualitative analysis showed that pregnant women experienced several forms of anxiety, including doubts about the normal birth process and anxiety levels while waiting for their due date. The effects of this level of anxiety can be seen in everyday activities such as feeling stressed during pregnancy, becoming more sensitive and irritable, and having difficulty sleeping. This is consistent with the hypothesis that during the third trimester, pregnant women encounter new disturbances in the birth process and the mother's sense of responsibility (Delgado, 2012).

Table 3. Normality Test Results for Pregnant Women's Anxiety Levels

| | N | Mean | Nilai p |
|-----------|----------|-------------|----------------|
| Pre-Test | 12 | 12,46 | 0,001 |
| Post-Test | 12 | 6,81 | |

The data in Table 3, which is the result of the analysis, shows that there is a difference in the anxiety level of the 4,444 respondents before and after the prenatal yoga treatment, with a p-value of 0.001. The null hypothesis is rejected because $p < 0.05$. The difference in anxiety levels is illustrated by the mean value of anxiety levels before treatment, which is 12,46. The average score after the test was 6,81. Average anxiety levels decreased by 5,65%. Moderate anxiety levels decreased by 8,33%, and severe anxiety levels decreased by 100%. This is consistent with the theory that prenatal yoga has an effect on reducing anxiety levels (Sindhu, 2014).

There was a statistical reduction in anxiety levels, suggesting that yoga may reduce anxiety levels in pregnant women. After doing prenatal yoga exercises, it turned out that the mother's anxiety level was better than before. Pregnant women also need adequate exercise to help them achieve optimal health throughout



pregnancy and the ability to endure childbirth. Practicing yoga, in addition to physical training, also has the effect of nourishing the soul so that pregnant women always feel calm and at peace. In addition, it also increases the ability of pregnant women to concentrate and pay attention so they can admire and communicate with their baby. This is consistent with Sri Maharani (2020) study, which found that yoga is an alternative treatment for pregnant women experiencing high levels of anxiety. Yoga not only reduces anxiety levels but also eliminates some of the vegetative symptoms that cause anxiety. In this study, research was conducted in the work area of the Putri Ayu Public Health Center in Jambi. The data collected will be analyzed univariately and bivariately. Prenatal gentle yoga has an effect on pregnant women's fear of labor with a p-value <0.001 (95% CI). Gentle prenatal yoga can have a huge impact on pregnancy anxiety during childbirth (Maharani and Hayati, 2020)

CONCLUSION AND SUGGESTION

The results of a study conducted at Ngletih Community Health Center, Kediri Town, in 2023. On average, pregnant women who practice gentle yoga before giving birth experience severe anxiety. On average, pregnant women who practice gentle yoga before giving birth experience mild anxiety, and the effect of prenatal yoga on anxiety in pregnant women before giving birth has a p-value of 0.001.

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REFERENCE

- Anxiety & Depression Associations of America (2016) *Pregnancy and Medication*.
Ashari, Pongsibidang, G.S. and Mikhrunnisai, A. (2019) 'Influence of Yoga Prenatal Gym to Decreasing in Anxiety of Third Trimester Pregnant Women', *Media Kesehatan Masyarakat Indonesia*, 15(1), pp. 55–62. Available at: <https://doi.org/10.30597/mkmi.v15i1.5554>.
Delgado, F.T.D.M.M.L. (2012) 'Yoga and Massage Therapy Reduce Prenatal Depression and Prematurity', *NIH Public Access*, 16(2), pp. 204–209.
Einion, A. (2016) "Mindfulness and perinatal mental health: A systematic review," Practicing Midwife., *Austalian College of Midwives*, 19(11), pp. 32–34.
Maharani, S. and Hayati, F. (2020) 'Pengaruh Prenatal Gentle Yoga Terhadap

- Tingkat Kecemasan Ibu Hamil Menghadapi Persalinan', *Jurnal Endurance*, 5(1), p. 161. Available at: <https://doi.org/10.22216/jen.v5i1.4524>.
- Rubetsson, C. (2014) "Anxiety in early pregnancy: Prevalence and contributing factors," *Archives of Women's Mental Health*, 17(3), pp. 221–228.
- Sindhu, P. (2014) *Yoga Untuk Kehamilan edisi yang diperkaya; sehat, bahagia, dan penuh makna*. Bandung: qanita.
- Syafrie (2017) 'Gambaran Pengetahuan dan Kecemasan Ibu Hamil Trimester III dalam Menghadapi Persalinan di Wilayah Kerja Puskesmas Muara Aman Kecamatan Lebong Utara.', *Journal of Midwifery*, 5.