

PRENATAL GENTLE YOGA ON THE ANXIETY LEVEL OF PREGNANT WOMEN IN THE THIRD TRIMESTER

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ABSTRAK: PRENATAL GENTLE YOGA TERHADAP TINGKAT KECEMASAN IBU HAMIL TRIMESTER III

Latar Belakang: Kehamilan adalah suatu rangkaian peristiwa yang terjadi apabila sel telur bertemu dengan sel sperma dan akan berkembang menjadi janin yang akan matang. Pada peristiwa kehamilan terjadi perubahan fisik dan psikologis, dari perubahan fisik akan mengakibatkan kecemasan yang akan berdampak buruk bagi janin dan ibu hamil. Untuk mengurangi kecemasan ibu hamil dapat dilakukan dengan prenatal yoga yaitu suatu olahraga yang berfokus pada pernafasan dan olah tubuh yang gerakannya sudah aman dan nyaman untuk ibu hamil. Penelitian ini bertujuan untuk mengetahui Pengaruh Prenatal Yoga terhadap kecemasan pada ibu hamil trimester III.

Tujuan: Tujuan penelitian ini adalah untuk menganalisis pengaruh prenatal gentle yoga terhadap tingkat kecemasan ibu hamil.

Metode: Desain penelitian intervensi dengan Quasi eksperimental menggunakan one grup pre-post-test design. Subjek dalam penelitian ini adalah ibu hamil trimester III, ada 24 ibu hamil trimester III di wilayah kerja Puskesmas Kandangan yang diberikan pre-test menggunakan Kuesioner *Pregnancy Related Anxiety Questionnaire-revised (PRAQ-R2)*, latihan prenatal yoga dilakukan sebanyak 2 kali selama 4 minggu berturut-turut, selanjutnya dilakukan post-test.

Hasil: Hasil Penelitian menggunakan uji statistik menunjukkan bahwa terdapat pengaruh prenatal gentle yoga terhadap kecemasan ibu hamil trimester III didapatkan hasil nilai *p-value* <0.001 artinya signifikan setelah diberikan treatment.

Kesimpulan: Prenatal gentle yoga berpengaruh signifikan terhadap penurunan tingkat kecemasan ibu hamil trimester III.

Saran: Bagi pelayanan kesehatan khususnya Puskesmas untuk mensosialisasikan kepada ibu hamil bahwa yoga merupakan salah satu bentuk latihan fisik yang baik untuk dilakukan dan bahkan kegiatan ini diterapkan atau dijadikan kegiatan rutin.

Kata Kunci: Yoga, Kecemasan, Ibu hamil, Trimester III

ABSTRACT

Background: Pregnancy is a series of events that occur when an egg meets a sperm cell and will develop into a fetus that will mature. In pregnancy, physical and psychological changes occur, from physical changes will result in anxiety that will have a bad impact on the fetus and pregnant women. To reduce anxiety in pregnant women, prenatal yoga can be done, namely a sport that focuses on breathing and body movements that are safe and comfortable for pregnant women. This study aims to determine the effect of prenatal yoga on anxiety in pregnant women in the third trimester.

Purpose: The purpose of this study was to analyze the effect of prenatal gentle yoga on the anxiety level of pregnant women.

Methods: The intervention research design was Quasi experimental using one group pre-post-test design. The subjects in this study were pregnant women in the third trimester, there were 24 pregnant women in the third trimester in the working area of Kandangan Health Center who were given a pre-test using the Pregnancy Related Anxiety Questionnaire-revised (PRAQ-R2), prenatal yoga exercises were carried out 2 times for 4 consecutive weeks, then a post-test was carried out.

Results: Research Results using statistical tests show that there is an effect of prenatal gentle yoga on anxiety in pregnant women in the third trimester. The results obtained a *p-value* <0.001, meaning it is significant after treatment is given.

Conclusion: Prenatal gentle yoga has a significant effect on reducing anxiety levels in pregnant women in

the third trimester.

Suggestions: For health services, especially health centres to socialize to pregnant women that yoga is a form of physical exercise that is good to do and even this activity is applied or made a routine activity.

Keywords: Yoga, Anxiety, Pregnant Women, Third Trimester

INTRODUCTION

Anxiety is a feeling of worry that arises as a reaction to a dangerous threat and is an early stage to prepare for it. High levels of anxiety during pregnancy can interfere with the mother's ability to carry out her duties and have an impact on the health of the mother and fetus. (Hidayat & Sumarni, 2013). Studies have shown that stress during pregnancy increases the risk of miscarriage, premature birth, birth defects, and fetal growth retardation. Furthermore, the hormone cortisol increases during pregnancy due to stress, which can lead to an increased risk of high blood pressure, preeclampsia, and low birth weight (LBW) (Wander et al., 2016)

Anxiety and depression during pregnancy are relatively common problems (12.5-42%) and these disorders are expected to become the second leading cause of morbidity by 2020. (Princess, 2019). According to data from the World Health Organization (WHO), 10% of pregnant women and 13% of new mothers worldwide have mental health problems, including depression. In China, anxiety is experienced by 20.6% of pregnant women; in Central America, anxiety symptoms are experienced by 41% of pregnant women in Nicaragua, while depression is experienced by 57% of pregnant women in Pakistan. In Sweden, 10% of pregnant women experience anxiety or depression, compared to 18% in Bangladesh and 29% in Sweden, in terms of anxiety, 23.4% of pregnant women in Malaysia and 71.90% of pregnant women in Indonesia reported experiencing anxiety symptoms (Bingan, 2019)

Adrenocorticotrophic hormone (ACTH), cortisol, and catecholamines are some of the stress hormones that can be released by mothers who are anxious or stressed due to signals through the hypothalamic-pituitary-adrenal (HPA) area. The

RESEARCH METHODS

This study used a quasi-experimental methodology to determine the influence or effect of therapy. This study design only used one set of subjects. Observations were made before and after therapy. The anxiety of pregnant women was measured twice, before doing yoga and in the last week of doing yoga. Participants in this study were third trimester pregnant women who had no problems. The Pregnancy Related Anxiety

Questionnaire-revised (PRAQ-R2) questionnaire was used to assess anxiety levels. In this study, respondents were first tested for their anxiety levels using the PRAQ-R2 questionnaire before receiving treatment.

The treatment given was prenatal yoga twice a week for 4 weeks with a duration of 60 minutes for each treatment.

The statistical analysis used was the paired t-test to compare the level of anxiety before and after being given prenatal gentle yoga.

RESEARCH RESULTS

Prenatal yoga research on anxiety levels of primigravida in the third trimester provided the following results.

Table 1
Frequency Distribution Table of Respondents' Anxiety Levels Before Being Given Prenatal Gentle Yoga Treatment

Release of these stress hormones causes spasms of the birth canal and systemic vasoconstriction, which interferes with blood flow in the uterus, interferes with oxygen delivery in the uterine muscles, and triggers uterine contractions. This problem causes labor to last longer than expected, which causes fetal discomfort (Amalia et al., 2020).

Practicing yoga before pregnancy focuses on breathing while emphasizing safety and comfort, which provides several benefits for pregnant women. Prenatal yoga is a kind of exercise for the body, mind, and soul that helps pregnant women in flexing their joints and calming their minds, especially in the third trimester.

Anxiety	f	(%)
Mild Anxiety	8	33.3%
Moderate Anxiety	13	54.2%
Severe Anxiety	3	12.5%

The data in table 1, the group before being given prenatal yoga treatment shows that out of 24 respondents, 54.2% experienced moderate anxiety and 12.5% experienced severe anxiety.

Anxiety level is a reaction to danger from pain or external factors that are difficult to overcome and

help remind people of danger. Based on the data collected, 13 respondents experienced moderate anxiety. This is not expected because it will interfere with the health and growth of the fetus. And 13 respondents said that the elements that influence their anxiety are very complex, including age, environment, and situation. The results of the qualitative analysis showed that pregnant women experience various levels of anxiety, including concerns about whether the delivery will go smoothly and anxiety about the expected date of birth.

Daily activities such as feeling tense during pregnancy, becoming more sensitive and irritable, and having trouble sleeping are all affected by this level of anxiety. This supports the idea that pregnant women experience new anxieties related to childbirth and the responsibilities of motherhood during the third trimester (Amalia et al., 2020).

Table 2
Frequency Distribution Table of Respondents' Anxiety Levels After Being Given Prenatal Gentle Yoga Treatment

Anxiety	f	(%)
Mild Anxiety	16	66.7%
Moderate Anxiety	8	33.3%

Data in table 2, moderate anxiety levels decreased by 20.9%, while severe anxiety levels decreased by 100%.

India is where yoga first emerged about 4,000 years ago. The Sanskrit word for unity is the origin of the name yoga. In fact, yoga is the oldest comprehensive philosophy of life ever encountered by humans. Yoga promotes brain clarity, emotional stability, body awareness, and deep relaxation (Bingan, 2019)

Yoga has been shown to help women cope with anxiety, sadness, stress, back pain, and sleep problems. Pregnancy yoga is a yoga-based activity that can help improve flexibility, endurance, and breathing strength. This muscle flexibility is very important during labor for mothers who often feel afraid and panic (Amalia et al., 2020)

Pregnant women can prepare themselves physically and mentally for childbirth by practicing yoga during their pregnancy. It increases awareness of breath and body, reduces anxiety, and educates pregnant women on how to adjust to new conditions. Strengthens and relaxes the muscles involved in labor to better prepare the physical body, especially the birth canal, for the birth process.

Yoga is a mind-body practice that combines physical postures (Asana), breathing (Pranayama), and meditation. Yoga is a comprehensive method

that can be applied to every part of life, including pregnancy and childbirth. Yoga combines calming or relaxing, reflective, and meditative activities that are done through each physical movement or position (asana) and breathing exercises. This is in accordance with research (Ningrum et al., 2019) who found that practicing yoga in pregnant women can reduce anxiety with a probability value (p) of 0.03.

Table 3
Differences in Respondents' Anxiety Levels Before and After Prenatal Yoga Treatment

Variable	N	Mean	p-value
Pre-Test Score	24	25.16	0.001
Post-Test Value	24	18.83	

Data in table 3, the results of the analysis show that there is a difference in the level of anxiety of respondents before and after being given prenatal yoga treatment with a p value = 0.001. The null hypothesis is rejected because $p < 0.05$. The difference in anxiety levels is indicated by the average value of anxiety levels before treatment, which is

25.16. The average measurement of the post-test value is 18.83. There is a decrease in the mean/average value of anxiety levels by 6.33. Moderate anxiety levels decreased by 20.9%, and severe anxiety levels decreased by 100%.

This is in line with research by Yuniza et al., 2021, which found that prenatal yoga is a kind of exercise for the body, mind, and soul that can help pregnant women stretch their joints and relax their brains, especially during the third trimester. Pregnant women who practice prenatal yoga will reap the benefits of pregnancy that will help the natural, smooth, and healthy labor process. Yoga during pregnancy can help increase birth weight while reducing the risk of premature birth complications (Yuniza et al., 2021). And research by Putri (2019), yoga improves physical fitness, quality of life, self-efficacy during labor, interpersonal relationships, autonomic nervous system activity, comfort, and reduces pain or reduces pain during labor, so that labor time becomes shorter (Putri, 2019)

According to the researcher's analysis, the yoga movements given to pregnant women have been adjusted to their trimester of pregnancy; this series of modified yoga movements, if done routinely during pregnancy, can condition the physical and mental to be stronger, but also flexible and adaptable to various unpleasant situations when facing childbirth. Some movements that can help reduce anxiety include refocusing/hypnorelaxation at the

beginning of the meeting. Warming up, breathing exercises, and movements (Standing pose, Warrior pose I, Squatting pose, Cat and cow pose, and Butterfly pose).

Gentle pregnancy yoga practice ends with hypnorelaxation. Prenatal yoga is an alternative activity recommended for pregnant women. Based on various physical, mental and spiritual benefits.

Prenatal yoga is a classic yoga that has been modified for pregnant women by paying attention to movements that are not harmful to both the mother and the fetus. In the working area of the Kandangan Health Center.

DISCUSSION

Prenatal yoga given twice in a 4-week period has been shown to reduce maternal anxiety on average. This is in accordance with research in Klaten which showed that yoga during pregnancy reduces maternal anxiety.(Aryani et al., 2018). In line with other research in Makassar, it shows that prenatal yoga has an effect on reducing maternal anxiety.(Ashari et al., 2019). Likewise, research in Bandung stated that there was an influence of prenatal yoga on the anxiety of pregnant women in the third trimester (Mulyati & Zafariyana, 2018).

Pregnant women in the third trimester experience anxiety due to physical and psychological changes (Arlym & Pangarsi, 2021). Anxiety is a natural emotional disorder characterized by feelings of deep and persistent fear or worry.(Hawari, 2013). Yoga improves mood during pregnancy so that the mother is more comfortable in her pregnancy and prepares for childbirth.(Uebelacker et al., 2017). Systematic reviews and meta-analyses suggest that prenatal yoga can reduce symptoms of depression (Gong et al., 2015).

The body and mind of a pregnant woman undergo significant changes. Many women feel tired and sore during the first trimester, therefore moderate yoga and relaxation techniques and emphasis on pelvic alignment for good placental implementation. The second trimester is a good time to work on leg strength and spinal balance. So, this is the time to get stronger. During the third trimester (34-40 weeks). The woman will experience more rigorous changes as she develops rapidly and her body prepares for childbirth, so the emphasis is on spinal and pelvic strength and balance (Aprillia, 2020).

Yoga is a physical and mental activity that promotes peace of mind. Yoga for pregnant women, also known as prenatal yoga, promotes comfort by improving sleep quality, endurance, blood flow, and oxygen supply (Aprillia, 2020). This makes pregnant

women feel physically and emotionally healthy. Pregnant women who practice prenatal yoga release more relaxation hormones, making the mother's body feel more comfortable and ultimately providing peace.

Prenatal yoga is practiced in groups, allowing mothers to interact with other pregnant women and share stories. This makes mothers feel like they have friends, that they have the same problems as other pregnant women, and they can share experiences. This can make the mother's mind calmer.

Prenatal yoga exercises like *uttanasana*, *marjayasana*, *balasana*, *virabhadrasana*, and *parshvakonasana* improve spinal flexibility. These poses can improve the circulation of cerebrospinal fluid throughout the brain and spinal cord (Lau et al., 2015). Increased circulation of cerebral spinal fluid helps increase serotonin and endorphins, which act as body-to-body bridges for pain relief and will replace catecholamines. Yoga can inhibit the hypothalamus's ability to produce neuropeptides, which stimulate the pituitary gland to release adrenocorticotrophic hormone, which suppresses cortisol production. Cortisol levels decrease, thereby reducing anxiety (Field et al., 2013). Prenatal yoga can reduce stress hormones and increase immune biomarkers Ig A during pregnancy (Chen et al., 2017).

CONCLUSION

The effects of prenatal gentle yoga show that pregnant women in their third trimester who feel anxious during their pregnancy will experience a decrease in anxiety after attending 4 prenatal gentle yoga classes.

Based on these findings, prenatal yoga and hypnorelaxation can help pregnant women cope with their worries about childbirth. Even one session of prenatal yoga can help reduce anxiety. Prenatal yoga is more effective in reducing anxiety levels when done two or more times.

To avoid psychological impacts, health practitioners should provide more information about fear before birth. When the time comes for birth, you can seek information from the media or consult with parents and health specialists.

To avoid psychological impacts, health practitioners should provide more information about prenatal anxiety. When approaching labour, information about childbirth can be obtained through the media, both from parents and health workers.

SUGGESTION

For health services, especially health centers to conduct screening of the psychological state of

mothers with valid instruments and socialize to pregnant women that yoga is a form of physical exercise that is good to do and even these activities are applied or made routine activities to apply in order to provide holistic midwifery care.

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