

THE EFFECT OF PRENATAL YOGA ON THE MENTAL HEALTH OF THIRD TRIMESTER PREGNANT WOMEN

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ABSTRAK : PENGARUH PRENATAL YOGA TERHADAP KESEHATAN MENTAL IBU HAMIL TRIMESTER III

Latar Belakang: Ibu hamil adalah salah satu golongan kelompok yang rentan terkena masalah kesehatan mental karena perubahan yang dialami pada berbagai tahapan yang mempengaruhi kesehatan mentalnya. Kesehatan mental termasuk kecemasan kehamilan terbukti dapat dikurangi atau dihilangkan melalui latihan fisik yang direkomendasikan adalah yoga karena biaya rendah, mudah untuk dilakukan dan sangat bermanfaat untuk kebugaran fisik dan psikologi.

Tujuan: Menganalisis pengaruh prenatal yoga terhadap kesehatan mental ibu hamil trimester III di wilayah kerja Puskesmas Tekarang Kabupaten Sambas.

Metode: Metode penelitian menggunakan desain penelitian dengan quasi eksperimental menggunakan rancangan pre-post-test design. Sampel penelitian ini yaitu ibu hamil trimester III yang berkunjung saat pemeriksaan ANC berjumlah 20 orang yang terbagi menjadi 10 orang kelompok kontrol dan 10 orang kelompok intervensi. Teknik pengambilan sampel dengan teknik purposive sampling. Instrumen penelitian menggunakan kuesioner Hospital Anxiety and Depression Scale (HADS). Analisis bivariat menggunakan uji paired sample t-test

Hasil: Hasil penelitian didapatkan nilai Sig. (2-tailed) adalah 0.000, yang lebih kecil dari 0.05 (batas signifikansi) sehingga p-value yang sangat kecil ini menunjukkan bahwa ada perbedaan yang signifikan antara hasil pretest dan posttest.

Kesimpulan: Ada pengaruh prenatal yoga terhadap kesehatan mental ibu hamil trimester III di wilayah kerja Puskesmas Tekarang Kabupaten Sambas.

Saran: Diperlukan survey minat ibu hamil dalam mengikuti prenatal yoga, beserta faktor pendukung dan penghambatnya.

Kata Kunci : Prenatal yoga; kesehatan mental; ibu hamil; trimester III

ABSTRACT

Background: Pregnant women are a group vulnerable to mental health problems due to the changes experienced across various stages that affect their mental well-being. Mental health issues, including pregnancy-related anxiety, have been shown to be reduced or eliminated through recommended physical exercise, specifically yoga. This is because yoga is low-cost, easy to perform, and highly beneficial for both physical and psychological fitness.

Purpose: To analyze the effect of prenatal yoga on the mental health of third-trimester pregnant women in the working area of Tekarang Public Health Center, Sambas Regency.

Methods: The research method employed a quasi-experimental design using a pre-post-test design. The study sample comprised 20 third-trimester pregnant women who attended Antenatal Care (ANC) examinations. The sample was divided into 10 individuals for the control group and 10 for the intervention group. The sampling technique used was purposive sampling. The research instrument was the Hospital Anxiety and Depression Scale (HADS) questionnaire. Bivariate analysis was conducted using the paired sample t-test.

Results: The results of the study showed a Sig. (2-tailed) value of 0.000, which is smaller than 0.05 (the significance threshold). This very small p-value indicates a significant difference between the pretest and posttest scores.

Conclusion: There is an effect of prenatal yoga on the mental health of third-trimester pregnant women in the working area of Tekarang Public Health Center, Sambas Regency.

Suggestions: A survey should be conducted to determine pregnant women's interest in participating in prenatal yoga, along with the identifying supporting and inhibiting factors.

Keywords: prenatal yoga; mental health; pregnant women; third-trimester

INTRODUCTION

The care during pregnancy is continuously evolving in a comprehensive and holistic manner, both in rural and urban areas. This is part of the realization of the "Sustainable Development Goal (SDG)" program to reduce the incidence of mortality and morbidity in pregnant women (Hairuddin et al., 2024; Ningsih et al., 2023). The group of pregnant women is one of the populations vulnerable to mental health issues due to the changes experienced across various stages that affect their mental well-being (Melinda et al., 2023; Pasambo et al., 2023; Viandika, 2021; Zahria Arisanti, 2021).

Nearly one in five pregnant women are affected by mental health problems during the prenatal and postpartum periods. However, to date, pregnant women with psychological distress do not know how to cope with it. Meanwhile, health service providers, especially midwives, remain passive in managing mental health. Pregnant women tend to experience increased anxiety which can lead to psychological disorders, including anxiety, stress, insomnia, depression, or post-traumatic stress disorder. Psychological health disturbances during pregnancy increase the risk to the fetus, such as poor fetal development, premature birth, or Low Birth Weight (LBW) (Anggraeni et al., 2025; Christin & Syahri, 2022; Wahyuni et al., 2025).

Currently, many interventions are being developed and studied in an effort to improve the physical and mental health of pregnant women. Pregnancy provides a good opportunity for mothers to engage in body relaxation. One such intervention is practicing prenatal yoga to prepare pregnant women physically, psychologically, and spiritually for the delivery process. Yoga creates physical awareness and a deep sense of relaxation, coupled with stable emotions and a clear mind (Ariasih et al., 2023; Evrianasari & Yantina, 2020; Widowati & Dahlan, 2023).

Yoga relates to increasing self-awareness. As the gestational age advances, the mother's thoughts and attention begin to focus on what is considered the climax, thus the feelings of anxiety, stress, and depression that the mother experiences become more frequent approaching the labor process. This issue is compounded by a lack of knowledge and support from the family, as well as limited knowledge among pregnant women about prenatal yoga (Azward et al., 2021; Dewianti et al., 2025; Mehta et al., 2023; Septiana, 2023).

Based on a preliminary study conducted in the working area of the Tekarang Public Health Center, Sambas Regency, several pregnant women experience mental health disturbances, especially

those nearing delivery. The manifested symptoms include feeling anxious and depressed beyond normal limits. One of the triggering factors is the physical and psychological changes experienced by the pregnant women. The prenatal yoga conducted offers benefits for gaining experience and sharing experiences with the midwife. This can help pregnant women increase their self-confidence to face the physical and psychological changes they are undergoing.

The objective of this study is to analyze the effect of prenatal yoga on the mental health of third-trimester pregnant women in the working area of Tekarang Public Health Center, Sambas Regency. The urgency of this research is that pregnant women are a vulnerable group where the state of their health significantly influences the quality of the fetus they are carrying. Prenatal yoga is an alternative utilized by midwives to enhance relaxation and maintain the psychological stability of pregnant women.

RESEARCH METHODS

This research is a quantitative study utilizing a quasi-experimental design with a pre-post-test design approach. The intervention group consists of pregnant women who participate in prenatal yoga, while the control group comprises pregnant women who do not. The comparison of mental health levels between the intervention and control groups will be conducted to determine the effect of the given intervention. The study will be implemented in 2024 within the working area of the Tekarang Public Health Center, Sambas Regency.

The subjects of this research are third-trimester pregnant women attending Antenatal Care (ANC) examinations. The sampling technique used is purposive sampling. The inclusion criteria are primigravida, age range 20–35 years, and domicile within the Tekarang Public Health Center working area. The exclusion criteria include unwillingness to be a respondent, currently under doctor's supervision, or suffering from chronic or acute comorbidity. The sample size for each group is 10 pregnant women, thus the study will involve 20 pregnant women in total. The independent variable is prenatal yoga, and the dependent variable is the mental health of third-trimester pregnant women.

Data collection from respondents will be performed by administering a questionnaire before and after the intervention. The Hospital Anxiety and Depression Scale (HADS) questionnaire will be the instrument used to measure anxiety and depression in the general population. The advantage of HADS is that it is simple, quick, and easy to use. In the

subsequent stage, respondents will participate in prenatal yoga once a week for three sessions. HADS measurements were carried out before and after intervention was given to respondents. The analysis for this study will use univariate descriptive statistics and bivariate analysis employing the paired sample t-test using SPSS software.

RESEARCH RESULTS

Tabel 1
Frequency Distribution of Mental Health Status of Third Trimester Pregnant Women in the Control Group

Mental Health Status of Third Trimester Pregnant Women	Pretest		Posttest	
	f	%	f	%
Normal	2	20	9	90
Mild	8	80	1	10

Based on Table 1, concerning the mental health status of third-trimester pregnant women in the study, the pre-test results indicate that the majority of pregnant women (80%) experienced mild mental health issues, while only 20% were categorized as having a normal mental state. However, after the intervention, a significant change occurred in the post-test results, where 90% of the pregnant women achieved a normal mental state, and only 10% still experienced mild mental disturbances. These results demonstrate a substantial improvement in the mental health of the pregnant women following the intervention, with a total of 10 respondents at each stage.

Tabel 2
Frequency Distribution of Mental Health Status of Third Trimester Pregnant Women in the Intervention Group

Mental Health Status of Third Trimester Pregnant Women	Pretest		Posttest	
	f	%	f	%
Normal	2	20	10	100
Mild	8	80	0	0

Based on Table 2, the frequency distribution of mental health status for third-trimester pregnant women in the intervention group is shown, comparing the pre-test and post-test results. In the pre-test, the majority of pregnant women (80%) displayed a mild mental health status, while only 20% were in the normal category. However, after

the intervention was administered, a highly significant change occurred in the post-test, where all pregnant women (100%) exhibited a normal mental state, and no pregnant women remained with mild mental disturbances.

Tabel 3
Test of Normality

Group	Shapiro-Wilk		
	Statistic	df	Sig.
Pretest Result			
Control Group	.933	10	.479
Intervention Group	.930	10	.445
Posttest Result			
Control Group	.942	10	.573
Intervention Group	.942	10	.575

Based on Table 3, for both the control and intervention groups in the pre-test results, the Sig. values are 0.479 and 0.445, respectively, which are greater than 0.05. This indicates that the pre-test data for both groups are normally distributed. Furthermore, for the post-test results, the Sig. values for the control and intervention groups are 0.573 and 0.575, respectively, which are also greater than 0.05. This shows that the post-test data for both groups are also normally distributed. Therefore, based on the Shapiro-Wilk normality test results, it can be concluded that the data for both the control and intervention groups across the pre-test and post-test are normally distributed, as the Sig. value in every group is greater than 0.05.

Based on Table 4, the paired difference (mean difference) between the pre-test and post-test is 4.100, with a Standard Deviation of 1.447 and a Standard Error Mean of 0.324. Furthermore, the 95% Confidence Interval of the Difference ranges from 3.423 to 4.777, indicating that the true mean difference between the pre-test and post-test falls within this range. The t-value for the paired samples test is 12.669, with a degrees of freedom (df) of 19 (based on a sample size of 20). The Sig. (2-tailed) value is 0.000, which is smaller than the significance threshold of 0.05. Therefore, this very small p-value leads to the conclusion that there is a significant difference between the pre-test and post-test results. This confirms a significant effect of prenatal yoga on the mental health of third-trimester pregnant women in the working area of Tekarang Public Health Center, Sambas Regency. The prenatal yoga program was successful in significantly improving the mental health of the pregnant women.

Tabel 4
Analysis of the Effect of Prenatal Yoga on the Mental Health of Third Trimester Pregnant Women in the Working Area of Tekarang Public Health Center, Sambas Regency

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test Results Post-test Results	- 4.100	1.447	.324	3.423	4.777	12.669	19	.000

DISCUSSION

The observed reduction in anxiety and stress experienced by pregnant women following yoga participation can be explained by previous research findings that show yoga's ability to reduce anxiety and enhance psychological well-being in this population. Yoga can improve flexibility, alleviate lower back pain, and help pregnant women manage stress more effectively, which supports the findings of the present study (Maolinda et al., 2025; Natsir et al., 2024; Puspania et al., 2024). The physical activity involved in yoga helps promote relaxation, reduce muscle tension, and improve sleep quality, all of which contribute to a decrease in stress (Husaema et al., 2024; Yayuk Puji Lestari & Ika Friscila, 2023). These relaxation techniques aid in minimizing muscular tension, lowering blood pressure, and enhancing blood circulation and sleep quality, collectively contributing to the psychological well-being of pregnant women. Furthermore, yoga practice stimulates the production of endorphins, known as "happiness hormones," which can positively influence mood and reduce feelings of anxiety and depression (Azward et al., 2021; Hasanah et al., 2024; Mehta et al., 2023).

The prenatal yoga program supports the parasympathetic nervous system, which plays a role in alleviating the stress response. This finding is also consistent with research indicating that psychological stress during pregnancy can adversely affect both maternal and fetal health (Adnyani, 2021; Lestari & Friscila, 2022). Therefore, stress management through safe and non-pharmacological methods, such as yoga, is crucial for supporting the mental health of pregnant women (Miana et al., 2022; Pratama & Damayanti, 2022). This study provides robust evidence that prenatal yoga can be an effective approach to improve the mental health of pregnant women, which should be considered for integration into

maternal health programs at the public health center level.

The researchers' assumption is that these findings suggest prenatal yoga serves as an excellent alternative for pregnant women who are unwilling or unable to use medications to manage anxiety or stress. Given the potential side effects of drugs during pregnancy that could affect the fetus, the use of yoga as a non-pharmacological approach is highly relevant. Additionally, yoga can enhance pregnant women's body awareness regarding the physiological changes occurring, which, in turn, helps improve their mental preparedness for the labor process.

CONCLUSION

There is an effect of prenatal yoga on the mental health of third-trimester pregnant women in the working area of Tekarang Public Health Center, Sambas Regency.

SUGGESTION

A survey is needed to assess the interest of pregnant women in participating in prenatal yoga, along with the identification of supporting and inhibiting factors.

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