

THE EFFECTIVENESS OF PRENATAL YOGA IN REDUCING ANXIETY IN THIRD-TRIMESTER PREGNANT WOMEN'

Reni Yusman¹, Tika Kencana², Yulia Netri³, Lira Dian Nofita⁴

^{1,2,3,4} Program studi Pendidikan Profesi Bidan, STIKES Senior, Medan, Indonesia
Email correspondence* :: rerey_yusman@yahoo.com

ABSTRAK : EFEKTIVITAS YOGA PRENATAL DALAM MENGURANGI KECEMASAN PADA WANITA HAMIL TRIMESTER TIGA

Pada trimester akhir kehamilan, ibu hamil sering mengalami kecemasan yang dipicu oleh rasa takut akan kematian, perasaan bersalah, kekhawatiran bayi mengalami kelainan, rasa nyeri, kegelisahan, tanggung jawab sebagai orang tua, kondisi ekonomi keluarga, serta trauma dari pengalaman persalinan sebelumnya. Kecemasan dapat timbul akibat rasa gelisah, ketidaksiapan menghadapi peran sebagai orang tua, kondisi ekonomi keluarga, serta kekhawatiran terhadap proses persalinan yang dipengaruhi oleh pengalaman negatif sebelumnya. Tingkat kecemasan pada ibu hamil trimester ketiga dapat dikurangi melalui praktik yoga prenatal. Prenatal yoga bertujuan untuk mempersiapkan ibu hamil secara menyeluruh, baik secara fisik, mental, maupun spiritual. Latihan ini memberikan berbagai manfaat positif, seperti membantu meredakan stres, mengurangi kecemasan, mengurangi rasa nyeri dan ketidaknyamanan selama kehamilan, serta menurunkan intensitas nyeri saat proses persalinan.

Tujuan: Jenis penelitian yang digunakan yaitu pre eksperiment dengan rancangan one group pretest posttest design. Teknik sampling yang digunakan sesuai dengan kriteria inklusi dan eksklusi. Sampel dalam penelitian ini sebanyak 34 ibu hamil yang sehat jasmani dan rohani. Analisis data yang dilakukan dalam penelitian ini menggunakan uji Paired T-test.

Metodologi: Jenis penelitian yang digunakan yaitu pre eksperiment dengan rancangan *one group pretest posttest design*. Teknik sampling yang digunakan sesuai dengan kriteria inklusi dan eksklusi. Sampel dalam penelitian ini sebanyak 34 ibu hamil yang sehat jasmani dan rohani. Analisis data yang dilakukan dalam penelitian ini menggunakan uji *Paired T-test*.

Hasil Penelitian: Hasil penelitian terdapat adanya efektivitas yang signifikan $0.000 < (p=0.05)$, membuktikan bahwa adanya efektivitas antara prenatal yoga terhadap tingkat kecemasan ibu hamil trimester III.

Kesimpulan Dari hasil penelitian tersebut dapat disimpulkan bahwa adanya efektivitas prenatal yoga terhadap tingkat kecemasan ibu hamil trimester III di Kenagarian Jambak. Bagi ibu hamil, disarankan untuk rutin mengikuti kegiatan prenatal yoga terutama pada trimester III sebagai salah satu upaya mandiri dalam menjaga kesehatan mental dan mempersiapkan diri menjelang proses persalinan.

Kata Kunci : Kecemasan; Prenatal Yoga; Wanita hamil

ABSTRACT

Background: In the final trimester of pregnancy, expectant mothers often experience anxiety triggered by fears of death, feelings of guilt, concerns about fetal abnormalities, physical pain, restlessness, the responsibilities of becoming a parent, financial pressures, and trauma from previous childbirth experiences. Anxiety may also arise due to uneasiness, lack of readiness to assume the role of a parent, economic concerns, and fears surrounding labor influenced by negative past experiences. The level of anxiety in third-trimester pregnant women can be reduced through the practice of prenatal yoga. Prenatal yoga aims to comprehensively prepare pregnant women physically, mentally, and spiritually. This practice offers various positive benefits, such as helping to relieve stress, reduce anxiety, alleviate discomfort and pain during pregnancy, and decrease the intensity of labor pain.

Purpose: The type of research used is a pre-experimental study with a one-group pretest-posttest design. The sampling technique was based on inclusion and exclusion criteria. The sample consisted of 34 pregnant women who were physically and mentally healthy. Data analysis in this study was conducted using the Paired T-test.

Method : This study employed a pre-experimental research design using a one-group pretest-posttest approach. The sampling technique was carried out based on inclusion and exclusion criteria. The sample

consisted of 34 pregnant women who were physically and mentally healthy. Data analysis in this study was conducted using the Paired T-test.

Results: The results of the study showed a significant effectiveness with a p-value of $0.000 < (p = 0.05)$, indicating that prenatal yoga has a significant effect on reducing anxiety levels in third-trimester pregnant women

Conclusion: Based on the results of the study, it can be concluded that prenatal yoga is effective in reducing anxiety levels among third-trimester pregnant women in Kenagarian Jambak. For pregnant women, it is recommended to regularly participate in prenatal yoga activities, especially during the third trimester, as an independent effort to maintain mental health and prepare for the childbirth process.

Keywords: Anxiety; Prenatal Yoga; Pregnant Women.

INTRODUCTION

Pregnancy is a natural and physiological process. Every woman who has healthy reproductive organs and experiences menstruation, as well as engages in sexual intercourse with a man who has healthy reproductive organs, has a high likelihood of becoming pregnant. During pregnancy, various physiological and psychological changes will occur (1).

Anxiety in pregnant women, particularly in the third trimester, can be caused by various factors such as fear of death, feelings of guilt, concerns about the baby being born with abnormalities, physical pain, restlessness, unpreparedness to take on the role of parenthood, economic pressure, as well as fear of the childbirth process influenced by previous negative experiences. This anxiety is not only experienced by first-time pregnant women (primigravida) but also by those who have had previous pregnancies (multigravida), as feelings of anxiety can still arise despite having gone through pregnancy before.

**The study by Ashari (2018) found that prenatal yoga plays a significant role in reducing anxiety levels in pregnant women entering their third trimester. This research showed that at the beginning of the study, many pregnant women experienced moderate anxiety, with 50% in the intervention group and 40% in the control group. After conducting two intervention sessions for each pregnant woman using a questionnaire, there was a substantial change in anxiety levels in the intervention group, with a significant decrease in the average score ($p=0.000$), whereas in the control group, the difference in the average score was not significant ($p=0.162$) (2).

If a pregnant woman experiences excessive anxiety, it can have negative impacts such as difficulty sleeping, prolonged stress, depression, lack of focus during activities, memory disturbances, and emotional changes characterized by irritability, which may potentially trigger uterine contractions. Further consequences of this condition include

increased blood pressure, risk of preeclampsia, premature birth (less than 37 weeks), and babies being born with low birth weight (3).

Data from the World Health Organization shows that the prevalence of pregnant women experiencing anxiety during pregnancy is 10%, and this increases to 13% as childbirth approaches (4). Data from the Ministry of Health of the Republic of Indonesia shows that the prevalence of pregnant women experiencing anxiety is around 43.3%, and those experiencing anxiety in facing childbirth is around 48.7% (5).

The anxiety level in third-trimester pregnant women can be minimized by practicing prenatal yoga and pregnancy exercises that have been organized by the government in pregnancy classes. The purpose of prenatal yoga is to prepare pregnant women physically, mentally, and spiritually. The positive effects of prenatal yoga for pregnant women include reducing stress, anxiety, pregnancy-related pain, discomfort, and labor pain (6). The coverage of Community Health Centers (Puskesmas) that conduct pregnancy classes is 77.91%, with at least 50% in villages or urban wards (7). This study aims to determine the effectiveness of prenatal yoga on the anxiety levels of third-trimester pregnant women.

RESEARCH METHODS

This study employed a pre-experimental method with a one-group pretest-posttest design. The population in this study included all pregnant women residing in Kenagarian Jambak, Lubuk Sikaping District. The research sample consisted of pregnant women with gestational ages between 28 and 37 weeks, without pregnancy complications, and not facing family issues. The sample size was determined using the Lemeshow formula, resulting in a total of 34 respondents. The independent variable in this study is prenatal yoga, while the dependent variable is third-trimester pregnant women. The sample criteria in this study include both inclusion and exclusion criteria.

The inclusion criteria are third-trimester pregnant women and those who are present during the study, while the exclusion criteria are women who are not in their third trimester of pregnancy and pregnant women who are unable to attend during the study.

The data collection process was carried out when pregnant women registered to participate in the prenatal yoga class by filling out a questionnaire prepared by the researcher. The instrument used to measure anxiety levels was the standard Hamilton Anxiety Rating Scale (HARS) questionnaire. The data obtained from the respondents' questionnaire responses were then analyzed using univariate and bivariate analysis methods. The statistical test applied in this study was the paired t-test to determine whether or not the intervention provided was effective.

RESEARCH RESULTS

Respondent Characteristics

Table 1
Frequency Distribution of Respondent Characteristics

Category	Frequency	%
Age		
<20 years	0	0
20–35 years	24	71
35 years	10	29
Education		
SMP	3	9
SMA	14	41
PT	17	50
Occupation		
IRT	7	20
PNS	5	15
Swasta	12	35
Others	10	21

Based on Table 1, the majority of respondents fall into the productive age category of 20–35 years. Respondents with junior high school education (SMP) account for 3 individuals (9%), respondents with senior high school education (SMA) account for 14 individuals (41%), and respondents with higher education account for 17 individuals (50%). Meanwhile, respondents who are employed make up 71%.

Univariate Analysis

The purpose of univariate analysis is to describe the characteristics of each variable without explaining any relationships, influences, or causal effects, as presented below:

Table 2
Frequency Distribution of Pretest and Posttest Variables of Anxiety Levels in Third-Trimester Pregnant Women

Anxiety Level	Pretest		Posttest	
	f	%	f	%
Low	7	20	0	0
Moderate	19	56	0	0
Severe	8	24	0	0
Very Severe	0	0	0	0
No Anxiety	0	0	34	100

Based on Table 2 above, it can be observed that there is a decrease in the anxiety levels of respondents after receiving the intervention by attending the prenatal yoga class. This is indicated by the pretest and posttest results. Before the respondents received the intervention, the majority had a moderate level of anxiety, with 19 respondents or 56%. After the intervention, the respondents' anxiety levels decreased, with all respondents showing no anxiety.

Bivariate Analysis

This analysis was conducted to determine the difference in mean scores between two measurements within the same group, namely before and after the intervention through participation in prenatal yoga classes. A normality test was first performed using the Kolmogorov-Smirnov method, which showed that the significance value in the pretest group was 0.165 ($P > 0.05$) and in the posttest group was 0.137 ($P > 0.05$), indicating that the data were normally distributed. Therefore, the statistical test used in this analysis was the Paired T-test, as explained below:

Table 3
Effectiveness of Prenatal Yoga on Anxiety Levels of Third-Trimester Pregnant Women

Ranks	N	Mean	t	P
Negative Ranks (Posttest>Pretest)	0			
Positive Ranks (Posttest<Pretest)	34	14.559	17.346	0.000
Ties (Posttest=Pretest)	0			

Based on Table 3 above, the results of the bivariate analysis using the Paired T-test showed a significant positive rank of 0.000, which is less than the significance level (p) = 0.05; therefore, H_0 is

rejected. It can be concluded that there is a significant difference in the anxiety levels of third-trimester pregnant women before and after participating in prenatal yoga. The mean rank in the table shows positive ranks of 14.559, and the t-value is positive at 17.346, indicating that the anxiety level of mothers before participating in prenatal yoga was higher compared to after attending prenatal yoga. Thus, it can be concluded that "there is an effectiveness of prenatal yoga on the anxiety levels of third-trimester pregnant women in Kenagarian Jambak, Lubuk Sikaping District.

DISCUSSION

The anxiety level in third-trimester pregnant women can be minimized by practicing prenatal yoga and pregnancy exercises organized by the government in pregnancy classes. The purpose of prenatal yoga is to prepare pregnant women physically, mentally, and spiritually. The positive effects of prenatal yoga for pregnant women include reducing stress, anxiety, pregnancy-related pain, discomfort, and labor pain.(6).

Pregnancy yoga exercises are highly beneficial for pregnant women. Yoga can also reduce stress levels and the tension experienced by the body. Prenatal yoga classes can be prepared for expectant mothers by incorporating proper breathing techniques and meditation practices to help achieve balance and body relaxation (8). The process of pregnancy and childbirth can become easier by promoting flexibility and strength. In addition, yoga activities can strengthen the muscle system, stimulate blood circulation, and promote relaxation (9).

Pregnancy yoga exercises during pregnancy can help maintain physical and emotional health. A pregnant woman who practices regularly, about three times per week for 10 weeks, can improve the elasticity and strength of the pelvic ligaments, as well as the leg and hip muscles. This can help reduce pain during labor until the baby is born, increase maternal comfort within the first two hours postpartum, and reduce the risk of prolonged labor (10).

Based on the research findings, it is known that before the intervention was given, most respondents experienced moderate levels of anxiety. However, after participating in the intervention, there was a decrease in the respondents' anxiety levels, or their anxiety was successfully managed. This is indicated by a decrease in the average anxiety score, from a mean value of 23.65 during the pretest to 9.09 in the posttest.

The results of this study are in line with the research by Ashari et al. (2019), which found that prenatal yoga exercises play an important role in reducing the anxiety levels of pregnant women entering their third trimester. This research demonstrated that, at the beginning of the study, many pregnant women experienced moderate anxiety—50% in the intervention group and 40% in the control group. After conducting two intervention sessions for each pregnant woman using a questionnaire, there was a significant decrease in the average anxiety score in the intervention group ($p=0.000$), whereas the difference in the average score in the control group was not significant ($p=0.162$).

According to Yuniza (2021), the anxiety level in pregnant women can be reduced through non-pharmacological methods, including prenatal yoga, which is easy to practice and can be done at home (11). Prenatal yoga is one of the exercises for pregnant women that can help reduce anxiety and provide a sense of safety. Prenatal yoga exercises are beneficial for pregnant women as they focus on breathing rhythm while prioritizing safety and comfort. Prenatal yoga is a form of exercise for the body, mind, and mental health of the mother, and it is highly effective in calming the mind during the third trimester (11).

The study by Maharani and Hayati (2020) used the Hamilton Anxiety Rating Scale (HARS) as the anxiety measurement tool. On average, pregnant women experienced severe anxiety before practicing prenatal gentle yoga, whereas after performing prenatal gentle yoga, they experienced mild anxiety. This indicates that prenatal gentle yoga has an effect on reducing anxiety in pregnant women when facing childbirth, with a p -value <0.001 (12).

The study by Sulistiyaningsih et al. (2020), which used the Hamilton Anxiety Rating Scale (HARS) as an anxiety measurement tool, showed a significant effect before and after performing prenatal gentle yoga, with a significance value (2-tailed) = 0.000. This indicates that prenatal gentle yoga is effective in reducing the anxiety levels of third-trimester primigravida pregnant women in facing childbirth (13).

The study by Yuniarti and Eliana (2020), using the HARS instrument, showed a decrease in anxiety levels, from 19.67 before the intervention to 10.80 after the intervention. Bivariate analysis obtained $p=0.005 < \alpha 0.05$. This indicates that prenatal yoga exercises have an effect on the readiness of primigravida mothers in facing childbirth (14).

The conclusion from the explanation above indicates that “there is an effectiveness of prenatal yoga on the anxiety levels of third-trimester pregnant women.” This suggests that practicing prenatal yoga can effectively reduce anxiety levels in third-trimester pregnant women. Thus, these findings highlight the importance of prenatal yoga in helping pregnant women reduce anxiety, which significantly impacts their health and well-being during pregnancy.

CONCLUSION

The analysis results show that there is an effectiveness of prenatal yoga on the anxiety levels of third-trimester pregnant women in Kenagarian Jambak, Lubuk Sikaping District, with a p-value of 0.000 ($P < 0.05$).

SUGGESTIONS

It is expected that this study can serve as a source of information or knowledge about the implementation of prenatal yoga as an alternative for third-trimester pregnant women experiencing anxiety. It can provide information or insights for healthcare professionals, particularly at the Polindes of Kenagarian, to establish prenatal yoga classes that offer both physical and psychological benefits during pregnancy, especially in reducing anxiety and pregnancy-related depression. Furthermore, it can serve as a medium of information and motivation for clients and their families regarding the reduction of anxiety levels in third-trimester pregnant women through regular participation in prenatal yoga. This study can also be used as baseline data for further development and contribute additional information or references for researchers and the community, particularly for studies related to “The Effectiveness of Prenatal Yoga on Anxiety Levels of Third-Trimester Pregnant Women.”

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