



The impact of relaxation in prenatal yoga against the anxiety level in pregnant women

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ABSTRAK

Latar Belakang: Tingkat kecemasan dan stres berdampak pada hasil persalinan seperti bayi prematur, BBLR, kelainan bayi, dan infeksi. Terapi komplementer menjadi tambahan pelayanan di banyak pelayanan kesehatan karena adanya kebutuhan masyarakat yang lebih sadar akan kesehatannya. Yoga prenatal merupakan salah satu terapi komplementer yang diberikan kepada ibu hamil agar mampu memberikan ketenangan dan kenyamanan pada ibu hamil serta mampu menurunkan tingkat kecemasan pada saat persalinan.

Tujuan: Mengetahui pengaruh relaksasi dalam prenatal yoga terhadap tingkat kecemasan pada ibu hamil.

Metode: Penelitian ini dilakukan dengan metode quasi eksperimental pre and post test dengan pendekatan cross sectional. Sampel dalam penelitian ini adalah ibu hamil trimester III sebanyak 16 responden setiap kelompok yang dibagi menjadi 2 kelompok dengan teknik purposive sampling. Perlakuan diberikan intervensi pernapasan yoga dan kontrol sesuai standar asuhan, tingkat kecemasan kedua kelompok diukur sebelum dan sesudah intervensi menggunakan HARS. Student t test digunakan untuk mengetahui ada tidaknya perbedaan antara kelompok perlakuan dan kelompok kontrol dalam hasil pengukuran kecemasan. Analisis varians digunakan untuk membandingkan antara 2 kelompok, apakah terdapat pengaruh kecemasan, uji Chi Square intervensi untuk mengetahui ada tidaknya perbedaan pada 2 kelompok perlakuan dan kontrol.

Hasil: Yoga prenatal berpengaruh dalam menurunkan kecemasan ibu hamil dalam mempersiapkan persalinan, hasil analisis menggunakan chi-square didapatkan $p < 0.001$ RR Score = 5.64 pada 95% CI 1.99-15.93 yang artinya perlakuan relaksasi dalam prenatal yoga berpengaruh signifikan terhadap penurunan kecemasan ibu hamil ($p < 0,05$). Berdasarkan analisis bivariat menunjukkan bahwa kelas prenatal yoga berpengaruh signifikan terhadap penurunan kecemasan ibu hamil sebesar 5,64 kali dibandingkan dengan metode konvensional.

Kesimpulan : Tingkat kecemasan ibu hamil dalam menghadapi persalinan pertama dengan mengikuti relaksasi dalam prenatal yoga sebelum dan sesudah diberikan perlakuan adalah sedang, menurun hingga ringan, sehingga diharapkan dapat memberikan informasi, menambah pengetahuan dan sebagai masukan untuk meningkatkan kesadaran diri dalam mengolah diri, khususnya kecemasan dalam mempersiapkan persalinan.

KATA KUNCI: relaksasi; prenatal yoga; kecemasan; persalinan

ABSTRACT

Background: The anxiety and stress level impact the outcome of labor such as premature baby, LBW, infant abnormality, and infection. Prenatal Yoga is one of the complementary therapies given to pregnant women so that able to give well-being and serenity to the pregnant women and able to decrease the anxiety level at the time of labor.

Objectives: To understand the impact of relaxation in prenatal yoga against the anxiety level in pregnant women.

Methods: This research is conducted with quasi-experimental pre-and post-test method with cross sectional approach. The sample is 3rd trimester pregnant women as amount as 16 respondents each group with purposive sampling technique. The treatment is given Yoga Breathing intervention and control according to the standard of care, both groups' anxiety levels are measured before and after the intervention using HARS. Student t test is used to determine whether there is a difference between the treatment group and the control group in the results of anxiety measuring. Analysis of variance is used to compare between 2 groups, whether there is an effect of anxiety on the Chi Square test intervention to determine whether there is a difference in the 2 treatment and control groups.

Results: The results of the analysis using the chi-square showed that $p < 0.001$ RR Score = 5.64 at 95% CI 1.99-15.93, which means that prenatal yoga treatment has a significant effect on decreasing the anxiety in pregnant women ($p < 0.05$). Based on the bivariate analysis, it shows that prenatal yoga classes have a significant effect on reducing anxiety in pregnant women by 5.64 times compared to conventional methods.

Conclusion: the level of anxiety of pregnant women in facing the first labor by following relaxation in prenatal yoga before and after treatment is moderate, decreases to mild.

KEYWORD : relaxation; prenatal yoga; anxiety; labor

Article Info:

Article submitted on February 05, 2021

Article revised on April 09, 2021

Article received on June 15, 2021

DOI: [http://dx.doi.org/10.21927/jnki.2021.9\(2\).82-87](http://dx.doi.org/10.21927/jnki.2021.9(2).82-87)

INTRODUCTION

In today's modern lifestyle there is an increasing level of stress, depression and anxiety. Especially for women, pregnancy is a time when women experience many changes in themselves, including changes in body shape, organ function, emotions and social life in the family and the external environment. Other than providing physical changes, pregnancy also (1). The psychological burden on a pregnant women is more common in the third trimester of gestation than in the first trimester and second trimester. In conditions of heavy psychological burden that helps pregnant women, which can affect the life of the fetus in the womb and the abnormalities that arise depending on the time of the psychological burden, if the disturbance begins to arise in pregnancy it can affect the growth of the fetus in the uterus, causing stunted or intrauterine growth restriction (IUGR), until the pregnancy heart rate disturbances in pregnancy have given birth (2).

Anxiety often occurs in pregnant women and it is normal. However, if the stress occurs for a long time or throughout pregnancy, stress can have negative effects such as insomnia, dizziness, and triggers the cortisol hormone and other stress hormones. This has a negative effect on the work of the heart which can result in hypertension and heart disease and of course will have a negative impact on the health of the fetus. Stress can increase the risk of premature babies and LBW (3).

Sports recommended for pregnant women to maintain the health of the body and the fetus in order to develop well and also to keep the mother's emotion stable are walking, cycling, swimming, pregnancy exercise, hypnobirthing and yoga (4). Yoga is an art movement by the body and breathing originating from India. Yoga can be done by anyone, including pregnant women. Pregnant yoga helps a mother to connect with her baby and her own body through deep practice and build awareness during the birth or delivery process (5).

The results of Wijayanti's (2014) research on the effectiveness of yoga pregnancy anxiety in third trimester pregnant women show that there is an average difference in anxiety reduction with a paired sample test before and after pregnancy yoga exercise on the first day of 6.86%, on the third day as much as 1.46% with bivariate analysis showing the value of P value = 0.000, so this shows that there is a difference in decrease in decreased anxiety on the first day and the third day before and after being given pregnancy yoga exercises. A very clear difference in Wijayanti's (2014) study is the measurement of anxiety using the DASS questionnaire which is only visible based on sleep quality, while in this study it measures the overall level of anxiety(6).

The purpose of this study was to determine the effect of breath relaxation therapy in prenatal yoga on the anxiety level of pregnant women in facing childbirth. Prenatal Yoga is a form of midwifery service for pregnant women in an effort to overcome discomfort, optimize fetal position and prepare pregnant women for labor so that it is expected to reduce the level of anxiety of pregnant women.

MATERIALS AND METHODS

The study was conducted in Sleman. The population of the study consisted of pregnant women who had checkup at PMB. The sampling of the study used simple random sampling. Simple random sampling was done so that the allocation of the number of intervention group and control group became balanced. The type of the study was quasi- experiment using pretest posttest control group design, namely treatment group and control group. In the treatment group, they were treated with gentle yoga prenatal therapy for pregnant women starting from 20 weeks once in a week for at least 4 meetings. The control group consisted of pregnant women starting from 20 weeks with pregnancy care in accordance with standard operational procedure (SOP). Measurement of

anxiety was done before and after intervention or administration of pregnancy care in accordance with SOP. Data were collected using observation method with questionnaire. The number of samples of the study was 16 respondents classified into 2 groups with purposive sampling technique. Group A was given intervention in form of yoga breathing and Group B was in accordance with care standard, the anxiety of both groups was measured before and after intervention using HARS. The data collected were then processed and analyzed analytically. The statistic test used was: student t-test used to investigate whether there was a difference between the treatment group and the control group in terms of the result of anxiety measurement. Variance analysis was done to compare the two groups, whether anxiety had an effect on intervention. Chi-squared test was done to investigate whether there was a difference between the treatment group and the control group.

RESULTS AND DISCUSSION

The study discussed about the comparison between pregnant women's anxiety using relaxation method in prenatal yoga and conventional method. Besides that, it also discussed about the effect of anxiety score changes between the prenatal yoga group and the control group.

Mother's Anxiety in Treatment Group and Control Group

The score obtained from pretest and posttest on average anxiety of the pregnant women in both groups can be seen from the following table. The difference between average score of anxiety of the two groups before and after can be observed. The score of anxiety pretest was almost the same, with median of prenatal yoga group 57.5 and median of control group 56.5, that means the score of anxiety of the two groups was moderate (STAI Y-1 \geq 40). The result of posttest median of prenatal yoga group was 36.4 and control group

Table 1. Comparison between pregnant women's anxiety in the two groups

Anxiety Variable	Group		Zmw*	p Score
	Prenatal Yoga (n=16)	Control (n=16)		
Pre-test				
Median	57.5	56.5	0.834	0.422
Range (min-max)	50-70	50-65		
Post-test				
Median	36.4	62.5	4.369	<0.001
Range (min-max)	35-66	49-89		
Difference between Before and After	Zw** = 3.482 p = <0.001	Zw = 2.955 p = 0.003		

Description: *: Zmw = Mann-Whitney Test
Zw = Wilcoxon Test

62.5 that means the anxiety score of prenatal yoga treatment group decreased while control group increased. The difference of decrease before and after treatment in treatment group was median 21.1 and in control group.

Relaxation in prenatal yoga is one of hypnotherapy methods that can break anxiety cycle in controlling anxiety reactions. Relaxation as one of alternative therapies can be given to pregnant women because it can reduce stress, pulses, and blood pressure that have problems. Anxiety in an extreme form can disturb someone in her daily life that can cause negative feelings such as fear, worry about the baby and her ability to be a mother. Relaxed condition is signified by decrease of blood pressure. Techniques in prenatal yoga use positive affirmations that can be done by the patients themselves without the help of a therapist so it is very convenient and can reduce stress and anxiety in daily life.

Pregnant women experience significant changes in physiological and psychological functions, the self-processing of this new state causes losses (7). Physical changes in pregnant women such as change in body shape with a large body, the talent for acne on the face or facial skin peeling. Psychological changes that occur in pregnant women, among others, are caused by feeling anxious before birth, concentration on changes in relationships with partners and anxiety about financial problems. At the same time, you

will also feel anxiety at the birth of a baby and the beginning of a new phase in the life of the mother to be. According to Nurdiana, anxiety is more appropriate for pregnant women due to the presence of the hormone progesterone. In addition to making pregnant women feel anxious, the increase in hormones also causes disturbances and makes pregnant women tires quickly (8).

The hormone that increases during pregnancy is the hormone adrenaline. The hormone adrenaline can cause dysregulation of the body's biochemistry, causing physical tension to appear in pregnant women such as irritability, anxiety, inability to concentrate, doubt and maybe even want to run away from the realities of life(9). According to Pieter and Lubis, pregnant women will experience forms of psychological changes, namely emotional changes, tend to be lazy, sensitive, easily jealous, asking for more attention, feeling uncomfortable, depression, stress, and experiencing anxiety, so that therapy is needed that can lowering the level of anxiety(10).

Effect of Prenatal Yoga in Reducing Anxiety

The effect prenatal yoga in reducing anxiety can be seen from Table 2 as the following women's anxiety in preparing for labor, the result of analysis using chi-squared test indicates that $p < 0.001$ value of $RR = 5.64$ on 95% CI 1.99-15.93 that means prenatal yoga treatment had a significant effect on decrease of pregnant women's anxiety

Table 2. Prenatal yoga class had an effect on decrease of pregnant.

Group	Anxiety Level				Total	X2	p Score	RR	95%CI	
	Moderate		Low							
	n	%	n	%						
Prenatal Yoga	3	18.75	13	81.25	16	100	21.3	<0.001	5.6	1.99-15.93
Conventional	14	87.5	2	12.5	16	100				

($p < 0.05$). Based on bivariate analysis, it indicates that prenatal yoga class had a significant effect on decrease of pregnant women's anxiety for 5.64 times more than conventional method.

DISCUSSION

The bivariate analysis done indicates that prenatal yoga class had a significant effect on decrease of pregnant women's anxiety for 5.64 times more than conventional method. Prenatal yoga class had greater effect in decreasing the anxiety score in pregnant women who prepared for labor compared to conventional method that means the hypothesis was accepted or tested.

The more frequently a pregnant woman did prenatal yoga, the lower her anxiety level facing labor. When doing yoga where there is a relaxation technique that can reduce anxiety, when an individual is stressed and anxious, sympathetic nerves work, while when an individual is relaxed, parasympathetic nerves work. The condition when sympathetic nerves work under stress and anxiety will trigger heartbeats and breaths and will cause narrowing of peripheral blood vessels and widening of central blood vessels. On the contrary, parasympathetic nerves decrease the functions increased by sympathetic nerves and increase the functions decreased by sympathetic nerves, so anxiety and stress can be reduced (11).

Sports recommended for pregnant women to maintain the health of the body and the fetus in order to develop properly and also to keep the mother's emotions stable are walking, cycling, swimming, pregnancy exercise, hypnobirthing and yoga (5). Yoga during pregnancy can relieve edema and cramps that

often occur in the last months of pregnancy, help baby position and movement, improve digestive system and appetite, increase energy and slow down metabolism to restore calm and focus, improve sleep quality, reduce nausea, morning sickness and mood, relieves tension around the cervix and birth canal, which focuses on opening the pelvis to facilitate labor, assists in postnatal care by restoring the uterus, stomach and pelvic floor, reducing tension, anxiety and depression during pregnancy, puerperal and puerperal delivery breast discomfort (11).

This results of this study are the same as Wijayanti's research that there is a difference in the average reduction in anxiety with the paired sample test before and after pregnancy yoga exercise with bivariate analysis showing the value of a P value = 0.000, this indicates that there is a difference in decreased anxiety before and after being given yoga pregnancy. The difference with this study can be seen in the anxiety measuring device and the anxiety difference test tool (6).

CONCLUSION AND RECOMMENDATION

Anxiety level of pregnant women in facing their first labor using conventional method before given treatment was moderate and after given treatment remained the same, namely moderate. Anxiety level of pregnant women in facing their first labor by attending relaxation in prenatal yoga before given treatment was moderate and after given treatment with some therapies and affirmations decreased, namely low. Midwifery care in giving prenatal yoga class could give an effect on the anxiety level of pregnant women in facing their first labor by decreasing the anxiety

level for 56.4 times greater than conventional method. The study is expected to be developed further by comparing the effect on duration of labor and labor outcome and baby.

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