

Original Research Report

Efficacy of Prenatal Yoga on Second Stage Progress in Third Trimester Pregnant Women

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Abstract: The study about the efficacy of yoga on second stage progress in third trimester pregnant. Labor is a journey process that will be experienced by pregnant women at the end of pregnancy after entering the age of 36 weeks under normal conditions. Labor will cause feelings of worry for a mother, but childbirth can be passed safely and comfortably without trauma. Prenatal yoga is considered as an alternative to non-conventional efforts to help pregnant women prepare physically, mentally and spiritually for the birth process. This study aims to determine the effect of prenatal yoga on the length of the second stage of labor at Mitra Sehat Mandiri Clinic. The study was conducted with an analytical design with a quasi-experimental primigravida method in the third trimester with a sample of 30 pregnant women who were divided into two groups, namely 15 maternity mothers who attended prenatal yoga and 15 who did not participate in prenatal yoga. Data analysis used independent t statistical test. The average length of the second stage of labor for women who took part in prenatal yoga was 21.66 with a standard deviation of 1.17, while those who did not do yoga were 42.76 with a standard deviation of 2.98. The conclusion is that there is an effect of third trimester yoga exercise on the length of the second stage of labor in mothers with P value = 0.000. Mothers who practice prenatal yoga before delivery will be better prepared to face labor, focus their thoughts and provide inner peace.

Keywords: Effect of Prenatal Yoga, Pregnant Women, Third Trimester Pregnant.



1. Introduction

Pregnancy is a time when a woman carries an embryo or fetus in her body [1]. Pregnancy is defined as a condition in which there are dramatic changes in physiological, psychological, and adaptation in women [2]. Pregnancy is a physiological process, but during pregnancy, a pregnant woman requires midwifery care during pregnancy [3]. Health evaluation during pregnancy is very necessary through regular inspections [1]. During the process of pregnancy, a pregnant woman can experience some physical discomfort [4]. Formal paraphrase. This situation sometimes interferes with the activities of pregnant women. Pregnant women who experience discomfort can lead to pathological conditions. This should be addressed immediately with appropriate obstetric management [5].

In the process of pregnancy, sometimes a pregnant woman feels happy and happy because she will become a mother and a parent [6]. Feelings of sadness and disappointment also often arise because after conception, the levels of the hormones progesterone and estrogen will increase, which is one of the factors of discomfort [7]. In particular, mothers who are primigravida will often feel anxious and worried about their pregnancy [8]. The process of adapting to this change must be prepared carefully because it has an important role in the delivery process.

Exercise can reduce the effects of anxiety and make the body more prepared for childbirth [9]. The recommended exercise during pregnancy is light exercise. Sport is a form of physical activity that is beneficial in developing the body's muscles. In addition, exercise can increase muscle elasticity [10]. Exercise is also a form of coping that can prevent physical stress during pregnancy [11] [12]. Sports activities that can be done during the prenatal period are yoga [13].

2. Literature Review

Yoga is a sport that trains the body at its best. Yoga not only trains the muscles, but also helps to understand how the body works. Breathing exercises are the most important element in doing yoga [14]. Yoga helps mothers relax, and relaxation inhibits the increase in sympathetic nerves, reducing the amount of hormones that cause body dysregulation [15]. In a study, it was stated that the influence of yoga was able to facilitate the labor process in the first stage of labor [16].

Data from the East Java profile in 2019 shows the total coverage of normal delivery assistance carried out by health workers reaches 97%. This figure has increased compared to 2018, reaching 95%. The coverage of delivery assistance by health workers in health facilities is included in the MSS indicator (Minimum Service Standards) which is expected to reach 100%. Thus, the province of East Java has not yet achieved 100% for its MSS indicators [17].

Based on these data, delivery with action is still carried out in the delivery process for cases that have an emergency score. This can occur due to complications during pregnancy or delivery. Another factor is at the request of the patient to perform a CS surgery on the grounds that he is afraid to face a long disorder and the pain during his procedure.

Research on prenatal yoga done by researchers is based on previous journals done by previous researchers. research conducted by Gemini et al in 2019 with the title of research on the influence of the birthing ball on the duration of the 1st active phase in primigravidas with a total sample of 20 primigravidas adjusted to the inclusion criteria. Based on the results of the data analysis, it was found that there is an influence of the birthing ball on the duration of the 1st active phase in primigravida [18]. Further research conducted by Anggit et al in 2020 which has the title research on the influence of prenatal yoga on uterine contractions and changes in endorphin hormone levels in primigravidas shows that the results of prenatal yoga research can affect the length of labor so that the mother is faster, uterine contractions become stronger and there is an increase in hormone levels endorphins. In addition, in line with the research done by. From the references above, it can be concluded that prenatal yoga can help reduce pain and help facilitate childbirth. So that researchers are interested in doing research on prenatal yoga for second stage labor. As one of the ways in the development of knowledge and finding new things from research related to the development of pregnancy complementary therapy, namely prenatal yoga.

3. Methods

The research used is a quasi-experimental design with a two-group post-test approach that uses the control group to compare with the treatment group. This research was conducted at Mitra Sehat Mandiri Clinic for 3 months. The population used in the study were 30 pregnant women respondents. Of the 30 respondents divided into 15 control groups and 15 treatment groups. Furthermore, the sampling was carried out by purposive sampling technique according to the inclusion and exclusion criteria. Analysis

of the data used in this study is to use a two-mean difference test using a different test using an independent t test.

4. Result and Discussion

Table 1, Table 2 and Table 3 shows the socio-demographic characteristics of respondents.

Table 1. Frequency Distribution of Respondent's Characteristic Based On Parity

Parity	Treatment Prenatal Yoga Group	Control Prenatal Yoga Group
Primiparous	10	11
Multiparous	5	4

Table 2. Frequency Distribution of Respondent's Characteristic Based On Age

Age (Year)	Treatment Prenatal Yoga Group	Control Prenatal Yoga Group
< 20	2	1
20-35	11	12
>35	2	2

Table 3. Frequency Distribution of Respondent's Characteristic Based On Job

Job	Treatment Prenatal Yoga Group	Control Prenatal Yoga Group
Working	1	2
Housewife	14	13

Table 4 shows the effect of prenatal yoga on the second stage in third trimester pregnant women.

Table 4. Effect of Prenatal Yoga on the Second Stage in Third Trimester Pregnant Women

Variabel	Group	Mean	SD	Min-Max	p-Value
Length of Labor	Treatment (n=15)	21,66	1,17	20,19-25,44	0,000
Second Stage	Control (n=15)	42,76	2,98	39,27-49,33	0,000

Based on the research that has been done, it is known that the average (mean) of the second stage of labor in pregnant women who take part in yoga exercises is 21.66 minutes with a standard deviation of 1.17. The second stage is when the cervix reaches full dilatation, with a period of time in a primigravida not exceeding 2 hours and in a multigravida not exceeding 1 hour. An experience shows that crossing this threshold can increase maternal and fetal morbidity rates. This is a symptom of an emergency that requires immediate action. Many factors cause long second stage, including: cephalopelvic disproportion, malpresentation, malposition, inadequate delivery, and shoulder dystocia [19].

For the effect of prenatal yoga on Stage II in the control group, it was known that the average (mean) of the second stage of labor for pregnant women who did not participate in yoga exercise was 42.76 minutes with a standard deviation of 2.98 minutes. It is known that on average pregnant women who do not follow yoga exercise will take longer than women who follow yoga exercise. This is in

accordance with the theory which states that a pregnant woman who does yoga on an ongoing basis will benefit from facilitating childbirth, reducing fetal distress and minimizing SC [20].

For the effect of prenatal yoga on the second stage of labor in third trimester pregnant women, based on the results of research conducted using the T Test, it is known that there is an effect of prenatal yoga in third trimester pregnant women on the second stage of labor with a p value = 0.000, so that mothers who do yoga experience the second stage with an average of 21.66 minutes and faster, compared to mothers who did not do yoga with an average of 42.76 minutes.

There are several actions that can be taken so that the pregnancy of the mother and fetus is always in a healthy condition and childbirth goes normally, such as doing sports, morning walks, cycling, dancing, yoga, and pregnancy exercises [21].

Yoga is a good technique in preparing for childbirth. This is because yoga has techniques that focus on muscle control exercises, breathing, relaxation, peace of mind. Yoga plays a very important role in preparing for the birth process, because during pregnancy there are physical and psychological changes [22].

Yoga trains a breathing technique called belly breathing. Pregnant women before giving birth should master breathing techniques. Yoga breathing techniques have uses in accelerating blood circulation, meeting oxygen needs, reducing tension. In addition, the yoga movement itself can make the muscles of the pelvic area and inner thighs elastic. At the time of pushing the muscles will relax actively so that the baby's head can come out easily. Mothers in labor also need relaxation between contractions to minimize pain [10].

Actually, the main factor in the occurrence of labor lies in the power, passage and passenger. Mothers who have physical strength who are more prepared before delivery will have an easier time going through the labor process. The wide condition of the pelvis affects the expulsion of the fetus. In addition, the condition or size of the fetus also affects the smooth delivery process [23].

The results of the research conducted are in line with Anggit's research. K, which is the effect of prenatal yoga on the duration of labor in the 1st stage of primigravida case study at Puskesmas Kadugede Kuningan, West Java, showed the average length of labor in the treatment group was 5.21 hours while the control group was 6.40 hours. Independent t-test test had an effect of prenatal yoga on the duration of the first stage of labor in the active phase ($p=0.000$). From this study, prenatal yoga has an effect in accelerating the first stage of labor [24].

A pregnant woman who does yoga regularly will get greater benefits and opportunities in having a normal delivery. Normal delivery until now has become one of the goals of every pregnant woman after the end of the pregnancy period. Normal, fast and painless delivery is a dream for every pregnant woman. So that one of the keys to success is to participate in prenatal yoga activities regularly and continuously.

5. Conclusion

The average (mean) of the second stage of labor for pregnant women who participated in yoga was 21.66 minutes with a standard deviation of 1.17. The average (mean) of the second stage of labor for pregnant women who did not participate in yoga was 42.76 minutes with a standard deviation of 2.98 minutes. There is an effect of prenatal yoga on the second stage of labor in pregnant women with p value = 0.000.

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