



## COMPARISON OF REDUCTION IN PHYSICAL DISCOMFORT SCORE FOR PREGNANT WOMEN WHO ATTENDED PRENATAL YOGA FOR 30, 45 AND 60 MINUTES

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### ABSTRACT

Prenatal yoga is a recommended choice for pregnant women because it can reduce physical discomfort. These activities include breathing exercises, stretches, strengthening positions, and relaxation techniques that help reduce back and neck muscle tension. This research aims to compare the reduction in physical discomfort scores of pregnant women who take part in prenatal yoga for 30, 45 and 60 minutes at Alanda Care, Pangkalpinang City in 2024. This research method is quantitative with pre-experimental design with one group pretest-posttest design. Data collection used the NRS (Numerical Rating Scale) questionnaire which was adopted from Petter and Perri 2005 in Fauziah 2012. The population of this study were all 90 pregnant women who took part in prenatal yoga at Alanda Care, Pangkalpinang City. The sample in this research was 30 respondents. This data was analyzed using the Paired Sample T-Test and Anova test. The results of this research are that the value of the paired T-test results obtained is p value (0.000), this figure is smaller than the  $\alpha$  (alpha) value = 0.05. The Anova test results produce a p value = 0.000 which is smaller than alpha 0.05. So it was concluded that there was a difference in the average comparison of the reduction in physical discomfort scores for pregnant women who participated in prenatal yoga for 30, 45 and 60 minutes.

Keywords: NRS; physical discomfort; prenatal yoga; pregnant women

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### INTRODUCTION

Pregnancy is a physiological state in which a woman's body experiences rapid biomechanical and physiological changes due to adaptation to fetal growth. However, not all pregnant women feel comfortable during pregnancy (Erna F, 2022). During pregnancy, mothers often experience various discomforts such as high frequency of urination as much as 50%, vaginal discharge as much as 15%, difficulty in defecating (constipation) reaching 40%, flatulence as much as 30%, swelling in the legs as much as 20%, leg cramps as much as 10%, headaches as much as 20%, striae gravidarum (stretch marks) as much as 50%, hemorrhoids (piles) as much as 60%, difficulty breathing (shortness of breath) as much as 60%, and back pain as much as 70% (Beti et al., 2019). During pregnancy, mothers experience various physical transformations and emotional changes that can cause discomfort, especially in the last trimester. These include frequent urination, back pain, constipation, varicose veins, fatigue, leg cramps, ankle swelling, changes in desire, and various other symptoms. In addition, increased anxiety can also be felt in dealing with these changes in life (Rafika, 2018).

Back pain can cause fatigue, difficulty sleeping, and shortness of breath, and cause the spine to curve backward, forming a lordosis posture, due to the growth of the enlarged fetus. In addition, this condition often causes psychological problems such as fear of changes in body appearance, anxiety about the labor process, the health of the baby, and herself, as well as decreased motivation and body image that can last throughout pregnancy until the last trimester. If not treated properly, this complaint can have a negative impact on the health of the mother and baby, even triggering serious complications during pregnancy (Nayak et al, 2015). The impact of this discomfort causes disruption in carrying out daily activities, as well as causing physical and psychological problems for pregnant women. In addition, energy can also be reduced, which can affect the metabolism of the mother and fetus, and in more severe cases, can increase the risk of Maternal Mortality Rate (MMR) if not properly controlled. One way to overcome this problem is to provide health education to pregnant women regarding the prevention or handling of complaints during pregnancy, one of which is through safe sports modifications such as yoga.

Prenatal yoga is a highly recommended exercise option for pregnant women because through this yoga practice, they can get movements that help minimize or even eliminate discomfort that is commonly experienced during pregnancy, such as back pain. In prenatal yoga, these activities include breathing exercises, body stretching, strengthening positions, and relaxation techniques, which play a role in addressing potential imbalances and reducing tension in the back and neck muscles. By performing gentle stretches while focusing on muscle balance and flexibility, prenatal yoga can help reduce discomfort and strengthen muscles during pregnancy (Tanjung, 2019). In principle, prenatal yoga is a safe activity for pregnant women and can be started from 18 weeks of pregnancy, as long as there is no history of complications during pregnancy, has never experienced premature birth or low birth weight, and has no history of miscarriage. For women who have a history of miscarriage, it is recommended to start yoga after reaching a gestational age of over 20 weeks or after the pregnancy condition improves (Yuningtyas, 2019). Prenatal yoga exercises for pregnant women focus on regulating breathing rhythm, with an emphasis on safety and comfort, thus providing a number of significant benefits. Prenatal yoga, as a form of exercise that targets the mother's body, mind, and mental well-being, has been shown to be very beneficial in increasing joint flexibility and calming the mind, especially when entering the third trimester of pregnancy. By following prenatal yoga exercises, pregnant women can feel the benefits that continue throughout their pregnancy, which in turn can support a natural and healthy birth. Prenatal yoga exercises can also increase the birth weight of babies and minimize the risk of premature birth and complications during childbirth (Juniwanti, 2018). The benefits of prenatal yoga for pregnant women in the third trimester include reducing physical complaints such as muscle spasms, pain in the upper and lower back, difficulty sleeping, constipation, leg cramps, dizziness, shortness of breath, tingling in the feet and fingers, and bloating (Rafika, 2018).

## **METHOD**

This study was conducted using a quantitative approach with a research design, namely Pre Experiment with a pre-test and post-test design of one group. The main characteristic of this design is to identify causal relationships by involving one group of subjects. In this study, researchers actively manipulated the variables studied to understand their effects on other variables. This design also has no comparison or control group. First, an observation was made of measuring the physical discomfort of pregnant women before the experiment (pretest), who were given prenatal yoga treatment, after which measurements were taken again after the experiment (posttest) using the NRS (Numerical Rating Scale) questionnaire which was adopted from Petter and Perri 2005 in Fauziah 2012. This study was conducted to

determine whether there was a difference in the average comparison of the decrease in physical discomfort scores of pregnant women who participated in prenatal yoga for 30, 45, and 60 minutes at Alanda Care, Pangkalpinang City in 2024. The sample used in this study was a sample that met the inclusion criteria to be used as a sample, the number of samples in this study was 30 people.

## RESULTS

Table 1.  
Distribution of respondent characteristics

Variable	f	%
Education		
SMA	10	33,3
College	20	66,7
Work		
Working	18	60,0
Not working	12	40,0
Age		
23	2	6,7
24	4	13,3
25	7	23,3
26	6	20,0
27	2	6,7
28	1	3,3
29	3	10,0
30	1	3,3
32	2	6,7
33	1	3,3
35	1	3,3
Gravida		
Primipara	19	63,3
Multipara	11	36,7
Gestational age		
Trimester II	6	20,0
Trimester III	24	80,0

Table 1, it is know that the distribution of respondent characteristics include respondents education distribution recorderd high school graduate 10 people (33,3%) and college graduates as many as 20 people (66,7%). The most respondents were a housewife with 12 people (40 %) and working mother 16 people (60%). Respondents age aged 25 years, the largest number being 7 people (23.3%). Respondents with Gravida, with 19 people (63.3%) being Primipara compared to multipara. that respondents with a higher maternal gestational age were mothers in the third trimester with a total of 24 people (80.0%) compared to mothers in the second trimester.

Table 2.  
Average physical discomfort score of pregnant women who participated in prenatal yoga for 30 minutes

	Mean	Std. Deviation	<i>p value</i>
<i>Pre_Yoga</i>	2.15	1.496	0,000
<i>Post_Yoga</i>	1.30	1.658	

Based on table 2, it shows that 30 minutes of prenatal yoga treatment can reduce physical discomfort for pregnant women by 0.85. namely from 2.15 (before) to down 1.30 (after). The results of the paired T test obtained a p value (0.000). This figure is smaller than the  $\alpha$  (alpha) value = 0.05 so that there is a difference in the average comparison of the reduction in physical discomfort scores for pregnant women who take part in prenatal yoga for 30 minutes. The

results of further analysis obtained an  $r$  value of 0.936, which shows that the correlation is very strong. The influence is unidirectional or  $H_a$  can be accepted while  $H_o$  is rejected. So there is a difference in the average comparison of reduction in physical discomfort scores for pregnant women who take part in 30 minute prenatal yoga at Alanda Care, Pangkalpinang City.

Table 3.

Average physical discomfort score of pregnant women who participated in prenatal yoga for 45 minutes

	Mean	Std. Deviation	<i>p value</i>
<i>Pre_Yoga</i>	2.85	1.387	0,000
<i>Post_Yoga</i>	1.10	1.021	

Based on table 3, it shows that prenatal yoga treatment for 45 minutes can reduce physical discomfort of pregnant women by 1.750, namely from 2.85 (before prenatal yoga treatment for 45 minutes) to changing down 1.10 (after prenatal yoga treatment for 45 minutes). The results of the paired T-test obtained a  $p$  value (0.000) This figure is smaller than the  $\alpha$  (alpha) value = 0.05 so that there is a Difference in the Average Comparison of the Reduction in Physical Discomfort Scores of Pregnant Women Who Follow Prenatal Yoga for 45 Minutes at Alanda Care, Pangkalpinang City. The results of further analysis obtained an  $r$  value of 0.792 which indicates that the Comparison of the Reduction in Physical Discomfort Scores of Pregnant Women Who Follow Prenatal Yoga for 45 Minutes at Alanda Care, Pangkalpinang City is very strongly correlated in one direction or  $H_a$  can be accepted while  $H_o$  is rejected. So it can be interpreted that there is an average difference in the Comparison of the Reduction in Physical Discomfort Scores of Pregnant Women Who Participated in Prenatal Yoga for 45 Minutes at Alanda Care, Pangkalpinang City.

Table 4.

Average physical discomfort score of pregnant women who participated in prenatal yoga for 60 minutes

	Mean	Std. Deviation	<i>p value</i>
<i>Pre_Yoga</i>	3.55	1.572	0,000
<i>Post_Yoga</i>	1.30	1.129	

Based on table 4, it shows that prenatal yoga treatment for 60 minutes can reduce physical discomfort of pregnant women by 2.250, namely from 3.55 (before prenatal yoga treatment for 60 minutes) to changing down 1.30 (after prenatal yoga treatment for 60 minutes). The results of the paired T-test obtained a  $p$  value (0.000) this number is smaller than the  $\alpha$  (alpha) value = 0.05 so that there is a Difference in the Average Comparison of the Reduction in Physical Discomfort Scores of Pregnant Women Who Follow Prenatal Yoga for 60 Minutes at Alanda Care, Pangkalpinang City. The results of further analysis obtained an  $r$  value of 0.614 which indicates that the Comparison of the Reduction in Physical Discomfort Scores of Pregnant Women Who Follow Prenatal Yoga for 60 Minutes at Alanda Care, Pangkalpinang City is strongly correlated in one direction or  $H_a$  can be accepted while  $H_o$  is rejected. So it can be interpreted that there is an average difference in the Comparison of the Reduction in Physical Discomfort Scores of Pregnant Women Who Participated in Prenatal Yoga for 60 Minutes at Alanda Care, Pangkalpinang City.

Table 5.

Distribution of average differences in prenatal yoga according to the duration of prenatal yoga treatment

Prenatal Yoga Treatment	Mean	SD	<i>p value</i>
Treatment 30 minute	.85	.587	0,000
Treatment 45 minute	1.75	.851	0,000
Treatment 60 minute	2.25	1.251	0,000

Based on table 5, it can be seen that the smallest average prenatal yoga treatment is 30 minutes of prenatal yoga treatment, which is 0.85 with a variation of 0.58. Along with the increasing time of prenatal yoga treatment, the highest average prenatal yoga treatment is 60 minutes of prenatal yoga treatment, which is 2.25 with a variation of 1.251. The results of the Anova test produced a p value = 0.000 smaller than alpha 0.05, so it was concluded that  $H_0$  could be accepted,  $H_a$  was rejected so that There is a Difference in the Average Comparison of the Decrease in Physical Discomfort Scores of Pregnant Women Who Follow Prenatal Yoga for 30, 45, and 60 Minutes. To prove which group is different from the 3 treatments above, namely 30, 45, and 60 minutes of prenatal yoga treatment, a post hoc test was carried out using the Bonferroni multiple comparisons test. The results of the Bonferroni test for different groups averaged a decrease in the physical discomfort score of pregnant women at 30, 45, and 60 minutes. 30 minutes with 45 minutes p (0.011) prenatal yoga 30 with 60 minutes with p (0.00). For the prenatal yoga treatment of 45 with 60 minutes there was no statistically significant difference in the average decrease. 45 and 60 are relatively the same, if seen from the average results then the 60 minute treatment will produce a more maximum decrease in physical discomfort in pregnant women.

## **DISCUSSION**

### **Identification of the Average Physical Discomfort Score of Pregnant Women Before Prenatal Yoga Treatment for 30, 45, and 60 minutes**

Physical discomfort during pregnancy is usually like physical symptoms that often occur including pain in the back of the body, lower back pain, cramps in the legs, calves, hips, pain in the genital area, digestive problems such as constipation, excessive fatigue, nausea, difficulty sleeping, heartburn, vomiting, and increased need to urinate (Hamad and Khalil, 2019). Factors that influence physical discomfort during pregnancy are: Gestational age: Pain generally appears between 20 and 28 weeks of pregnancy, with an average of around 22 weeks. The peak of pain usually occurs in the 27th week. Research supports that the first period when pain appears is between the 20th and 28th weeks. The level of discomfort in the lower back area tends to be higher in pregnant women entering the third trimester (Purnamasari, 2019) Maternal age: In general, women begin to feel pain in the lower back when they reach the age of around 20 to 24 years, and this pain reaches its peak when they are over 40 years old (Sukeksi et al., 2018).

Parity: Multiparous and grandmultiparous mothers tend to experience back pain more often and are at higher risk than primiparas. This is caused by muscle weakness, which makes it difficult for the muscles to support the growing uterus. With a lack of support or support, the uterus can appear sagging and the back can experience changes in curvature. Muscle weakness in the abdomen is generally experienced by grandmultiparas (Fithriyah et al., 2020). Daily Activities: Studies in pregnant women show that the intensity of Low Back Pain has a high prevalence and can result in limitations in daily activities. Identification of women who are more susceptible to this condition is important for effective prenatal care. Health professionals should be aware of symptoms of musculoskeletal discomfort during pregnancy, especially low back pain, and consider managing this problem, especially during routine prenatal/ANC consultations (Duarte et al., 2018).

Excessive Body Relaxation: Increased physical activity provides significant benefits, especially for pregnant women, because it supports fetal health through maintaining placental vascular function. Physical activity can also increase self-esteem, body image satisfaction, and reduce the risk of developing depression both in the antenatal and postpartum periods. Doing physical exercise during pregnancy can help overcome some of these complaints,

which may subside spontaneously or develop into chronic pain (Salwa et al., 2021). Based on the results of the study before being given prenatal yoga, the results of physical discomfort in pregnant women were obtained, namely in the 30-minute treatment with a value of 2.15 in the 45-minute treatment with a value of 2.85 and in the 60-minute treatment with a value of 3.55. This shows that pregnant women who experience physical discomfort are in the NRS 1-6 Discomfort score range. Supported by research by Dewi Santi et al, (2021) with 20 respondents using NRS measurements, there was a score before prenatal yoga of 5.85 with prenatal yoga treatment for 60 minutes. This is also in line with research by Diasih Tri et al, (2022) with 18 respondents using NRS, there was a score before pregnancy exercise of 2.72. In prenatal yoga treatment with 18 respondents using NRS, there was a score before 2.89. Based on the explanation above, the researcher argues that measuring the level of physical discomfort using NRS can be done to measure a state of physical discomfort experienced by the body. Numerical Rating Scale (NRS) is a measuring tool that asks patients to rate their pain according to the level of pain intensity on a numerical scale from 0-10 or 0-100. The number 0 means "no pain" and 10 or 100 means "severe pain" (severe pain). Pain intensity is a description of the severity of pain felt by a person. Measurement of pain intensity is subjective and individual. Measurement of pain with an objective approach is done by using the body's physiological response to the pain felt by a person.

### **Identification of the Average Physical Discomfort Score of Pregnant Women after Prenatal Yoga Treatment for 30, 45, and 60 minutes**

One alternative method that can be used to reduce physical discomfort in pregnant women is prenatal yoga. Prenatal yoga is a modification of classical yoga that has been adjusted to the physical condition of pregnant women which is done with a gentler and slower intensity. Prenatal yoga has three important principles, namely conscious breathing, gentle and slow movements, and relaxation and meditation. Deep and regular breathing is healing and calming. Through the correct breathing technique, the mother will be able to control her mind, body and with relaxation and meditation, the mother's entire body and mind are relaxed, calm and peaceful. The study stated that pranayama and relaxation as well as gentle movements that make the mother feel relaxed have a significant positive effect in reducing physical discomfort in pregnant women. After prenatal yoga was carried out on pregnant women with physical discomfort, the results were obtained with an average score in the 30-minute treatment with a score of 1.30 in the 45-minute treatment with a score of 1.10 and in the 60-minute treatment with a score of 1.30 which means that pregnant women who have been given prenatal yoga have decreased physical discomfort. This study is in line with the study of Latifah et al, (2021) which showed that the provision of prenatal yoga showed significant results with a total of 25 respondents showing that before and after yoga exercises there were changes from before yoga exercises, almost half experienced moderate pain, namely 12 respondents (48%), while after yoga exercises almost half experienced moderate pain, namely 12 respondents (48%). Based on the data above and according to the Wilcoxon statistical test with the help of the SPSS 16 program at an error rate of 5%, calculations were carried out to determine whether there was an influence between the independent and dependent variables. The result of the  $p$  value calculation is  $0.000 < \alpha (0.05)$ . If the  $p$  value  $< \alpha (0.05)$  then it means that there is an effect of yoga exercises on back pain in pregnant women in the third trimester. This is in line with research conducted by Lina Fitriani in 2021 which stated that prenatal yoga is effective in reducing lower back pain in pregnant women in the third trimester. Lina Fitriani also compared the effectiveness of prenatal gymnastics and yoga, it was found that the implementation of yoga was more effective in reducing lower back pain compared to prenatal gymnastics with Conclusion Prenatal gymnastics is effective in reducing lower back pain in pregnant women in the third trimester as seen from the results of the pre-test to those that

experienced a decrease with a  $p$  value = 0.000 and a mean value of 26. While prenatal yoga is effective in reducing lower back pain in pregnant women in the third trimester as seen from the results of the pre-test to the post-test which experienced a decrease with a  $p$  value = 0.000 and a mean value of 29. So there is a significant difference in effectiveness between prenatal gymnastics and prenatal yoga on complaints of lower back pain in pregnant women in the third trimester as seen from the average value of prenatal gymnastics, which is 26 and the average value of prenatal yoga, which is 29. Thus, prenatal yoga is more effective in reducing lower back pain.

Anggasari et al, (2021) also stated that regularity in performing prenatal yoga also affects back pain. So it is recommended for pregnant women to be regular in performing yoga exercises to get optimal results. This is also in line with the theory that pregnancy yoga can help overcome general physical complaints such as back pain, pelvic pain, and swelling in parts of the body (Pratignyo, 2014). Based on previous research findings, it can be concluded that pregnancy yoga can bring balance to various aspects of the body, mind, and personality, resulting in users who are full of energy, strength, and clarity of life goals. If pregnant women do it every week during their pregnancy, it can help maintain the elasticity and strength of the pelvic, hip, and leg muscle ligaments, which can help reduce pain during labor and provide space for birth. Yoga exercises are tailored to the needs of pregnant women. Prenatal yoga is intended to prepare pregnant women physically, mentally, and spiritually for the birth process. Mothers will be more confident and confident to give birth smoothly and comfortably if they prepare carefully. Based on the explanation above, according to researchers based on related theories and research, yoga can reduce back pain in pregnant women by using relaxation techniques that can be done by imagining something pleasant in order to relax the body, maintain the elasticity and strength of the pelvic ligaments, hips, and leg muscles.

### **Comparison of prenatal yoga to reduce physical discomfort in pregnant women**

In this study, it has an effect in reducing physical discomfort of pregnant women because there is a decrease in the physical discomfort score measured by NRS before and after prenatal yoga treatment. The results of the paired test showed a difference between the 30-minute prenatal yoga treatment group, 45-minute prenatal yoga treatment, and 60-minute prenatal yoga treatment. When viewed from the number of physical discomfort scores of pregnant women, the difference score was obtained in the 30-minute treatment with a score of 0.85 in the 45-minute treatment with a score of 1.750 and in the 60-minute treatment with a score of 2.250. With that, it can be concluded that prenatal yoga can have an effect on reducing physical discomfort of pregnant women. In the statistical test using the T test, a  $p$  value of 0.000 was obtained. This means that the physical discomfort of pregnant women decreased after being given prenatal yoga treatment. This means that prenatal yoga is effective in reducing physical discomfort in pregnant women. This study is in line with the study of Latifah et al, (2021) which showed that the provision of prenatal yoga showed significant results with a total of 25 respondents showing that before and after yoga exercises there was a change from before yoga exercises, almost half experienced pain on a moderate scale, namely 12 respondents (48%), while after yoga exercises almost half experienced pain on a moderate scale, namely 12 respondents (48%). Based on the data above and according to the Wilcoxon statistical test with the help of the SPSS 16 program at an error level of 5%, calculations were carried out to determine whether there was an influence between the independent and dependent variables. The results of the  $p$  value calculation are  $0.000 < \alpha$  (0.05). If the  $p$  value  $< \alpha$  (0.05) then it means that there is an effect of yoga exercises on back pain in pregnant women in the third trimester.

This is in line with research conducted by Lina Fitriani in 2021 which stated that prenatal yoga is effective in reducing lower back pain in pregnant women in the third trimester. Lina Fitriani also compared the effectiveness of prenatal gymnastics and yoga, it was found that the implementation of yoga was more effective in reducing lower back pain compared to prenatal gymnastics with Conclusion Prenatal gymnastics is effective in reducing lower back pain in pregnant women in the third trimester as seen from the results of the pre-test to those that decreased with a  $p$  value = 0.000 and a mean value of 26. While prenatal yoga is effective in reducing lower back pain in pregnant women in the third trimester as seen from the results of the pre-test to the post-test which decreased with a  $p$  value = 0.000 and a mean value of 29. So there is a significant difference in effectiveness between prenatal gymnastics and prenatal yoga on complaints of lower back pain in pregnant women in the third trimester as seen from the average value of prenatal gymnastics, which is 26 and the average value of prenatal yoga, which is 29. Thus, prenatal yoga is more effective in reducing lower back pain. This is also in line with research conducted by Titin Rustiningsih in 2022, which stated that prenatal yoga is a safe complementary and alternative therapy that can prevent and reduce physical discomfort in pregnant women.

Based on the explanation above, the researcher argues that physical discomfort experienced by pregnant women is a problem that is often experienced by pregnant women. This is in accordance with Pratignyo's theory, (2014) In prenatal yoga exercise movements, there is relaxation: *sasi* is very useful for deepening breathing, reducing adrenaline, relieving muscle tension, increasing endurance, smoothing blood flow, releasing endorphins, reducing stress and tension, and providing a sense of calm. comfortable and peaceful so that mothers are more ready to face childbirth. Based on the results of the study, the researcher argues that after carrying out prenatal yoga exercises, pregnant women are more ready to face childbirth because in prenatal yoga exercise movements, mothers can be more relaxed so that physical discomfort decreases. In this study, it was shown that prenatal yoga can have an effect on the physical discomfort of pregnant women which is indicated by a decrease in the score of physical discomfort in pregnant women. So this is what makes prenatal yoga effective in reducing physical discomfort in pregnant women and prenatal yoga is a complementary and alternative therapy that is safe to do gently and can prevent and reduce physical discomfort in pregnant women.

### **Effectiveness of providing prenatal yoga for 30, 45, and 60 minutes**

In this study, there were three different times during prenatal yoga treatment in reducing physical discomfort of pregnant women using different groups. By using the Anova test, a post hoc test was carried out using the Bonferroni multiple comparisons test. It can be seen that the average of the smallest prenatal yoga treatment was the 30-minute prenatal yoga treatment, which was 0.85 with a variation of 0.58. Along with the increasing time of prenatal yoga treatment, the average of the highest prenatal yoga treatment was the 60-minute prenatal yoga treatment, which was 2.25 with a variation of 1.251. The results of the Anova test produced a  $p$  value = 0.000 which was smaller than  $\alpha$  0.05, so it was concluded that there was a difference in the average comparison of the decrease in the physical discomfort score of pregnant women who participated in prenatal yoga for 30, 45, and 60 minutes. Proof of which group was different from the 3 treatments above, namely the 30, 45, and 60-minute prenatal yoga treatments, was carried out by a post hoc test using the Bonferroni multiple comparisons test. The results of the Bonferroni test of different groups showed an average decrease in the physical discomfort score of pregnant women at 30, 45, and 60 minutes.  $p$  (0.011) prenatal yoga 30 with 60 minutes with  $p$  (0.00). The treatment of prenatal yoga 45 with 60 minutes did not have a statistically significant difference in the average decrease. 45 and 60 are relatively



the same, if seen from the average results, the 60-minute treatment will produce a more maximum decrease in physical discomfort of pregnant women.

This study is in line with research In line with Rafika's research, 2018, Prenatal yoga is effective in reducing lower back pain in pregnant women, carried out with a duration of 30-60 minutes and a frequency of once a week for two weeks with a p value of 0.000. (Rafika, 2018). Meanwhile, in the theory put forward by Octavia (2018), prenatal yoga has a significant effect on reducing back pain in pregnant women in the third trimester after intervention twice for one week with a duration of 60 minutes with a p value of 0.001. In line with the research of Saper et al (2013), there is a significant difference in doing prenatal yoga once a week or once every two weeks on physical complaints during pregnancy. Dewi's research (2018), prenatal yoga increases the physical readiness of pregnant women in the third trimester after prenatal yoga intervention is carried out once a week with a duration of 60 minutes for three weeks. Based on the explanation above, the researcher argues that prenatal yoga which is carried out for 45 with 60 minutes has no statistically significant difference in the average decrease. 45 and 60 are relatively the same, if seen from the average results, then the 60-minute treatment will produce a more maximum decrease in physical discomfort in pregnant women. This is in accordance with Pratignyo's theory, (2014) In prenatal yoga exercise movements, there is relaxation: *sasi* is very useful for deepening breathing, reducing adrenaline, relieving muscle tension, increasing endurance, smoothing blood flow, smoothing blood flow, releasing endorphins, reducing stress and tension, and providing a sense of calm. comfortable and peaceful so that mothers are more ready to face childbirth. Based on the results of the study, researchers argue that after carrying out prenatal yoga exercises, pregnant women are more ready.

## **CONCLUSION**

In the prenatal yoga group, the average difference in physical discomfort scores in the 30 minute treatment was 0.85, in the 45 minute prenatal yoga treatment it was 1.750, and in the 60 minute prenatal yoga treatment it was 2.250. It was concluded that there was a difference in the average comparison of reduction in physical discomfort scores for pregnant women who took prenatal yoga for 30, 45, and 60 minutes and the prenatal yoga group with 30, 45, and 60 minutes had quite significant differences. In the groups carried out for 45 and 60 minutes, there was no statistically significant difference in the average reduction. 45 and 60 are relatively the same, if you look at the average results, then a 60 minute treatment will result in a more optimal reduction in physical discomfort in pregnant women.

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