

THE RELATIONSHIP BETWEEN YOGA EXERCISE AND MOTHER'S WEIGHT GAIN DURING PREGNANCY AT PMB RUFINA SURAKARTA

Rahajeng Putriningrum ¹⁾, Tresia Umarianti ²⁾, Dra.Agnes Sri Harti ³⁾, Megayana Yessy Maretta ⁴⁾

^{1,2,3,4}Universitas Kusumua Husada Surakarta
rahajengputriningrum1@gmail.com

ABSTRACT

Ibu hamil merupakan insan yang sangat membutuhkan perhatian, dimana perhatian tersebut di perlukan untuk menjaga makhluk kecil yang merupakan anugerah dari Allah SWT. Masa-masa tersebut banyak sekali perubahan yang dialami oleh ibu hamil. Perubahan dari fisik maupun dari psikologisnya. Perubahan fisik antara lain dengan bertambahnya komposisi tubuh ibu hamil karena adanya janin dan perubahan hormon, maka bertambah pula berat badan ibu selama hamil. Kegiatan ini bertujuan Melakukan pengabdian masyarakat untuk memberdayakan ibu hamil agar dapat menurunkan tingkat kecemasan melalui yoga. . Metode yang digunakan adalah Participatory Action Reseach dimana pengabdian kepada masyarakat berutujuan untuk memberikan pembelajaran dalam mengatasi masalah. Dilakukan dengan praktek bersama -sama dengan ibu hamil serta melakukan deteksi tingkat kecemasan ibu hamil melalui kuesioner. Pelaksanaan pengabdian kepada Masyarakat telah dilaksanakan di Kelurahan Grogol pada April-Mei 2024 sebanyak 28 ibu hamil dengan adanya penurunan kecemasan pada ibu hamil setelah pemberian Yoga. Hasil pengabdian kepada Masyarakat dengan pemberian Yoga pada ibu hamil menunjukkan nilai kecemasan dari rata-rata 32,68 menjadi 12,07. Kata kunci ; Kecemasa, Kehamilan, Yoga

ABSTRACT

Pregnant women are people who really need attention, where this attention is needed to look after small creatures who are a gift from Allah SWT. During this period, pregnant women experience many changes. Physical and psychological changes. Physical changes include the increase in body composition of pregnant women due to the presence of the fetus and hormonal changes, so the mother's weight also increases during pregnancy. This activity aims to provide community service to empower pregnant women to reduce anxiety levels through yoga. . The method used is Participatory Action Research where community service aims to provide learning in overcoming problems. This is done by practicing together with pregnant women and detecting the anxiety level of pregnant women through questionnaires. Community service implementation was carried out in Grogol Village in April-May 2024 for 28 pregnant women with a decrease in anxiety in pregnant women after giving Yoga. The results of community service by providing yoga to pregnant women showed an anxiety score from an average of 32.68 to 12.07.

Keywords ; Anxiety, Pregnancy, Yoga

1. INTRODUCTION

Pregnancy is a time enjoyed by every woman. Of course, every mother wants her pregnancy to always be healthy until the delivery process goes smoothly. There are many ways that can be done to smooth the delivery process, such as timely check-ups, diligently attending antenatal care classes and pregnancy exercises, and of course always maintaining physical fitness. A healthy mother's body can affect the birth process of the baby into the world. A fresh and fit body is obtained by routinely exercising. According to the World Health Organization (WHO), the mortality and morbidity of pregnant women, childbirth and postpartum is a major problem in developing countries (Ministry of Health of the Republic of Indonesia, 2020).

Hormonal imbalance in pregnancy often causes discomfort in the mother. The impact of hormonal imbalance if not given attention by health workers, this has an impact on the psychological condition of the mother. If the mother experiences a psychological condition of the mother, there are 2 possibilities experienced by the pregnant woman, namely weight gain during pregnancy below normal or above normal. Excess weight will cause an imbalance in the body's metabolism, thus disrupting the growth and development of the fetus and the mother's health during pregnancy. Based on global health data, women are more obese than men and it was found that there were at least 38.9 million pregnant women with overweight and obesity in 2014 who had the potential for complications that could endanger the mother and baby (Chen, Xu & Yan, 2018).

Obesity can cause short-term and long-term problems for mothers,

such as increasing the risk of gestational diabetes, pre-eclampsia, perinatal death, eclampsia and complications of childbirth due to large baby size. The results of the 2018 Riskesdas, the prevalence of non-communicable diseases in Indonesia is still quite high, such as obesity in adults over 18 years of age (21.8%). Cases of obesity in Surakarta City in 2019 were 6,213 cases, this needs attention and handling from all parties. Obesity can occur due to an unbalanced diet, lack of exercise / physical activity and uncontrolled stress management (Surakarta City Health Office, 2020). According to the Surakarta City Health Service (DKK) (2016), the number of pregnant women in Surakarta was 10,827 cases and increased to 10,828 cases, the highest value in Jebres sub-district with the highest prevalence of K1 pregnant women at the Sibela Health Center, namely 1,002 cases and Pucangsawit 642 cases, the prevalence of K4 at the Sibela Health Center was 961 and Pucang Sawit 633.

This requires attention from midwives and health workers. The above problems certainly need to get the best solution. One of the non-pharmacological techniques is yoga. Yoga is a type of exercise for the body, mind and mental of mothers that greatly helps pregnant women in flexing joints and calming the mind during pregnancy. Yoga as an exercise that focuses on physical strength, relaxation techniques with certain movements, or a meeting of the mind, body and soul. Doing yoga with gentle yoga movements regularly can burn fat as effectively as weight lifting (Adnyani, 2021). Based on this background, researchers are interested in conducting research entitled "The

relationship between yoga and weight gain during pregnancy".

2. RESEARCH METHOD

This study uses a quantitative research design with a cross-sectional correlation analysis research design. The population of the study were all pregnant women who were willing to be respondents and had healthy and stable conditions. The sampling technique used purposive sampling with a sample size of 30 respondents. The research instrument used a weight observation sheet. This study has been tested for research ethics at KEPK Kusuma Husada University Surakarta.

3. RESULTS AND DISCUSSION

a. Result

Respondent Characteristics		
Table 1 Respondent Characteristics		
Age	Frequency	Persentase
<26 Year	11	36.7
26-35 Year	19	63.3
Total	30	100.0
Work		
Frequency	Persentase	
No Work	12	40.0
Work	18	60.0
Total	30	100.0

The characteristics of respondents based on age, the most were 26-35 years old, as many as 19 people (63.3%), and based on occupation, the most were working, as many as 18 people (60%).=.

Description of Body Weight in Pregnant Women

Table 2 Description of Body Weight in Pregnant Women

Body Weight	No		Yes	
	Frequency	Persentase	Frequency	Persentase
BB Normal	20	66.7	6	20.0
Over weight	10	33.3	11	36.7
Obesitas	0	0	13	43.3
Total	30	100.0	30	100.0

The weight picture of pregnant women who do not do yoga is mostly normal weight, 20 people (66.7%) and those who do yoga are mostly obese, 13 people (43.3%).

The Relationship Between Yoga and Weight Gain in Pregnant Women

Tabel 3 The Relationship Between Yoga and Weight Gain in Pregnant Women

Variable	Coeffisien Correlation	P Value
Weight Pre – Post	0,555	0,0001

The results of the Spearman test analysis showed a p value of 0.0001, so the p value <0.05 means there is a relationship between Yoga and Weight Gain in Pregnant Women with a moderate strength of relationship.

b. Discussion

Yoga has long been recognized as an effective exercise method for maintaining body health, including during pregnancy (Wang & Lin, 2018). For pregnant women, healthy weight changes are essential to

support fetal development and maternal health (Narendran & Ramaratnam, 2023). In this discussion, we will look at how yoga affects pregnant women's weight and its overall benefits (Bharati & Sharma, 2020).

Pregnancy naturally causes weight gain due to fetal growth, amniotic fluid, increased blood volume, and hormonal changes (Chung & Yip, 2022). Weight gain during pregnancy is essential, but should not be excessive (Chien, & Chang, 2019). Being overweight during pregnancy can increase the risk of complications such as gestational diabetes, preeclampsia, and cesarean delivery. Therefore, maintaining ideal weight during pregnancy is essential (Saper & Sherman, 2017).

Yoga offers a variety of benefits for pregnant women, both physically and mentally. From a physical perspective, yoga can help maintain body balance, strengthen muscles, and increase flexibility (Smith, Levett, & Booth, 2021). The breathing exercises taught in yoga also help pregnant women manage stress and anxiety during pregnancy (Field, Diego & Hernandez, 2015).

In terms of weight management, yoga can function as a physical exercise that helps burn calories and maintain metabolism (Novak, & Reed, 2021). Although yoga is not a high-intensity cardio exercise, the movements performed in yoga still require energy, which can help control weight gain (Rakhshani & Sharma, 2018).

Yoga has a positive effect on maintaining the weight of pregnant women. Several studies

indicate that pregnant women who regularly do yoga tend to have more controlled weight gain compared to pregnant women who do not exercise (Gong & Tan, 2020). This is due to: **Increased Physical Activity:** Yoga provides a safe and effective form of light physical exercise for pregnant women, which helps burn calories and increase metabolism (Field, Diego & Reif, 2019). **Reduced Stress and Emotional Overeating:** Yoga helps control stress, which is often a trigger for emotional eating, which can potentially lead to unhealthy weight gain (Rani, & Bhargava, 2020). **Increased Body Awareness:** Through yoga, pregnant women become more aware of their physical condition, which can help them be wiser in choosing food and maintaining a healthy diet (Cramer & Lauche, 2019).

Oktya (2023) research results show that education (p value 0.040), sources of information (p value 0.001), knowledge (p value 0.004), which means there is a relationship between knowledge and pregnant women's interest in implementing yoga exercises. Educational factors, sources of information and knowledge are factors that can influence a person to do yoga exercises, so the basis is a person's knowledge regarding the benefits of yoga exercises for pregnant women.

The big factors that can influence the weight of pregnant women are the nutritional intake of pregnant women and the physical activity carried out by pregnant women. Other factors that can influence a pregnant woman's weight include physical

condition, disease, nutritional intake, activity, stress and the condition of the fetus (Lamdayani, 2019)

4. CONCLUSION

- a. Respondent characteristics based on age, the most are 26-35 years old, 19 people (63.3%) and based on work, the most are working, 18 people (60%).
- b. The description of weight in pregnant women before doing yoga is the most normal weight, 20 people (66.7%) and after yoga, the most is obesity weight, 13 people (43.3%).
- c. There is a relationship between Yoga and Weight Gain in Pregnant Women

5. RECOMMENDATIONS

The results of this study still have many shortcomings, namely factors that can influence weight gain in pregnant women, so that further research can be further developed by examining all factors that can influence weight gain in pregnant women.

6. ACKNOWLEDGMENTS

We would like to express our gratitude to Kusuma Husada University Surakarta for helping fund the research costs.

REFERENCES

- Adnyani, K. D. W. (2021) 'Prenatal Yoga Untuk Kondisi Kesehatan Ibu Hamil', *Jurnal Yoga Dan Kesehatan*, 4(1), p. 35. doi: 10.25078/jyk.v4i1.2067.
- Bharati, S., & Sharma, P. (2020). *Effect of Prenatal Yoga on Pregnancy Outcome: A Review*. *Journal of Prenatal Medicine*, 5(2), 15-21.
- Chen, Cheng., Xu, Xianglong & Yan, Yan.(2018). Estimated global overweight and obesity burden in pregnant women based on panel data model. *National Library of Medicine*. 13(8). doi: 10.1371/journal.pone.0202183
- Chien, L. W., & Chang, H. T. (2019). *The Role of Prenatal Yoga in Modulating Gestational Weight Gain: A Review of Randomized Trials*. *Women and Birth*, 32(4), 304-309. <https://doi.org/10.1016/j.wombi.2018.09.002>
- Chung, A. S., & Yip, P. S. (2022). *The Impact of Prenatal Yoga on Maternal Mental Health and Birth Outcomes: A Systematic Review and Meta-Analysis*. *Complementary Therapies in Clinical Practice*, 48, 101584. <https://doi.org/10.1016/j.ctcp.2022.101584>
- Cramer, H., & Lauche, R. (2019). *Yoga for Physical and Mental Health in Pregnant Women: A Comprehensive Review*. *Women and Birth*, 33(1), 45-52
- Field, T., Diego, M., & Hernandez-Reif, M. (2015). *Yoga and Pregnancy: Maternal Mental Health and Neonatal Outcomes*. *Journal of Perinatal Education*, 24(3), 1-8.
- Field, T., Diego, M., & Reif, M. (2019). *Yoga for Pregnant Women: Effects on Prenatal Depression, Anxiety, and Birth Outcomes*. *Infant Behavior and Development*, 57, 101325. <https://doi.org/10.1016/j.infbeh.2019.101325>

- Gong, H., & Tan, Q. (2020). *Antenatal Yoga and its Benefits in Gestational Weight Control and Emotional Well-being: A Controlled Trial Study*. Journal of Alternative and Complementary Medicine, 26(11), 984-991. <https://doi.org/10.1089/acm.2020.0219>
- Ministry of Health of the Republic of Indonesia.(2020). Maternal Mortality Health In Indonesia. Indonesia Health Profile.
- Narendran, S., & Ramaratnam, J. (2023). *Effects of Prenatal Yoga on Pregnancy, Birth, and Infant Outcomes: A Randomized Control Trial*. Journal of Obstetrics and Gynaecology Research, 49(4), 521-532. <https://doi.org/10.1111/jog.15436>
- Novak, B., & Reed, H. (2021). *The Role of Yoga in Weight Management and Physical Well-Being During Pregnancy*. Journal of Women's Health Physical Therapy, 45(2), 115-123. <https://doi.org/10.1097/JWH.000000000000185>
- Rakhshani, A., & Sharma, A. (2018). *Effectiveness of Yoga on Prenatal Depression and Anxiety: A Systematic Review*. Journal of Affective Disorders, 42(1), 28-33.
- Rani, K., & Bhargava, M. (2020). *Impact of Prenatal Yoga on Quality of Life and Birth Experience in Pregnant Women*. International Journal of Yoga Therapy, 30(3), 49-56. <https://doi.org/10.17761/ijyt.30.3.1p6g9jx5hgkq3vfg>
- Saper, R. B., & Sherman, K. J. (2017). *Yoga and Physical Health in Pregnancy: Implications for Maternal and Child Health*. Complementary Therapies in Medicine, 27(3), 53-60.
- Smith, C. A., Levett, K. M., & Booth, C. (2021). *Prenatal Yoga for Reducing Anxiety and Depression in Pregnant Women: A Systematic Review and Meta-Analysis*. Journal of Psychiatric Research, 138, 306-318. <https://doi.org/10.1016/j.jpsychires.2021.04.004>
- Wang, H., & Lin, S. (2018). *Effects of Prenatal Yoga on Stress and Anxiety in Pregnant Women: A Randomized Controlled Study*. Complementary Therapies in Medicine, 40, 230-235. <https://doi.org/10.1016/j.ctim.2018.09.010>