JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

THE EFFECT OF FOOT SOAKING THERAPY WITH RED GINGER BAKED ON HIGH BLOOD PRESSURE IN PREGNANT WOMEN AT THE GUNTUR GARUT COMMUNITY HEALTH CENTER IN 2025

Pebriyanti Rahayu [1*], Fenni Valianda Amelia Ramadhan [1]

Fakultas Vokasi Universitas Indonesia Maju

Email Correspondence: pebriyantirahayu@gmail.com

Abstract

During pregnancy, various events often occur, including hypertension. Therefore, hypertension needs to be treated and controlled. Hypertension in Pregnancy (HDK) is a major cause of maternal death. Pregnancy is a physiological process. The definition of pregnancy is fertilization or the union of spermatozoa and ovum, followed by nidation or implantation. The process of changes that occur will cause an imbalance of estrogen and progesterone hormones in the mother's body during pregnancy, including hypertension. The condition of a pregnant woman with hypertension is when she experiences an increase in systolic or diastolic blood pressure greater than 140/90 mmHg. Hypertension treatment can be done pharmacologically and non-pharmacologically. The purpose of this study was to determine the effect of providing foot soak therapy with red ginger decoction on high blood pressure in pregnant women at the Guntur Garut Community Health Center in 2025, using a quasi-experimental method, with a one-group pretest-posttest research design. The sampling technique used purposive sampling with a sample size of 20 respondents. The average blood pressure of hypertensive clients before the foot soak therapy with red ginger decoction was 165.16 mmHg while the average blood pressure after the foot soak therapy with red ginger decoction was 159.63 mmHg, with a t-test obtained a p-value of 0.001. Conclusion: There is an effect of providing foot soak therapy with red ginger decoction on high blood pressure in pregnant women at the Guntur Community Health Center in 2025. It is recommended for hypertensive pregnant women in an effort to treat and overcome hypertension can be done with foot soak therapy with warm red ginger decoction and maintain a diet.

Keywords: Foot Soak, Red Ginger, Hypertension

INTRODUCTION

Pregnancy is a physiological process that involves significant changes in a woman's body and psychology to support the growth and development of the fetus. This process is essentially natural, but it is often accompanied by complications that can endanger both the mother and the fetus. One common complication is gestational hypertension (GHD), which is a leading cause of maternal death worldwide. Gestational hypertension is a condition where blood pressure rises above 140/90 mmHg during pregnancy. According to Fatimah & Nuryaningsih (2017), a normal pregnancy lasts 40 weeks, or approximately 9 international calendar months. However, hormonal changes that occur during pregnancy—particularly increased estrogen and progesterone levels—can cause physiological imbalances such as hypertension (Nurhayati, 2019). This requires special attention because if left untreated, it can have fatal consequences for the health of both the mother and the fetus.

The World Health Organization (WHO, 2020) reports that hypertension in pregnant women ranks second among causes of maternal morbidity and mortality worldwide, accounting for

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

12% (Surianti et al., 2021). Globally, approximately 1.13 billion people suffer from hypertension, and its prevalence continues to rise. In Southeast Asia, the prevalence of hypertension is quite high, such as in Thailand (17%), Vietnam (34.6%), Singapore (24.9%), and Malaysia (29.9%). In Indonesia alone, according to the 2018 Basic Health Research (Riskesdas), 63.3 million people, or 34.11% of the population, have hypertension. In West Java, the number of hypertension sufferers is projected to reach 3,212,072 by 2024, with the highest prevalence in women at 36.85% compared to men at 31.34% (Dinkes, 2023). Meanwhile, in Garut Regency, 5,447 cases of hypertension were found in 2024, with the highest number at Guntur Community Health Center (262 cases) (Health Office, 2025). This situation indicates that hypertension remains a serious health problem that requires effective control efforts, especially for pregnant women.

Hypertension is often referred to as a silent killer because it often does not cause symptoms until damage occurs to vital organs such as the heart, kidneys, brain, and eyes (Ministry of Health of the Republic of Indonesia, 2018). Based on Ministry of Health data (2020), the main causes of maternal death in Indonesia are bleeding, hypertension in pregnancy, and infection. Globally, approximately 80% of maternal deaths are caused by direct factors such as postpartum hemorrhage (25%), hypertension and infection in pregnant women (32%), eclampsia (8%), abortion (13%), and other causes (7%) (Arikah et al., 2020). Hypertension in pregnancy is the second leading cause of maternal death after bleeding (Ministry of Health of the Republic of Indonesia, 2017). Factors causing hypertension in pregnancy include maternal age, a history of previous hypertension, stress, too close pregnancies, and genetic factors (Rambe, 2019). Hypertension also tends to occur more frequently in first pregnancies or pregnancies with a frequency of more than four. This condition can increase the risk of serious complications such as preeclampsia, eclampsia, placental abruption, and premature birth.

The impact of hypertension on pregnant women is not only felt during pregnancy, but also has the potential to cause cardiovascular diseases later in life, such as coronary heart disease and heart failure (Desy et al., 2022). Hypertension in pregnant women can also disrupt blood flow to the placenta, causing stunted fetal growth and increasing the risk of premature birth. Therefore, routine check-ups at community health centers (Puskesmas) and integrated health posts (Posyandu) are crucial for early detection and management of hypertension in pregnancy (Alatas, 2019). Hypertension control can be carried out in various ways, both pharmacological and non-pharmacological. Non-pharmacological treatment is an alternative option because it is more economical and has fewer side effects, including through healthy lifestyle changes, a low-salt diet, regular physical activity, adequate rest, and the use of complementary therapies such as herbal remedies (Azwar, 2021).

Indonesia is rich in natural resources in the form of medicinal plants that have great potential as complementary therapies for various diseases, including hypertension. According to the Regulation of the Minister of Health of the Republic of Indonesia No. 179/Menkes/Per/VII/1976, traditional medicine is medicine derived from nature such as plants, animals, or minerals that are used in treatment based on empirical experience (Dafriani, 2019). One widely used herbal plant is ginger (Zingiber officinale). Ginger is known to contain essential oils, gingerol, and shogaol, which provide a warming effect, widen blood vessels, improve blood circulation, and have antioxidant and anti-inflammatory properties (Khodijah et al., 2023). Because of these properties, ginger is believed to help

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

lower blood pressure. Therapy using ginger can be done in various forms, one of which is a foot soak in boiled red ginger, which has a relaxing effect, improves blood circulation, and lowers blood pressure (Pratiwi, 2020).

Soaking feet in boiled red ginger is a non-pharmacological technique that utilizes the natural heating effect of ginger water to improve blood flow. The gingerol content in red ginger has hypotensive activity that helps dilate blood vessels and improve peripheral circulation (Arinda, 2019). Various studies support the health benefits of ginger. For example, Widayanti (2024) found that administering red ginger drink effectively reduced emesis gravidarum in pregnant women in the first trimester. Hernawati (2024) also showed that ginger candy can minimize the frequency of emesis gravidarum as a safe and accessible complementary therapy. Meanwhile, Putri (2023) found a positive effect of ginger administration on reducing morning sickness in pregnant women in the first trimester. Although most research focuses on the benefits of ginger for nausea and vomiting, its potential to lower blood pressure in pregnant women is still rarely specifically studied, making it interesting to study further.

A preliminary study conducted at the Guntur Garut Community Health Center (UPT Puskesmas) showed that the incidence of hypertension in pregnant women is still quite high. In 2024, 124 cases were recorded, and in January–April 2025, there were 47 pregnant women with hypertension who still relied on pharmacological treatment from community health center doctors, but the results were not optimal. No pregnant women had yet tried foot soak therapy with boiled red ginger as an alternative treatment. Based on these conditions, this study is important to assess the effectiveness of this complementary therapy. Therefore, researchers are interested in conducting a study entitled "The Effect of Providing Foot Soak Therapy with Boiled Red Ginger on High Blood Pressure in Pregnant Women at the Guntur Garut Community Health Center (UPT Puskesmas) in 2025." This study aims to determine the picture of blood pressure before and after foot soak therapy with boiled red ginger, as well as to analyze its effect on high blood pressure in pregnant women in the region.

RESEARCH METHODS

This research method uses a quasi-experimental design with a one-group pretest-posttest design approach, namely measurements are carried out before and after treatment without a control group. This study aims to determine the effect of foot soak therapy using red ginger decoction on high blood pressure in pregnant women at the Guntur Garut Community Health Center (UPT Puskesmas). The research subjects were pregnant women with hypertension who were selected through purposive sampling based on inclusion criteria, such as willingness to be respondents, cooperative, and not taking antihypertensive medication during the past week. Based on the analytical calculation of two proportions, the number of samples used was 20 pregnant women. The data collection process was carried out twice, namely before and after the therapy. Respondents were asked to soak their feet in red ginger decoction at a temperature of 39°C for 20 minutes every day for six days. Blood pressure was measured with a sphygmomanometer in a sitting position, then recorded on an observation sheet for further processing.

Data processing was carried out through editing, coding, entry, cleaning, and analysis using the SPSS program. Data normality was tested using the Kolmogorov-Smirnov test. If the data were normally distributed, analysis used the dependent t-test (pretest-posttest) to determine

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

the difference in blood pressure before and after therapy. If the data were not normally distributed, the Mann-Whitney test was used as a non-parametric alternative. This study also adhered to the principles of research ethics, namely respondent consent, maintaining anonymity and confidentiality of data, and ensuring voluntary participation. The research stages included preparation (research permit, respondent approach, literature review), implementation (observation questionnaire, data processing), and the final stage (report preparation and trial). This method is expected to produce valid data on the effectiveness of red ginger as a natural therapy to reduce high blood pressure in pregnant women.

RESULTS AND DISCUSSION

Research Result

Respondent Characteristics

Table 1. Age Characteristics of Hypertension Clients

Age

n	Mean	Standard Deviation	Minimum	Maximum
20	29,80	3,16	24	35

Table 1 shows that the average age of hypertensive clients is 28.80 years with a standard deviation of 3.16 years. The lowest client age is 24 years and the highest client age is 35 years.

Table 2. Characteristics of education of hypertensive clients

Education	Frequency	%
SD	2	10,0
JUNIOR HIGH SCHOOL	8	40,0
SMA	10	50,0

Table 2. above shows that half of the hypertensive clients have a high school education and almost half of the clients have a junior high school education.

Blood pressure before undergoing foot soak therapy with boiled red ginger

Table 3. Blood pressure before soaking feet in boiled red ginger

n	Mean	Standard Deviation	Minimum	Maximum
20	165.16	4.902	157	174

Table 3 shows that the average blood pressure of hypertensive clients before the red ginger foot soak therapy was 165.16 mmHg with a standard deviation of 4.902 mmHg. The lowest value was 157 mmHg and the highest was 174 mmHg.

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

Blood pressure after foot soak therapy with boiled red ginger

Table 4. Blood pressure after foot soak therapy with boiled red ginger

n	Mean	Standard Deviation	Minimum	Maximum
20	159.63	5.134	150	169

Table 4 above shows that the average blood pressure after foot soaking therapy with red ginger decoction was 159.63 mmHg with a standard deviation of 5.134 mmHg. The lowest blood pressure was 150 mmHg and the highest blood pressure was 169 mmHg.

The Effect of Foot Soak Therapy with Red Ginger Decoction on Blood Pressure Hypertensive Client Blood

Table 5. Effect of Foot Soak Therapy with Red Ginger Decoction on Blood Pressure

Pair	n	Mean	Std. Error Diference	95% CI	P value
Blood pressure before - after foot soak	20	5.400	1.539	2.284– 8.516	0,001

Table 5. above shows that the average deviation of blood pressure before and after foot soak therapy with red ginger decoction is 5,400 with *a standard error difference of* 1.539. The results of the hypothesis test using *the dependent t test* produced *a p value* of 0.001 which means it is smaller than *alpha (α)* 0.05. This shows that there is a difference in blood pressure before and after foot soak therapy with red ginger decoction, where the average blood pressure after foot soak therapy with red ginger decoction (159.63 mmHg) is lower than the average blood pressure before foot soak therapy with red ginger decoction (165.16 mmHg) so it can be concluded that foot soak therapy with red ginger decoction can lower blood pressure in hypertensive clients.

DISCUSSION

Univariate Analysis

Blood Pressure Before Red Ginger Foot Soak Therapy

The results of data processing according to Table 3 show that the average blood pressure of hypertensive clients before the foot soak therapy with boiled red ginger was 165.16 mmHg with a standard deviation of 4.17 mmHg. The lowest value was 157 mmHg and the highest value was 174 mmHg. Hypertension is an increase in blood pressure in the arteries. Hyper means excessive, the results of the study showed that the average blood pressure of hypertensive clients before the foot soak therapy with boiled red ginger was 165.16 mmHg with a standard deviation of 4,902 mmHg. This condition indicates that the respondents' blood pressure was high. Factors causing hypertension in pregnant women according to Ekasari (2021) include heredity, lifestyle, diet, obesity, lack of activity, etc. Consumption of foods

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

high in salt, saturated fat, and trans fat, as well as insufficient fruit and vegetable intake can increase the risk of hypertension. Lack of physical activity or exercise can contribute to weight gain and the risk of hypertension. Being overweight or obese before and during pregnancy increases the risk of hypertension. Pregnant women under 20 or over 35 are at higher risk. In this study, the average age of pregnant women was 29.80 years, within the healthy age range. However, other factors may influence hypertension, such as heredity, diet, and lifestyle. A family history of hypertension increases the risk of developing the condition, and if a mother has had hypertension in a previous pregnancy, the risk of it recurring in subsequent pregnancies is higher.

Triyanto (2017) stated that the risk of developing hypertension during pregnancy is very high if there is a family history or heredity of hypertension. Family history is a problem that triggers hypertension. If a parent has a history of hypertension, there is a lifelong risk of developing hypertension. This is related to increased intracellular sodium levels and a low potassium-to-sodium ratio. Therefore, pregnant women need to understand the risk factors and efforts to control hypertension. Understanding and knowledge about hypertension are necessary for pregnant women to prevent more severe hypertension conditions. This is in line with what Manuaba (2018) stated, who stated that knowledge of hypertension in pregnant women is related to the occurrence of hypertension. Utilizing foot soak therapy using boiled red ginger can reduce hypertension in pregnant women.

Many alternative treatments utilize natural elements, including ginger. Ginger is a medicinal plant and spice long known to Indonesians, and is found throughout the tropics. Ginger contains essential oils that provide a warming and spicy sensation, widening blood vessels and improving blood flow (Khodijah et al., 2023). Warm ginger is preferred over other herbal therapies because ginger contains antioxidants that can neutralize cell damage caused by free radicals and anti-inflammatory properties that help suppress inflammation caused by excessive oxidative stress and relieve pain. Ginger also contains essential oils that provide a warming and spicy sensation , widening blood vessels and improving blood flow . These properties make ginger a choice because it has properties that other herbs do not have. Therefore, ginger is used in combination with foot baths in the treatment of hypertension, especially as a non-pharmacological alternative therapy (Pratiwi, 2020).

Researchers believe that lifestyle, diet, obesity, lack of activity, consumption of foods high in salt and the like need to be controlled and regulated according to the instructions of health workers. Hypertension cannot be cured but can be controlled if the client is able to control the risk factors.

Blood Pressure After Foot Soak Therapy with Red Ginger Decoction

The results of data processing according to Table 4 above show that the average blood pressure after foot soak therapy with red ginger decoction was 159.63 mmHg, the lowest blood pressure was 159 mmHg and the highest blood pressure was 169 mmHg. Prevention and treatment of hypertension in pregnant women involves lifestyle changes such as maintaining a healthy diet, being active, avoiding smoking and alcohol, and monitoring blood pressure regularly. If necessary, doctors can prescribe medications to control blood pressure in pregnant women. Consuming certain foods such as fresh fruit, avocado, nuts, lentils and other non-herbal therapies such as therapy with cucumber juice, watermelon, tomato juice,

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

beetroot juice therapy, banana juice therapy, kiwi juice therapy and the like, as well as nuts and avoiding foods that can worsen it such as salty foods, processed foods, red meat, saturated fats, and high-sugar drinks (Nurhidayat, 2017).

Triyanto (2017) stated that the risk of developing hypertension during pregnancy is very high if there is a family history or heredity of hypertension. Family history is a problem that triggers hypertension. If a parent has a history of hypertension, there is a lifelong risk of developing hypertension. This is related to increased intracellular sodium levels and a low potassium-to-sodium ratio. Therefore, pregnant women need to understand the risk factors and efforts to control hypertension. Understanding and knowledge about hypertension are necessary for pregnant women to prevent more severe hypertension conditions. This is in line with what Manuaba (2018) stated, who stated that knowledge of hypertension in pregnant women is related to the occurrence of hypertension. Utilizing foot soak therapy using boiled red ginger can reduce hypertension in pregnant women.

Many alternative treatments utilize natural elements, including ginger. Ginger is a medicinal plant and spice long known to Indonesians, and is found throughout the tropics. Ginger contains essential oils that provide a warming and spicy sensation, widening blood vessels and improving blood flow (Khodijah et al., 2023). Warm ginger is preferred over other herbal therapies because ginger contains antioxidants that can neutralize cell damage caused by free radicals and anti-inflammatory properties that help suppress inflammation caused by excessive oxidative stress and relieve pain. Ginger also contains essential oils that provide a warming and spicy sensation , widening blood vessels and improving blood flow . These properties make ginger a choice because it has properties that other herbs do not have. Therefore, ginger is used in combination with foot baths in the treatment of hypertension, especially as a non-pharmacological alternative therapy (Pratiwi, 2020).

In line with Pratiwi's (2020) opinion, ginger can be used in combination with foot soaks in the treatment of hypertension, especially as a non-pharmacological alternative therapy. This is also supported by the results of Safitri's (2025) research which stated that there was an Effect of Warm Ginger Water Foot Soak Therapy on Reducing Blood Pressure in Pregnant Women with Preeclampsia in the Sei Langkai Community Health Center Work Area, Batam City. Likewise, the results of Ulistiani's (2023) research stated that there was an effect of providing warm ginger water foot soak therapy on reducing blood pressure in hypertensive pregnant women at BPM Nina Jakarta.

According to the researcher's assumption, there is an influence on hypertension in pregnant women because pregnancy hypertension does not have to be treated with drugs (pharmacology), it can also be treated non-pharmacologically by soaking the feet in red ginger.

Bivariate Analysis

The Effect of Red Ginger Foot Soak Therapy on Blood Pressure

The average deviation of blood pressure before and after foot soak therapy with red ginger decoction was 5.40 with a standard error difference of 1.539. The results of the hypothesis test using the T dependent test produced a p value of 0.001 which means it is smaller than alpha

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

(α) 0.05. This shows that there is a difference in blood pressure before and after foot soak therapy with red ginger decoction, where the average blood pressure after foot soak therapy with red ginger decoction (159.63 mmHg) is lower than the average blood pressure before foot soak therapy with red ginger decoction (165.16 mmHg) so it can be concluded that foot soak therapy with red ginger decoction can reduce blood pressure in hypertensive clients. Hypertension is a condition of increased systolic blood pressure of more than or equal to 140 mmHg and diastolic of more than or equal to 90 mmHg. Hypertension can be classified into two types: primary or essential hypertension, the cause of which is unknown, and secondary hypertension, which can be caused by kidney disease, endocrine disease, heart disease, and renal disorders (Yonata & Pratama, 2016). Persistently high and uncontrolled blood pressure can lead to complications in various organs. As Kharisma (2022) explains, complications in these organs that can occur if hypertension is not properly managed include complications in the brain, eyes, heart, and kidneys.

According to Smeltzer & Bare (2018), hypertension can be managed non-pharmacologically. One such non-pharmacological treatment is therapy. Many alternative treatments utilize natural elements, one of which is ginger. Ginger is a medicinal plant and spice long known to Indonesians, and is found throughout tropical regions. Ginger contains essential oils that can provide a warming and spicy effect, which widens blood vessels and improves blood flow (Khodijah et al., 2023).

In line with Pratiwi's (2020) opinion, ginger can be used in combination with foot soaks in the treatment of hypertension, especially as a non-pharmacological alternative therapy. This is also supported by the results of Safitri's (2025) research which stated that there was an Effect of Warm Ginger Water Foot Soak Therapy on Reducing Blood Pressure in Pregnant Women with Preeclampsia in the Sei Langkai Community Health Center Work Area, Batam City. Likewise, the results of Ulistiani's (2023) research stated that there was an effect of providing warm ginger water foot soak therapy on reducing blood pressure in hypertensive pregnant women at BPM Nina Jakarta.

Blood pressure is a crucial factor in the circulatory system to control. Increases or decreases in blood pressure affect homeostasis within the body. Blood pressure is essential for the driving force of blood flow within the arteries, arterioles, capillaries , and venous system, thus maintaining a stable blood flow. A complementary therapy that can be performed independently is foot soaks (foot hydrotherapy). Soaking the feet in warm water improves circulation and induces a systemic response due to vasodilation.

Soaking your feet in boiled red ginger improves blood circulation and promotes muscle relaxation. Red ginger offers the most significant benefits compared to other types of ginger. Gingerol compounds have been shown to have hypotensive activity. Gingerol comes from non-volatile oils. This compound creates a warming sensation on the skin when applied topically (Arinda, 2019). Ginger contains essential oils that provide a warming effect and a spicy aroma, dilating blood vessels and improving blood flow (Kurniawati, 2010). Red ginger is a type of ginger often used medicinally. Many believe that red ginger contains a high essential oil content (2.5%) . Its sharp aroma and spicy taste offer superior benefits compared to other subspecies (Hartanto & Fitmawati, 2014).

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

The results of this study indicate that respondents experienced a decrease in blood pressure. This can be seen from the difference in average blood pressure before and after foot soak therapy with red ginger at a temperature of 39º for 20 minutes, which is 5.40 in systolic;. The dependent t test obtained a p value = 0.001, so Ha is accepted and Ho is rejected, meaning there is an effect of foot soaking with boiled warm water with red ginger on blood pressure in pregnant women.

Soaking your feet in boiled red ginger has the effect of improving blood circulation and promoting muscle relaxation. Red ginger offers the most significant benefits. The compound gingerol has been shown to have hypotensive activity. Gingerol comes from non-volatile oils, as previously explained. This compound is what creates the warming sensation on the skin when applied (Pratiwi, 2020).

According to researchers, the therapeutic effect of soaking feet with boiled red ginger on high blood pressure is due to the warm water and ginger widening blood vessels, improving circulation. Ginger's essential oil content can be absorbed slightly through the skin, but its main effects are a warm sensation, muscle relaxation, and improved peripheral circulation, which indirectly helps lower blood pressure and makes mothers more relaxed. This can relax the entire body and reduce fatigue from a busy day.

CONCLUSION

Based on the results of research that has been conducted regarding the Effect of Providing Foot Soak Therapy with Red Ginger Decoction on High Blood Pressure in Pregnant Women at the Guntur Garut Community Health Center UPT in 2025, it can be concluded that the average blood pressure of hypertensive clients before the Foot Soak Therapy with Red Ginger Decoction was 165.16 mmHg at the Guntur Garut Community Health Center UPT. And the average blood pressure of hypertensive clients after the Foot Soak Therapy with Red Ginger Decoction was 159.63 mmHg at the Guntur Garut Community Health Center UPT. was 159.63 mmHg at the Guntur Garut Community Health Center UPT. The average deviation of blood pressure before and after the foot soak therapy with red ginger decoction was 5,400 with a std. error difference of 1.539. The results of the hypothesis test using the dependent t test produced a p value of 0.001 which means it is smaller than alpha (α) 0.05. This shows that there is a difference in blood pressure before and after foot soak therapy with red ginger decoction, where the average blood pressure after foot soak therapy with red ginger decoction (159.63 mmHg) is lower than the average blood pressure before foot soak therapy with red ginger decoction (165.16 mmHg) so it can be concluded that foot soak therapy with red ginger decoction can lower blood pressure in hypertensive clients.

BIBLIOGRAPHY

Ambar, Hafifah Fikriyah et al. (2021). Antenatal Midwifery Care Management for Mrs. S, 43 Weeks and 1 Day Gestation with Serotinus. Window of Midwifery. Journal Vol. 2 No. 2: 118-128

Anam, K. (2016). A Healthy Lifestyle Prevents Hypertension. Langsat Journal, 3(2), 97–102.

Anisa, Rizqi (2015) Effectiveness of Giving Warm Ginger Water Foot Soaks on Reducing Blood Pressure in Elderly People with Hypertension at Pucang Gading Nursing Home, Semarang Journal

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

Aprilyadi, N., Feri, J., & Ayu, L. (2021). Application of Guided Imagery Techniques to Reduce Headaches in Hypertension Patients at Siti Nurbaya Hospital.

Aisyah, Lubuklinggau City, 2021. Journal of Complementary Health, 1(1), 24–30. https://doi.org/10.36086/jch.v1i1.1114

Arikah, T., et al., (2020). Risk Factors for Hypertension in Pregnant Women at the Kramat Jati Community Health Center, East Jakarta in 2019. Indonesian Journal of Public Health Research and Development, 1(2), 115124

Arikunto, S. (2019). Research Procedures. Jakarta: Rineka Cipta.

Azwar. (2021). Non-Pharmacological Therapy for Hypertension Patients. Taman Ilmu Library.

Dafriani. Putri (2019). Herbal Approach in Treating Hypertension. 98, ISBN 978-602-5994-36–4.

Daryono, ED, AT Pursitta and A. Isnaini. (2018). Extraction of Essential Oil from Basil Plants with N-Hexane Solvent. Journal of Chemical Engineering 9(1):2-3

Dahlan, MS (2018). Statistics for Medicine and Health. Salemba Medika.

Garut Health Office. (2024). Health Profile. Garut. Garut Regency

Darmawan, A., Berawi, KN, Karimah, N., & Wahyudo, R. (2019). Effectiveness

Acupuncture Therapy for Hypertension Patients. Jurnal Agromedicine, 6, 332–336. file:///C:/Users/user/Downloads/Jurnal Akupuntur hipertensi/Darmawan, 2019.pdf

Dartiwen, Nurhayati Y. Midwifery Care During Pregnancy.

Ekasari, MF et al. (2021) Hypertension: Recognize the causes, signs, symptoms, and treatment, Hypertension. Edited by A. Jubaedi. Jakarta.

Erbhasan, (2025). Overview of the Level of Knowledge About Hypertension Among Hypertension Patients at Legok Community Health Center. Thesis, Tarumanagara University

Fatimah & Nuryaningsih. (2017). Midwifery Care for Pregnancy. Jakarta: Faculty of Medicine and Health, Muhammadiyah University.

Hastuti, Apriyani Puji. (2022). Hypertension. Lakeisha Publisher.

Indonesian Ministry of Health, (2021). To Reduce Maternal Mortality Rate, 4,180 Portable Ultrasounds Ready Next Year. Jakarta

Ministry of Health of the Republic of Indonesia. Hypertension: The Most Common Disease in the Community. Jakarta: Ministry of Health of the Republic of Indonesia; 2019.

Khodijah, A., Fahrianingsih, & Rohmah, H. (2023). Effectiveness of Foot Soak with Ginger Decoction on Reducing Blood Pressure in Pregnant Women with Preeclampsia in the Rogotrunan Community Health Center Work Area. Scientific Journal of Obstetrics and Gynecology, 15(3), 57–60.

Kozier, Erb, Berman & Snyder (2020), Textbook of Fundamentals of Nursing: Concepts, Process, and Practice (7th ed., Vol. 2). Jakarta: EGC

Kurniawan, I., Sulaiman. (2019). JHSP: The Relationship Between Exercise, Stress, and Dietary Patterns with Hypertension Levels at the Elderly Integrated Health Post in Sudirejo I Village, Medan City District. Vol 1 (1): 14.

Marhabatsar, NS, & Sijid, SA (2021). Review: Hypertension in the Cardiovascular System. Journal of UIN Alauddin, November, 75. http://journal.uinalauddin.ac.id/index.php/psb

Masteria. (2019). In Wagiono, Dessy Agustina, and Sabrina Alfiansyahri Miledhiya. Benefits of Red Ginger. Indonesian Agrotechnology Journal 2(5):41—4

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

Desy, DS, Sulastini, S., & Riana, RMAD (2022). Characteristics of Severe Preeclampsia Patients at Dr. Slamet Regional Hospital, Garut Regency. Prima Insan Cendikia Health Science Journal, 1(01), 31-40.

Nasution, LK and Rambe, NY (2020) 'Hypertension in the Elderly in Huraba Village, Batang Angkola District, South Tapanuli Regency , 2020'

Notoatmodjo. (2021). Research Design in the research method using Quantitative. Research Design

Nurhidayat, S. (2017). Nursing Care for Hypertension Patients. In Health Journal.

Nursalam, (2018). Concept and Application of Nursing Science Research Methodology. Guidelines for Nursing Research Theses, Dissertations, and Instruments. 2nd Edition. Jakarta: Salemba Medika Publisher.

Perdani, A.P. and Berawi, K.N. (2021) "Holistic Management With Family Doctor Approach In A 37- Year-Old Female Patient With Primary Hypertension.," Jurnal Ilmu Medis Indonesia, 1(1), pp. 17–24.

Pradono J, Kusumawardani N, Rachmalina R. (2020). Hypertension: A Hidden Killer in Indonesia.

Pratiwi, WR, Asnuddin, Hamdiyah, & Hasriani.(2020). Reproductive Health Education in Facing Emergency Disaster Situations as an Effort to Improve Welfare and Healthy Reproduction. Indonesian Journal of Community Dedication (IJCD), 2(2), 39–44. http://jurnal.stikesnh.ac.id/index.php/community.

Putri, GSY, Sulistiawati, S., & Laksana, MAA (2022). Analysis of risk factors for anemia in pregnant women in Gresik Regency in 2021. Journal of Midwifery Research

Reichenbach, A., Bringmann, A., Reader, EE, Pournaras, CJ, RungerBrändle, E., Riva, CE, Hardarson, SH, Stefansson, E., Yard, WN, Newman, EA, & Holmes, D. (2019). Nursing care for a client with congestive heart failure with activity intolerance nursing problems in the CVCU room of Bangil Pasuruan General Hospital. Progress in Retinal and Eye Research, 561(3), S2–S3.

Riskesdas. (2018). Health Research and Development Agency of the Ministry of the Republic of Indonesia in 2018.

Restiani Arma M. dkk. (2019). A Potential Herbal Plants As Antihipertensive Therapy: A Review. Semarang: Proceedings Of International Conference On Applied Science And Health No 4

Setyaningrum, HD and C. Saparinto. 2018. Ginger. Jakarta: Penebar Swadaya.

Siswanto, Y., & Afandi, A. (2019). Improving Knowledge About Hypertension in Adolescents. Indonesian Journal of Independent Community Empowerment, 2(3), 1–7 . https://doi.org/10.35473/jpmmi.v2i3.32

Sugiyono. (2022). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alfabeta.

Surianti, T, et al. (2021). Factors Associated with the Occurrence of Hypertension in Pregnant Women in the Work Area of the Wosu Community Health Center, Bungku District.

Susanti, S., Bujawati, E., Aulia, R., Sadarang, I., Ihwana, D., & Barru, K. (2022). Self-Relationship

Verma, N., Rastogi, S., Chia, YC, Siddique, S., Turana, Y., Cheng, H. Min, Sogunuru, GP, Tay, JC, Teo, BW, Wang, TD, Tsoi, KKF, & Kario, K. (2021). NonPharmacological Management Of Hypertension. Journal Of Clinical Hypertension, 23(7), 1275–1283. https://Doi.Org/10.1111/Jch.14236

WHO. (2021). Guidelines for the management of hypertension. Guidelines subcommittee. J Hypertensi 17. Hlm.151-83.

JURNAL PENELITIAN PROGRESSIF
Vol 5No 1 (2026): SEPTEMBER 2025-FEBRUARY 2026 |
DOI: https://doi.org/ 10.61992/jpp.v5i1.282 | E-ISSN:2963-4369

Yonata, A. & Pratama, ASP (2016). Hypertension as a Triggering Factor for Ade's Stroke. Majority, 5(3).