# THE EFFECT OF BALANCE LEAF BOILING ON CHANGES IN BLOOD PRESSURE IN HYPERTENSION PATIENTS IN THE WORKING AREA OF PAYUNG SEKAKI PEKANBARU HEALTH CENTER

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**Abstract**
Hypertension is a health problem in the world, both developed and developing countries. Hypertensive patients routinely take drugs to control and lower blood pressure, but people are now getting tired of taking drugs because of the side effects of hypertension drugs that make dizziness, diarrhea and coughing. People turn to non-pharmacological treatment, one of which is by consuming boiled salam leaves to control blood pressure. Salam leaves contain flavonoids as antioxidants that can lower blood pressure. Consuming a decoction of salam leaves 2 times a day for 7 days as much as 150 cc, according to the SOP. The purpose of this study was to determine the effect of boiled salam leaves on changes in blood pressure in hypertensive patients in the work area of the Simpang Tiga Inpatient Health Center Pekanbaru City involving 14 respondents. The study was conducted on 12 June to 6 July. The research design used is Cross Over Design with pre-test and post-test designs. The sampling technique used is purposive sampling with inclusion criteria. The research instruments used were observation sheets, SOPs and also a sphygmomanometer. The results of this study indicate that there is an effect of salam leaf decoction before and after giving the salam leaf stew with p value = 0.00 where it can be concluded that there is an effect of salam leaf stew on reducing blood pressure in hypertensive patients. The results of the Decoction and Drug Statistical Test showed a systolic P value of 0.264 > (0.05) and a diastolic p value of 0.100 < (0.05), indicating that there was no significant difference between the decoction and the drug in controlling and lowering blood pressure in hypertensive patients. This study recommends to further researchers to conduct further research on the effect of boiled Bay leaves on changes in blood pressure in patients with hypertension.

Keywords: Effect, Salam Leaves, Hypertension.

## INTRODUCTION

Hypertension is a health problem in the world, both in developed countries and developing countries. The term "silent killer" is applied to hypertension because usually people who suffer from it do not know the symptomsbefore and new symptoms appear after certain organ systems suffer blood vessel damage. Blood pressure involves two measurements, namely systolic and diastolic (Simandalahi & Yentisukma, 2019). Treatment of hypertension can be done using a pharmacological approach and non-pharmacological. Non-pharmacological approach or so-

called Complementary approaches are very popular in Indonesia. Approach Complementary is an additional effort beyond the medical approach It is believed to lower blood pressure. Treatment developments Complementary has a very rapid increase in percentage. By Globally there are many complementary therapies to lower blood pressure one of which is herbal therapy (Risa et al, 2018). A number of Complementary treatments have been found to help Lowering blood pressure using traditional plants. People use complementary therapies for reasons of belief, finances, chemical drug reactions, healing rates and also felt effects reduction in blood pressure is felt more quickly (Trisnawati & Jenie, 2019,
(A. Lestari & Faridah, 2021). One type of complementary therapy that can be used for lowering blood pressure in hypertensive sufferers is by consume boiled bay leaves. Bay leaves Bay leaves come from the country Southeast Asia, such as Burma, Indochina, Thailand, the Malay Peninsula, Sumatra, Kalimantan and Java. The natural distribution of the Bay Leaf tree covers tropical regions of Asia such as Myanmar, Thailand, Vietnam, Malaysia, the Philippines, Singapore, Brunei and Indonesia. Apart from that, bay leaves can also be found in India. Bay leaves are a type of foliage plant and traditional medicine. Bay leaves contain flavonoid compounds, phenols, alkaloids, tannins, and coumarins. Purified ethanol extract from bay leaves has the potential to be developed into antihypertensive drugs (Hasim et al., 2019)
Bay leaf decoction is given twice a day (150 ml for one drink) after eating for 7 consecutive days, with the preparation procedure, namely (Simandalahi & Yentisukma, 2019):
Fresh bay leaves are washed clean, then the leaves are weighed 50 grams for 1 glass. Fresh green leaves are boiled in 300 ml of water until it boils until the remaining water is reduced to half. Strain while warm, and give 2 glasses per day, morning and evening (150cc) after eating. Next, blood pressure is measured again after giving the intervention and recorded on the observation sheet. Consume the decoction for 7 consecutive days.

## RESEARCH METHODS

This research uses a cross over design. A cross over design is an experimental design where each experimental subject receives several treatments over different time periods. This design aims to determine the results obtained before and after the bay leaf decoction consumption intervention, which begins with measuring blood pressure before the treatment (pre-test) and after the intervention (post-test).
This research was conducted in the Payung Sekaki Health Center Work Area. This research was conducted from February 2022 to July 2022. The population of this study was all hypertension sufferers who were within the working area of the RI Simpang Tiga Health Center, where the number of hypertension sufferers was from January to December 2021
totaling 6,324 people, and the number of samples in this study was 13 people. This study used two variables, namely the dependent variable for reducing blood pressure and the independent variable was bay leaves. This research used 2 data analysis techniques, namely Univariate and Bivariate.

## RESEARCH RESULT

This section presents the research results. Research results are accompanied by tables, graphs (images), and/or charts. [Times New Roman, 12, normal], 1 space. PNG/jpg image format.

## DISCUSSION

Univariate Analysis

a. Age

From the research results, the majority of hypertensive respondents were aged 30-40 years. According to researchers' assumptions, increasing a person's blood pressure does not only depend on age, but increasing blood pressure is also caused by a person's habits and lifestyle.

b. Gender

Based on the gender of the respondents in this study, it was found that the proportion of women was greater than men with a total of 11 respondents (78%). And the number of male respondents was 3 respondents (21.4%). According to researchers' assumptions, there are more women than men who suffer from hypertension. This is caused by low estrogen levels. Estrogen functions to increase levels of High Density Lipoprotein (HDL) which plays a very important role in maintaining healthy blood vessels.

c. Work

According to researchers' assumptions, excessive work makes you physically tired and stress increases which will cause blood pressure to increase.

d. Blood Pressure and Drug Treatment

Researchers used the drug Amlodipine to lower blood pressure. The results were that CCB class drugs had a good ability to lower blood pressure in a short time. According to researchers' assumptions, medication is a fast, effective way to lower blood pressure. If consumed regularly by hypertensive patients, it can control blood pressure so that it remains stable.

e. Blood Pressure and Bay Leaf Treatment

The results of the independent t-test statistical test showed a value of $p = 0.000$ and $p = 0.001$, meaning $p < 0.05$, which means there is an effect of giving bay leaf boiled water on blood pressure in hypertensive elderly people.

Bivariate Analysis

a. Comparison of drug treatment and daun salam leaf decoction on reducing blood pressure.

Statistical testing using the T-dependent paired T-Test. The results obtained were that the sample average for systolic drug intervention had a p value of 0.00, which means <0.05. Meanwhile, the diastolic p value of the drug is 0.00, which means <0.05. Thus, the hypothesis in this study is that there is an effect of drug treatment on blood pressure in patients.

b. The difference in blood pressure after being given medication and decoction.

The hypothesis in this study is that there is no significant difference in the effect of administering drug treatment and boiled daun salam leaves on blood pressure in patients. According to the researchers' assumptions, this shows that hypertensive patients can use Bay leaf decoction as a non-pharmacological treatment to lower blood pressure and control blood pressure when they are bored with taking medication.

## CONCLUSIONS AND SUGGESTIONS

The hypothesis in this study is that there is no significant difference in the effect of administering drug treatment and boiled daun salam leaves on blood pressure in patients. According to the researchers' assumptions, this shows that hypertensive patients can use Bay

leaf decoction as a non-pharmacological treatment to lower blood pressure and control blood pressure when they are bored with taking medication.

1. For educational institutions

It is hoped that the results of this research can be used as a reference for knowledge and also the development of midwifery science and midwifery services throughout a woman's life cycle.

2. For respondents

It is hoped that this research can provide input or can be used as knowledge regarding non-pharmacological treatments to reduce blood pressure in hypertensive patients.

3. For future researchers

For future researchers, it is hoped that this research can be used as a source of information and the results of this research can be used as a comparison to conduct further research and further develop this research to suggest that future researchers should examine the comparative effect of decoction of Bay leaves and Bay on reducing blood pressure. in hypertensive patients.

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