

The Application of Bay Leaf Decoction in Hypertension Patients (Literature Review)

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ABSTRACT

Background & Objective: The increase in non-communicable diseases (NCDs) poses a challenge to the healthcare sector in maintaining quality of life. One of the most prevalent NCDs today is hypertension. Hypertension is classified as a silent killer and is spreading worldwide. Hypertension can be managed through pharmacological and non-pharmacological therapies. Non-pharmacological therapy can be administered through complementary therapy, such as herbal medications, and one herbal treatment believed to lower hypertension is the use of boiled bay leaf water. **Method:** The research method used a literature review of studies published between 2020 and 2024. The literature search employed a data strategy using the keywords “hypertension” and “bay leaves,” utilizing the Google Scholar and PubMed databases. The criteria included articles discussing the relationship between hypertension and bay leaves, with full-text availability. **Result:** The results from 10 articles indicate that consuming a decoction of bay leaves is effective in lowering blood pressure in hypertensive patients. **Conclusion:** It is recommended that hypertensive patients consume a decoction of bay leaves regularly to achieve effective results, but they should also maintain a balanced diet and engage in sufficient physical activity.

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Introduction

The rise in non-communicable diseases (NCDs) poses a challenge to the healthcare sector in maintaining quality of life. One of the most prevalent NCDs today

is hypertension. Hypertension is classified as a silent killer and is spreading worldwide (Azura, 2021).

Hypertension is a condition where blood pressure exceeds normal limits. An individual is diagnosed with hypertension if their blood pressure is measured more than twice in a state of adequate rest, with systolic blood pressure exceeding 140 mmHg and diastolic blood pressure exceeding 90 mmHg (Hastuti Puji, 2022).

Data from Indonesia based on the 2018 Riskesdas survey indicates that the number of hypertension cases in Indonesia is 63,309,620 people, with the highest prevalence in South Kalimantan at 44.1% and the lowest in Papua at 22.2% (Ministry of Health of the Republic of Indonesia, 2018). Basic health research conducted found that the prevalence of hypertension in West Java Province reached 26.2%, and the prevalence of hypertension in Cirebon City reached 22.0%. A study conducted in 2018 showed that according to survey results, the highest number of degenerative disease cases based on morbidity data was hypertension, with 37 cases out of 120 elderly individuals (A. R. Safitri & Ismawati, 2018).

Efforts in managing hypertensive patients begin with modifying the patient's lifestyle, followed by administering treatment according to medical criteria and recommendations. This is done to control the patient's blood pressure levels, ensuring they remain within the recommended range. In Indonesia, the public often prefers herbal or traditional medicines over conventional ones. This is evidenced by a study by Ervina and Ayubi (2018), which states that 66.2% of the population still prefers to use traditional medicine over conventional medicine. However, many Indonesians are still improper in processing and using herbal remedies, which could potentially lead to toxic effects.

Hypertension can be managed through pharmacological and non-pharmacological therapies. The administration of chemical medications is one of the pharmacological treatments for hypertension. Non-pharmacological treatment can be provided through complementary therapy, such as administering herbal medications. One herbal treatment believed to lower hypertension is by providing a decoction of bay leaves (Trio Gustin Rahayu, 2021). Bay leaves (*Syzygium polyanthum*) are indigenous Indonesian medicinal plants that are easily found and widely used in communities to lower blood sugar levels, cholesterol, blood pressure, diarrhea, and gastritis. Several studies have shown that bay leaf decoction contains several beneficial compounds for health, including flavonoids, essential oils, tannins, Vitamin A, Vitamin E, alkaloids, saponins, quinones, phenolics, triterpenoids, and steroids (Aji & Sani, 2021). Therefore, based on the above background, this article is a literature review aimed at summarizing the effects of bay leaf decoction on hypertensive patients.

Objective

Based on this, researchers were interested in conducting a literature study aimed at summarizing the effects of giving salam leaf tea to hypertensive patients.

Method

The method used in this literature review employed a comprehensive strategy, such as searching for articles in research journal databases and searching the internet. The articles searched were retrieved from several databases, including Google Scholar and PubMed. At the beginning of the search, the author used the keyword: "(bay

leaves and hypertension)". A time limit of 5 years was applied to the journal search, specifically from 2020 to 2024. The article titles were related to lowering blood pressure in hypertensive patients and bay leaf decoction. Full-text samples were used based on the articles to be analyzed. After collecting data and information, the main ideas of this journal were compared with several related theories, and further recommendations were provided for non-pharmacological approaches that can be used to control blood pressure in hypertensive patients.

Results

The database used by researchers from Google Scholar and PubMed. At the population search stage, researchers did not encounter any significant problems. Research on the administration of bay leaf decoction to hypertensive patients has been widely conducted. This further strengthens the researchers' motivation to review the effectiveness of administering bay leaf decoction to hypertensive patients. The second stage involved screening articles to identify key points. During the screening stage, the researchers limited the time frame to 2020–2024.

Discussion

Based on the results of a literature review of 10 articles, all of them reported a decrease in systolic and diastolic blood pressure in hypertensive patients after being given a decoction of bay leaves. After the intervention with bay leaf decoction, 6 articles reported a decrease in systolic and diastolic blood pressure after administering the decoction for 2 weeks. The results of the study (Aji Prima Trisna., Sani, 2021) titled "The Effect of Bay Leaf Decoction Therapy on Blood Pressure Changes in Hypertensive Patients in the Tempurejo Jumapolo Karang Anyar Area" This type of study is a quasi-experimental design. The study sample consisted of 40 hypertensive patients in the Tempurejo Jumapolo Karang Anyar area. The participants were given boiled bay leaf water, one glass twice daily for two weeks. The bay leaf water was prepared by boiling 15 bay leaves in 750 ml of water for 15 minutes, with 200 ml consumed each time. There was an effect of the boiled bay leaf water therapy on blood pressure in hypertensive patients, with a Wilcoxon test p-value of 0.000.

Consuming bay leaf decoction can lower blood pressure, as the minerals in bay leaves help improve blood circulation and reduce high blood pressure. Hypertensive patients should regularly consume it as it helps improve blood flow and oxygen intake. The intervention using bay leaf decoction is a natural treatment that does not cause side effects in hypertensive patients.

Previous research has indicated that the longer patients use antihypertensive medications, the higher the risk of side effects. Most respondents in the study reported being significantly bothered by side effects such as dizziness, weakness, stomach issues, and swollen legs. This aligns with a study conducted by (Budiman., Asep., Tiffany in 2020) titled "The Difference Between Boiled Celery Leaf Water and Boiled Bay Leaf Water in Lowering Blood Pressure in Pre-Elderly Individuals with Primary Hypertension," with a sample size of 22 respondents, and (Ramadan., Restiana, 2022) titled "The Application of Bay Leaf Decoction to Lower Blood Pressure in Hypertensive Patients in Pasirlaja Village." The sample for this study was a hypertensive patient in Pasirlaja Village, RT 013, RW 002, Pasirlaja Subdistrict. The intervention provided was administering 100 ml of bay leaf decoction twice daily for

7 days. The results of this study showed a decrease in both systolic and diastolic blood pressure before and after administering the bay leaf decoction.

According to Anisa's (2021) study titled "The Effect of Bay Leaf Decoction on Blood Pressure Reduction in Hypertensive Patients," with a sample size of 15 people, using purposeful sampling with a pre-experimental method, it was stated that bay leaf decoction therapy can lower blood pressure by boiling 9 bay leaves in 400 ml of water for 15 minutes, leaving 200 ml to be administered in the morning and evening during 3 visits over 5 days.

Conclusion

Based on research findings, the use of non-pharmacological therapy involving the administration of boiled bay leaf decoction to hypertensive patients is considered effective in lowering systolic and diastolic blood pressure. Regular consumption of bay leaf decoction can provide benefits for hypertensive patients; however, hypertensive patients should also pay attention to their diet and ensure it is balanced with adequate exercise. However, the consumption of boiled bay leaf water should be taken regularly every day, in the morning and evening, to achieve more effective and optimal results.

References

- Aji, P. T., & Sani, F. N. (2021). Pengaruh Terapi Air Rebusan Daun Salam Terhadap Perubahan Tekanan Darah Pada Penderita Hiperensi Di Wilayah Tempurejo Jumapolo Karanganyar: Pengaruh Terapi Air Rebusan Daun Salam Terhadap Perubahan Tekanan Darah Pada Penderita Hiperensi Di Wilayah Tempurejo Jumapolo Karanganyar. *Viva Medika: Jurnal Kesehatan, Kebidanan Dan Keperawatan*, 14(02), 139-152.
- Azura, C. T. (2021). Literature Review: Gambaran Gaya Hidup terhadap Kejadian Hipertensi pada Usia Dewasa [Undergraduate thesis]. Poltekkes Medan, Sumatera Utara, Indonesia.
- Badrujamaludin, A., Budiman, B., & Erisandi, T. D. (2020). Perbedaan air rebusan daun seledri dan air rebusan daun salam terhadap penurunan tekanan darah pada pra lansia dengan hipertensi primer. *Holistik Jurnal Kesehatan*, 14(2), 177-186.
- Dafriani, P. (2021). Pengaruh Rebusan Daun Salam (*Syzigium Polyanthum* Wight Walp) Terhadap Tekanan Darah Pasien Hipertensi di Sungai Bungkal, Kerinci 2016. *Jurnal Kesehatan Medika Saintika*, 7(2).
- IRAWAN, M. (2019). Asuhan keperawatan pada keluarga Ibu R dengan hipertensi dengan pendekatan terapi komplementer yaitu rebusan daun salam di orong Ladang Hutan Kec Baso Kab. Agam tahun 2019 (Doctoral dissertation, UNIVERSITAS PERINTIS INDONESIA).
- Kemenkes. (2022). 7 Manfaat Daun Salam bagi Kesehatan. Kementerian Kesehatan Direktorat Jendral Pelayanan Kesehatan. [https://yankes.kemkes.go.id/view_artikel/928/7-manfaat-daun-salam-bagi-kesehatan#:~:text=Daun salam berjasa dalam menurunkan, penderita diabetes dan penderita resistensi](https://yankes.kemkes.go.id/view_artikel/928/7-manfaat-daun-salam-bagi-kesehatan#:~:text=Daun%20salam%20berjasa%20dalam%20menurunkan,penderita%20diabetes%20dan%20penderita%20resistensi).
- Kurnia, anih. (2020). SELF-MANAGEMENT HIPERTENSI. CV.Jakad Media Publishing.[https://books.google.co.id/books?id=a18XEAAQBAJ&printsec=f](https://books.google.co.id/books?id=a18XEAAQBAJ&printsec=frontcover)rontcover

- &dq=hipertensi&hl=id&newbks=1&newbks_redir=0&source=gb_mobile_search&sa=X&ved=2ahUKEwji5b64u5L7AhWp4jgGHfvNBhwQ6AF6BAGHEAM#v=onepage&q=hipertensi&f=false
- Kurnia, D. A., & Sabichiyyah, N. A. (2021). Kepatuhan Regimen Terapi Pada Pasien Hipertensi di Wilayah Puskesmas. *Jurnal Persatuan Perawat Nasional Indonesia (JPPNI)*, 5(1): 19-31.
- Made, N., Sanjiwani, S., & Sudiarsa, W. (2021). Sosialisasi Pemanfaatan Herbal Drink Daun Salam Sebagai Pengobatan Tradisional. 22(2), 1-2. <https://doi.org/10.5281/zenodo.5576068>
- Meliyana, A. T., & Wulandar, R. (2021). Pengaruh Terapi Relaksasi Guided Imagery terhadap Penurunan Tekanan Darah pada Penderita Hipertensi dengan Media Video [Working Paper]. Universitas Aisyiyah Surakarta, Jawa Tengah, Indonesia.
- Nurjannah, S. (2024). *PENGARUH PEMBERIAN AIR REBUSAN DAUN SALAM (SYZIGIUM POLYANTHUM) TERHADAP PENURUNAN TEKANAN DARAH PADA LANSIA PENDERITA HIPERTENSI DI UPT PUSKESMAS GADING REJO TAHUN 2024* (Doctoral dissertation, Universitas Muhammadiyah Pringsewu).
- Nurtanti, S., & Sulistiyoningsih, S. (2022). Efektivitas Rebusan Daun Salam Terhadap Penurunan Tekanan Darah Pada Pasien Hipertensi. *Jurnal Keperawatan GSH*, 11(2), 34-39.
- Parwati, I., & Mulyanti, S. (2022). Penerapan Terapi Rebusan Daun Salam Terhadap Penurunan Tekanan Darah Pada Pasien Hipertensi Di Rt 001 Rw 004 Desa Jayaratu Wilayah Kerja Pkm Sariwangi. *Healthcare Nursing Journal*, 4(2b), 77-83.
- Rahmalia, A., Apriza, A., & Isnaeni, L. M. A. (2021). Pengaruh Pemberian Air Rebusan Daun Salam (*Syzygiumpolyanthum*) Terhadap Penurunan Tekanan Darah Pada Penderita Hipertensi Di Desa Kuok Wilayah Kerja Upt Blud Puskesmas Kuok. *Jurnal Ksetan Tambusai*, 2(4), 375-381.
- Rhamadan, R., Restiana, N., & Badrudin, U. (2022). Penerapan Rebusan Daun Salam Untuk Menurunkan Tekanan Darah Pada Penderita Hipertensi Di Desa Pasirlaja. *Healthcare Nursing Journal*, 4(2b), 157-162.
- Sutawan, I. (2020). *GAMBARAN ASUHAN KEPERAWATAN PADA PASIEN HIPERTENSI DENGAN TERAPI HERBAL (AIR REBUSAN DAUN SALAM) DALAM PEMENUHAN KEBUTUHAN RASA NYAMAN DI UPT KESMAS 1 SUKAWATI GIANYAR* (Doctoral dissertation, Poltekkes Denpasar Jurusan Keperawatan).
- Syah, L. H. (2024). *APLIKASI REBUSAN DAUN SALAM UNTUK MENURUNKAN TEKANAN DARAH PADA KELUARGA DENGAN HIPERTENSI* (Doctoral dissertation, Skripsi, Universitas Muhammadiyah Magelang).
- Tika Herawati, A., Manaf, H., & Kusumawati, E. P. (2021). Pengetahuan Tentang Penanganan Penyakit Hipertensi Pada Penderita Hipertensi. *JKP Jurnal Ilmiah Kesehatan PENCERAH*, 10(2), 159-165. <https://stikesmu-sidrap.e-journal.id/JIKP/article/view/265>
- Trio Gustin Rahayu. (2021). *Syzygium Polyanthum Effects on Blood Pressure Decrease of Patients with Post Stroke*. *Jurnal Ilmiah Kesehatan Pencerah*, 10(1), 84-89.