Jurnal Kesehatan Komunitas Indonesia (JKKI)
Volume 5 Issue 3, December 2025, pp 350-358
https://ebsina.or.id/journals/index.php/jkki
eISSN 2503-2801, pISSN 2985-3435

Implementation of Benson Relaxation to Lower Blood Pressure in Elderly Hypertensive Patients in Joyotakan Village, Serengan District, Surakarta

Kurnia Ayu Rahmawati[1]*, Mulyaningsih[1]

1. 'Aisyiyah University Surakarta, Indonesia

Article History
Submitted: 21-09-2025
Revised: 10-11-2025
Accepted: 06-12-2025

doi.org/10.58545/jkki.v5i3.585

Abstract

Background: Hypertension is a common health condition among older adults and a major risk factor for cardiovascular complications. Non-pharmacological interventions, such as Benson relaxation, offer a safe and accessible approach to blood pressure management in the elderly. **Objective:** This study aimed to evaluate the effect of Benson relaxation therapy on blood pressure reduction among older adults with hypertension in Joyotakan Village, Serengan District, Surakarta City, Indonesia. **Methods:** A descriptive case study design was employed with two elderly respondents diagnosed with stage I hypertension. Benson relaxation was administered once daily for three consecutive days, with each session lasting 10–20 minutes. Blood pressure was measured before and after each intervention. Inclusion criteria were: diagnosed hypertension, age ≥35 years, ability to communicate verbally, and willingness to participate. Exclusion criteria included altered consciousness or concurrent use of antihypertensive medication during the study. **Results:** Both respondents showed consistent reductions in systolic and diastolic blood pressure across all three days. Respondent Mrs. S's blood pressure decreased from 145/100 mmHg to 130/80 mmHg (a reduction of 15/20 mmHg), shifting from Stage I hypertension to prehypertension. Respondent Mr. S's blood pressure decreased from 142/105 mmHg to 120/77 mmHg (a reduction of 22/28 mmHg), reaching the normal range. Daily reductions ranged from 5–15 mmHg in systolic and 5–15 mmHg in diastolic pressure. **Conclusion:** Benson relaxation therapy demonstrated a positive effect in lowering blood pressure among elderly individuals with hypertension, supporting its use as an effective non-pharmacological nursing intervention in community settings.

Keywords: Benson relaxation, Hypertension, Elderly, Blood pressure

Correspondence
Kurnia Ayu Rahmawati,
'Aisyiyah University of Surakarta,
Jl. Ki Hajar Dewantara No.10, Jawa, Kec. Jebres, Kota Surakarta, Jawa Tengah 57146
Email: Kurniaayur2@gmail.com

How to cite:
Rahmawati, K. A., & Mulyaningsih. (2025). Implementation of Benson Relaxation to Lower Blood Pressure in Elderly Hypertensive Patients in Joyotakan Village, Serengan District, Surakarta. Jurnal Kesehatan Komunitas Indonesia, 5(3), 350-358. https://doi.org/10.58545/jkki.v5i3.585

1. BACKGROUND

Elderly is the final stage of the aging process. Aging is a condition that occurs in human life. The aging process is a lifelong process, not just starting at a certain point, but rather from the beginning of life. Growing old is a natural process, which means a person has gone through three

stages, namely childhood, adulthood, and old age. The large number of declines in body function experienced by an elderly person can lead to a decrease in quality of life, including balance problems (Puput, 2024; Kurdi et al., 2025).

Based on WHO data (2023), around 1.28 billion adults aged 30-79 years worldwide suffer from hypertension. The number of people with hypertension increases every year. By 2025, it is estimated that there will be around 1.5 billion people affected by hypertension in various countries in the world, including Indonesia. Based on the results of Hypertension in Indonesia, the prevalence of hypertension based on measurement results in the population aged >18 years is 34.1%. The number of hypertension sufferers in Indonesia is estimated at 15 million people.

Proper management of hypertension can control blood pressure and prevent complications that are very risky to health. Management of hypertension to control blood pressure is grouped into two, including pharmacological therapy and non-pharmacological therapy. Management of pharmacological treatment can be carried out using chemical drugs. Globally, non-pharmacological therapies to lower blood pressure have been widely used, such as herbal therapy, exercise, deep breathing relaxation, progressive muscle relaxation, soaking the feet in warm water, and Benson relaxation. One of the non-pharmacological therapies to lower blood pressure is Benson relaxation therapy. Benson relaxation therapy combines breathing relaxation techniques with elements of faith or spirituality, which helps create an internal environment conducive to achieving well-being (Hidayat, 2022; Pangestu et al., 2024).

The research results align with those of Simahati et al. (2024), which indicate that before the Benson relaxation technique was administered, blood pressure ranged from 130/75 mmHg to 159/77 mmHg. After being taught the Benson relaxation technique, blood pressure decreased from 130/60 mmHg to 158/75 mmHg, indicating that the technique effectively lowered blood pressure in hypertensive patients.

Based on the description of research results (Yulendasari & Djamaludin, 2021). Research suggests that Benson may benefit from relaxation for 5 minutes every night before bed for 5 days. The effect of Benson relaxation therapy on reducing blood pressure in hypertensive patients, as measured by the difference in average

systolic blood pressure between the intervention group and the control group. This happens because Benson's relaxation focus is on specific phrases that are said with complete confidence, repeated over and over again, using a regular rhythm, accompanied by a resigned attitude.

The results of research conducted by Ibrahim et al. (2024), benson relaxation technique can lower blood pressure. This can help break the cycle of anxiety and relieve the symptoms that accompany it. This study aims to determine the results of implementing Benson relaxation for the 2 respondents in providing relief to elderly people suffering from hypertension. This research was conducted over 3 days within a single week. The results of the study showed that before applying Benson relaxation, people experienced hypertension. After administering Benson relaxation for a duration of 10-20 minutes, carried out over 1 week and 3 days, the hypertension was alleviated. Blood pressure measurements were taken after resting for both respondents, and there was a decrease in systolic blood pressure of 7-10 mmHg and a decrease in diastolic blood pressure of 5 mmHg. Benson relaxation has been shown to affect blood pressure. Benson relaxation therapy causes the organs in the endocrine system to reduce their activity, particularly the adrenal glands, thereby leading to a decrease in blood pressure. A decrease in blood pressure, resulting from a decrease in heart pumping activity, also affects the pulse.

Based on a preliminary study, there were elderly people in Joyotakan Village RT 02 RW 02, it was found that the number of residents was 164 from 53 families, with 40 people suffering from hypertension. The results of interviews conducted by researchers with elderly people with hypertension found that 5 residents usually took medicine from the health center to lower blood pressure and 4 residents who felt dizzy, had pain in the nape of the neck and did not know how to treat hypertension and they had never practiced non-pharmacological therapy to lower blood pressure. Based on the background of the problem and the results obtained above, the author is interested in taking nursing action to apply.

2. METHODS

The design of this research is a case study with a descriptive method. This research investigates the implementation of Benson Relaxation therapy for blood pressure changes in patients in Joyotakan Village.

The case study employed an approach involving two respondents, spanning a surgical process from assessment to data collection, surgical diagnosis, planning, implementation, and evaluation, with a focus on the independent surgical action carried out, specifically the provision of Relaxation Therapy to the two respondents.

The subjects in this application are patients who have hypertension in their families. The subject of this research involves two patients. Respondents will be given the application, namely Benson Relaxation, taking into account the inclusion and exclusion criteria. Inclusion Criteria: Patients with Hypertension, able to communicate verbally, aged 35-64 years, consisting of 2 individuals (both female and male), and willing to participate as respondents. Exclusion Criteria: Patients with illnesses or conditions that make it impossible (decreased consciousness), or who are not willing to be a respondent, or who are on medication.

This application was conducted in the gerontic nursing practice stage, located in Joyotakan Village, RT 02 RW 02, Serengan, Surakarta. This implementation was carried out over 3 days with 2 respondents, each taking 10-20 minutes. The research took place from April 19 to 21, 2025.

3. RESULTS

The location of this research was RT 2 RW 2 Joyotakan, Serengan, Surakarta City. Joyotakan Village is one of seven villages in Serengan District, with an area of 0.43 km², making it one of the smallest villages in the District. Joyotakan sub-district comprises villages including Joyotakan village, Joyotakan Wetan, Mijipinilihan, and Mijipinilihan Kidul. Joyotakan Village is divided into 6 Neighborhood Units (RW) and 33 Neighborhood Units (RT). RW 2 consists of Neighborhood Units (RT), namely RT 1, RT 2, RT 3, RT 4, RT 5, and RT 6. This implementation was carried out in Joyotakan Village, RT 2 RW 2, Serengan, Surakarta City, on April 19 - 21, 2025. The subjects of this implementation were two respondents with cases of hypertension sufferers.

Table 1. Blood Pressure Before Giving Benson Relaxation

Respondent	Date	Blood Pressure (Pre)	Category
Mrs. S	19 April 2025	145/100 mmHg	Hypertension Grade I
Mr. S	19 April 2025	142/105 mmHg	Hypertension Grade I

Jurnal Kesehatan Komunitas Indonesia (JKKI)
Volume 5 Issue 3, December 2025, pp 350-358
https://ebsina.or.id/journals/index.php/jkki
eISSN 2503-2801, pISSN 2985-3435

Based on Table 1, blood pressure before applying Benson Relaxation to Mrs. S with systolic 145 mmHg, diastolic 100 mmHg, and Mr. S with Systolic 142 mmHg, diastolic 105 mmHg, and included in the grade I hypertension category.

Table 2. Blood Pressure After Being Given Benson Relaxation

Respondent	Date	Blood Pressure (Post)	Category
Mrs. S	19 April 2025	130/80 mmHg	Pre Hypertension
Mr. S	19 April 2025	120/77 mmHg	Normal

Based on table 2, blood pressure after applying Benson Relaxation to Mrs. S with systolic 130 mmHg, diastolic 80 mmHg and included in the Pre Hypertension category and Mr. S Systolic 120 mmHg, diastolic 77 mmHg and included in the Normal category.

Table 3. Results of the Development of Blood Pressure in the Elderly Before and After Being Given Benson Relaxation

Respondent	Day/Date	Blood Pressure Before Benson Relaxation	Blood Pressure After Benson Relaxation	Information
Mrs. S	Saturday, 19 April 2025	145/100mmHg	135/90 mmHg	Decrease in systolic blood pressure of 10 mmHg and diastolic decrease of 10 mmHg
	Sunday, 20 April 2025	140/90 mmHg	130/85 mmHg	Decrease in systolic blood pressure of 10 mmHg and diastolic decrease of 5 mmHg
	Monday 21 April 2025	135/87 mmHg	130/80 mmHg	Decrease in systolic blood pressure of 5 mmHg and diastolic decrease of 7 mmHg
Mr. S	Saturday, 19 April 2025	142/105mmHg	130/90 mmHg	Decrease in systolic blood pressure of 12 mmHg and diastolic decrease of 15 mmHg
	Sunday, 20 April 2025	140/90 mmHg	135/80 mmHg	Decrease in systolic blood pressure of 5 mmHg and diastolic decrease of 10 mmHg
	Monday 21 April 2025	135/85 mmHg	120/77 mmHg	Decrease in systolic blood pressure of 15 mmHg and diastolic decrease of 8 mmHg

Based on Table 3, the results of the development of blood pressure in the two respondents before and after applying Benson Relaxation for 3 days are shown, including those in the grade I hypertension category. Decrease in systolic blood pressure 1-15 mmHg, while diastolic 1-15 mmHg.

Volume 5 Issue 3, December 2025, pp 350-358
https://ebsina.or.id/journals/index.php/jkki
eISSN 2503-2801, pISSN 2985-3435

Table 4. Comparisons Before and After Giving Benson Relaxation

Respondent	Before	Information	After	Information	Difference
Mrs. S	145/100 mmHg	Hypertension Grade I	130/80 mmHg	Pre Hypertension	15/20 mmHg
Mr. S	142/105 mmHg	Hypertension Grade I	120/77 mmHg	Normal	22/28 mmHg

Based on Table 4, there is a comparison of the differences in blood pressure reduction after applying Benson Relaxation. The blood pressure reduction in the Mrs. S is 15/20 mmHg, while for Mr. S is 22/28.

4. DISCUSSION

Blood pressure in the elderly before Benson Relaxation

Based on Table 1, the blood pressure values measured before Benson relaxation in Mrs. S were 145 mmHg systolic and 100 mmHg diastolic. In Mr. S, with a systolic blood pressure of 142 mmHg and a diastolic blood pressure of 105 mmHg, the blood pressure measurement results for both respondents showed high values. The factors that influence changes in blood pressure include age, genetics, gender, lack of physical activity, stress, smoking, and high cholesterol.

Based on these results, there is a difference in blood pressure because Mrs. S and Mr. S have a family history of hypertension. This is in line with the results of research conducted by Lamangida et al. (2025), which shows that families with genetic or hereditary factors that cause hypertension are at risk of suffering from hypertension as well. A specific gene mutation causes a person to have the genetic formula for hypertension. There were 91 (87.02%) hypertensive sufferers who had a family history of hypertension. These results also show that a family history of hypertension is related to the incidence of hypertension. Genetic factors alone account for approximately 30% of the variations in blood pressure observed among different groups of people.

Blood pressure in the elderly after being Benson Relaxation

Based on Table 2, the results of applying Benson relaxation to elderly people with hypertension showed that the blood pressure of both respondents was reduced. The first responder, Mrs. S, experienced a decrease in blood pressure after Benson relaxation to 130/80mmHg. Meanwhile, Mr. S experienced a decrease in blood pressure after Benson relaxation to 120/77 mmHg. In line with research conducted by (Simahati et al., 2024) with the results of research after Benson

Volume 5 Issue 3, December 2025, pp 350-358
https://ebsina.or.id/journals/index.php/jkki
eISSN 2503-2801, pISSN 2985-3435

relaxation was carried out, it was found that there was a significant reduction in blood pressure with results of >10mmHg, so it can be interpreted that giving Benson relaxation can reduce blood pressure in hypertension sufferers and the same results were obtained in research (Yunizar et al., 2025). There is a self-soothing component in relaxation. Benson's relaxation technique is a method designed to reduce stress and help individuals cope with high-stress situations.

Development of blood pressure in the elderly before and after Benson Relaxation

Based on Table 3, the Development of blood pressure reduction in hypertensive patients before and after receiving Benson relaxation revealed a decrease in blood pressure between the before and after interventions. The application in this research was carried out once every 3 days with a duration of 20 minutes.

Mrs. S's blood pressure being higher than Mr. S's is influenced by several factors, namely age and heredity, which result in thickening and stiffness of the blood vessels. Irregular eating patterns and a lack of salt reduction can cause the body to retain more water, thereby increasing blood volume and cardiac output. The activities carried out by Mrs. S affect sleep patterns, which can cause an increase in heart rate and narrowing of blood vessels, while Mr. S has a healthy diet, and reducing salt can keep blood volume and cardiac output optimal. Mr. S gets enough activity and rest to keep his heart rate normal and prevent an increase in blood pressure caused by stress and fatigue.

Comparison of blood pressure in the elderly before and after being given Benson Relaxation

Based on the results presented in Table 4, comparing the final results between the two respondents, the results showed differences in the reduction in blood pressure levels before and after deep breath relaxation for both respondents. This can be proven by the results of Mrs. S's blood pressure before and after the therapy was administered, which decreased from 145/100 mmHg to 120/80 mmHg. Meanwhile, Mr. S found a decrease in systolic and diastolic blood pressure, with a difference of 22/28 mmHg. This is due to the effects of Benson's relaxation, which helps overcome high blood pressure and irregular heart rates. In a state of relaxation, there is a decrease in emotional stimulation and areas that regulate cardiovascular function, such as the posterior hypothalamus, which will reduce blood pressure.

5. CONCLUSION

Based on the findings of this study, it can be concluded that the application of the Benson relaxation technique had a positive effect on reducing blood pressure in both respondents, who initially presented with Grade I hypertension. Following three consecutive days of Benson relaxation therapy, both participants demonstrated clinically meaningful reductions in systolic and diastolic blood pressure. Specifically, Mrs. S transitioned from Grade I hypertension to the prehypertension category, with a total reduction of 15/20 mmHg, while Mr. S achieved normal blood pressure levels, reflecting a greater reduction of 22/28 mmHg. These results suggest that the Benson relaxation technique may serve as an effective non-pharmacological intervention for managing mild hypertension, supporting its potential integration into nursing care protocols for hypertensive patients, particularly in community or geriatric settings.

AUTHOR CONTRIBUTIONS

The author contributes in conceptualization, data collection and analysis Kurnia Ayu Rahmawati, and Mulyaningsih. Writing and manuscript revisions: Kurnia Ayu Rahmawati.

ACKNOWLEDGMENT

The author would like to thank the RT 2 RW 2 Joyotakan, Serengan, Surakarta for facilitating this research.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest in this research.

DATA AVAILABILITY STATEMENT

The data are available from the corresponding author upon reasonable request.

REFERENCES

Hidayat, A. A. (2022). Khazanah Terapi Komplementer-Alternatif: Telusur Intervensi Pengobatan Pelengkap Non-Medis. Nuansa Cendekia.

Ibrahim, S. S., Ebeid, I. A. E. S., & Abd El-Aty, E. M. (2022). Efficacy of benson relaxation technique on physiological parameters, anxiety and sleep quality among gestational hypertensive women. Assiut Scientific Nursing Journal. 10(29), 14-25. https://doi.org/10.21608/asnj.2022.120036.1316

Kurdi, F., Putri, M. S., & Susanto, T. (2025). The relationship between

self-care management with quality of life at elderly with hypertension in nursing home of Jember. Working with Older People, 29(1), 48-56. https://doi.org/10.1108/WWOP-01-2024-0004

Lamangida, S. Y., Masi, G. N. M., & Renteng, S. (2025). Gambaran Faktor Resiko Terjadinya Hipertensi. Jurnal keperawatan, 13(1), 10–17. https://doi.org/10.35790/j-kp.v13i1.60775

Pangestu, A. W., Kurdi, F., & Rasni, H. (2024). The Relation Between Life Style and Quality of Life on Hypertension Farmers in Panti District, Jember Regency. Journal of Rural Community Nursing Practice, 2(1), 97–111. https://doi.org/10.58545/jrcnp.v2i1.226

Puput, H. (2024). Pengaruh Terapi Relaksasi Benson Terhadap Tekanan Darah Pada Lansia Penderita Hipertensi Di Ruang Rawat Inap Rs Bhayangkara Tk. I Pusdokkes Polri. Universitas Mohammad Husni Thamrin. http://eresources.thamrin.ac.id/id/eprint/1178/

Simahati, A. U., Iskandar, I. And Nursaadah, N. (2024). Pengaruh Relaksasi Benson Terhadap Penurunan Tekanan Darah Pasien Hipertensi Di Puskesmas Krueng Barona Jaya. Jurnal Ilmu Kesehatan Insan Sehat, 12(2), Pp. 109–114. https://doi.org/10.54004/jikis.v12i2.261

Yulendasari, R., Prasetyo, R. ., Sari, I., Sari, L. Y., & Melyana, F. (2022). Penyuluhan kesehatan tentang tuberculosis (TB paru). JOURNAL of Public Health Concerns, 2(3), 125–130. https://doi.org/10.56922/phc.v2i3.202

Yunizar, D. A., Dora, M. D. & Amalia, A. (2025). Pengaruh Terapi Relaksasi Benson Terhadap Penurunan Tingkat Stress Pada Lansia Di Uptd Pelayanan Sosial Lanjut Usia Tresna Wherda Natar Tahun 2024. Journal Of Citizen Research And Development, 2(1), Pp. 129–139. https://doi.org/10.57235/jcrd.v2i1.4117