Review

Benson Relaxation Therapy: Impact on Blood Pressure in Hypertensive Older Adults – A Literature Review

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Abstract

Introduction: The high incidence of hypertension can have an impact on increasing death rates in the world because it can cause heart failure and coronary heart disease and increase the risk of stroke. A strong emphasis on managing essential HTN with non-pharmacological interventions involving multiple elements of lifestyle modification, focusing on more permanent measures to help improve the overall quality of life and decrease physician dependence and hospitalizations of severe complications. This study aimed to explore the effect of Benson relaxation therapy on blood pressure in older adults with hypertension.

Methods: The method used in this literature review was to examine the results of previous research in published articles. Article searches were carried out via PubMed, Science Direct, and Google Scholar using the keywords "Benson Relaxation," "Blood Pressure," AND "Hypertensive Older adults," as well as combinations of these keywords such as "Benson relaxation on older adults hypertensive blood pressure." Fifteen articles were extracted based on the inclusion that Benson relaxation and other relaxation treatments significantly reduced blood pressure values in hypertension sufferers.

Results: There were 15 articles focused on Benson therapy. Eleven studies were of pre-experimental study design. The remaining studies were case study groups (two) and one randomized control study. All of the articles combine deep breathing relaxation and religious relaxation.

Conclusion: Benson relaxation has a significant effect on reducing blood pressure values in hypertension sufferers.

Keywords: Benson relaxation, blood pressure, hypertension, older adults

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INTRODUCTION

Blood pressure is the most critical factor in the circulatory system. Not all blood pressure is within the normal range, resulting in abnormal blood pressure, such as high and low blood pressure. Blood pressure is the pressure of blood flowing through the arteries. Hypertension or high blood pressure is one of the most common heart diseases. The US National Health and Nutrition Examination Survey (NHANES) showed that 70% of adults over 65 years of age have hypertension. The global prevalence of hypertension in people aged 30–79 years was estimated at a level of 1.27 billion in 2019, which corresponds to 32% women and 34% men globally. By province, South Kalimantan (39.6%), East Kalimantan (29.6%), West Java (29.4%) and Bali (19.9%) have the highest prevalence of hypertension.

Several risk factors for hypertension that can be controlled include high sodium intake, low potassium intake, low calcium, low magnesium, obesity, alcohol, and smoking behavior. Meanwhile, risk factors that cannot be controlled include genetic factors, family history, age, and race. The prevalence of hypertension increases with age; in older adults over 60 years of age, it exceeds 60% [5]. With age, the levels of physical activity decline, corresponding to generally quieter lifestyles and increasing body weight; consequently, the incidence of hypertension in the rapidly aging society will continue to increase worldwide. It is estimated that by 2025, the percentage of people with hypertension will increase by 15–20%, reaching the number of nearly 1.5 billion [5]. The high incidence of hypertension can have an impact on increasing death rates in the world because there are quite a lot of complications from hypertension. If not treated in the long term, it can cause damage to the arteries and the organs that receive blood from the arteries. Complications of hypertension can cause heart failure and coronary heart disease, and increase the risk of stroke [6]. In 2018, the European Society of Cardiology (ESC) and the European Society of Hypertension (ESH) published guidelines for managing arterial hypertension in adults. One of the goals of these guidelines was to provide pragmatic recommendations to improve the detection and treatment of hypertension [5], [7]. Management of hypertension is grouped into non-pharmacological therapy and pharmacological therapy. Non-pharmacological therapy does not use drug agents in the therapy process, while pharmacological therapy uses drugs or compounds that, in their work, can affect the patient’s blood pressure [8]. There is a strong emphasis on managing essential HTN with non-pharmacological interventions involving multiple elements of lifestyle modification, focusing on more permanent measures to help improve the overall quality of life and decrease physician dependence and hospitalizations of severe complications [5], [9]. One non-pharmacological therapy is the Benson relaxation technique, which can help to reduce blood pressure.

The Benson relaxation response is thought to inhibit the autonomic nervous and central nervous systems and increase parasympathetic activity, characterized by
decreased skeletal muscle and cardiac muscle tone and disrupting neuroendocrine function [10]. Benson's relaxation is a combination of relaxation and philosophical belief factors by someone who focuses on specific phrases by pronouncing them repeatedly using a regular rhythm accompanied by a resigned attitude, thereby causing a strong relaxation response [13].

A previous study investigated Benson Relaxation on Blood Pressure in Hypertension sufferers. Still, it did not provide a specific explanation regarding the effect of Benson relaxation therapy on systolic and diastolic blood pressure in older adults with hypertension [10]. More in-depth research is needed regarding Benson Relaxation on Blood Pressure in older adults with hypertension so that it can be applied by the community [12]. This study aimed to explore the effect of Benson relaxation therapy on blood pressure in older adults with hypertension.

METHODS

Identify the Research Question

The research question was: 'What is known in the existing literature about Benson Relaxation therapy, the effect of Benson Relaxation to lower blood pressure, the effect of Benson Relaxation on hypertension in older adults, and how effectively the Benson Relaxation lowers blood pressure in older adults. The literature review aimed to ensure the inclusion of several concepts to provide researchers with a deeper understanding of the effect of Benson Relaxation on lowering blood pressure in older adults in nursing practice.

Data Collection

Data was collected through a comprehensive library review, which involved gathering, reading, annotating, and processing written materials. The data sources included published journals relevant to the issue or topic under investigation.

Identify Relevant Studies

Relevant studies were identified by filtering 3,821 articles according to PRISMA guidelines, and articles were searched for international research journal databases (PubMed, ScienceDirect, and Google Scholar). This initial pool was narrowed down to 15 articles based on criteria set by the author. All searches were performed in November 2023 and published from 2019 to 2023. The keywords in this literature review are adapted to the Medical Subject Heading (MeSH) consisting of "Benson relaxation therapy," "Benson relaxation in lower blood pressure," and "effect Benson therapy in hypertension."

Study Selection

The literature search strategy employed for the intended databases involved using specific keywords related to the research title: "Benson Relaxation," "Blood Pressure," AND "Older adults Hypertension."
In the PubMed database, the initial search with the keyword "Benson Relaxation" returned 3,821 articles. Applying a filter for articles published in the last five years reduced this number to 163 articles. Narrowing the focus to "Benson relaxation on blood pressure in hypertensive older adults" resulted in 18 articles.

In the ScienceDirect database, the initial search for "Benson relaxation" identified 2,197 articles, and 36 articles were found with the keyword "Benson relaxation on blood pressure." Filtering for articles from the last five years refined the search to 173 articles with "Benson relaxation" and 19 articles with "Benson relaxation on blood pressure in hypertensive older adults."

In the Google Scholar database, 25,060 articles were found with the keyword "Benson relaxation," 6,980 articles with "Benson relaxation on blood pressure," and 1,853 articles with "Benson relaxation on blood pressure in hypertensive older adults." Applying a filter for the last five years reduced these numbers to 1,656 articles with "Benson relaxation," 1,469 articles with "Benson relaxation on blood pressure," and 862 articles with "Benson relaxation on blood pressure in hypertensive older adults."

After screening the full texts and selecting the most relevant articles based on the inclusion and exclusion criteria, 15 articles were chosen for review.

Charting the Data

Data in a literature review should be organized logically and descriptively, ensuring relevance to the research question. A data charting form was developed based on the study by Peters et al., which suggested extraction fields for systematic literature reviews. Table 1 provides a list of the included articles and the extracted data.

Collating, Summarizing, and Reporting the Results

Of the 15 identified articles, the focus was on Benson therapy. Five studies were Quasi-experimental studies; six articles were Pre-experimental studies, while the remaining included four case study groups, as shown in Table 1.
Table 1

Summary of the Benson Relaxation Studies

<table>
<thead>
<tr>
<th>Author/Year/Country</th>
<th>Title</th>
<th>Research Methods, Sample, and Population</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramadhani et al. (2023) Indonesia [13]</td>
<td>Blood Pressure Control with Benson Relaxation Technique in Hypertensive Patients</td>
<td>Quasi-experimental with the treatment group and the control group. The population was all older adults with hypertension, and the sample accounted for 44 older adults.</td>
<td>Benson's relaxation technique, done regularly, would help lower blood pressure and provide relaxation to the muscles to reduce muscle tension, reduce stress, and calm the mind.</td>
</tr>
<tr>
<td>Royani, et al. (2022) Indonesia [14]</td>
<td>The Effect of Benson Relaxation Therapy on the Blood Pressure of older adults with Hypertension</td>
<td>Pre-experimental design with One Group Pretest Posttest method. The population was older adults, with 23 respondents.</td>
<td>Benson Relaxation effectively lowers Diastolic Blood Pressure in older adults.</td>
</tr>
<tr>
<td>Authors</td>
<td>Title</td>
<td>Study Design</td>
<td>Sample Size</td>
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<tr>
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</tr>
<tr>
<td>Rosa et al. (2020) Indonesia</td>
<td>The Effect of Benson Relaxation on Blood Pressure of Hypertension Patients of Productive Age in the Working Area of Pandanwangi Health Center, Malang City</td>
<td>A pre-experimental design with a group pre-post-test design. The sample was 30 older adults.</td>
<td>This Benson relaxation therapy could be an alternative in the treatment of hypertension.</td>
</tr>
<tr>
<td>Khotimah dan Prajayanti, (2024) Indonesia</td>
<td>Implementation of Benson Relaxation Therapy on Systolic Blood Pressure in older adults with Hypertension in Bejen Village, Karanganyar Regency</td>
<td>Case study with a descriptive design on two female respondents aged 60 years and over.</td>
<td>Implementation of Benson relaxation therapy could reduce systolic blood pressure in older adults with hypertension in Bejen Village, Karanganyar Regency.</td>
</tr>
<tr>
<td>Atmojo, et al. (2019) Indonesia</td>
<td>Effectiveness of Benson Relaxation Therapy on Blood Pressure in Hypertension Sufferers</td>
<td>Pre-experimental design with one group pre-posttest design. The research sample consisted of 30 people.</td>
<td>The study results showed that Benson relaxation therapy could decrease systolic blood pressure. There is an effect of Benson relaxation therapy on blood pressure in patients with hypertension in Unggahan Village.</td>
</tr>
<tr>
<td>Pratiwi et al. (2021) Indonesia</td>
<td>The implementation of Benson relaxation on blood Pressure reduction in hypertension patients in Metro city</td>
<td>The case study design and sample were older adults with hypertension</td>
<td>The application of Benson relaxation could reduce blood pressure in hypertensive patients.</td>
</tr>
<tr>
<td>Mahardian dan Saryomo (2022) Indonesia</td>
<td>Implementation of Benson relaxation to hypertension patients in Sukapa village, Pagerageung District</td>
<td>case study design with hypertensive patient</td>
<td>There was a decrease in blood pressure after being given relaxation therapy. Benson</td>
</tr>
<tr>
<td>Wartonah et al. [4]</td>
<td>Benson’ Relaxation to Lower Blood Pressure in older adults with Hypertension.</td>
<td>Quasi-experimental with one group pretest-posttest involved 30 older adults</td>
<td>There was a significant reduction in blood pressure in hypertensive older adults by 5 to 7 mmHg after doing Benson relaxation for three months.</td>
</tr>
<tr>
<td>Nurleny dan Hasni (2022) Indonesia</td>
<td>The Effect of Benson Relaxation Therapy on Systolic Blood</td>
<td>Pre-experimental with One Group pretest-posttest. The sample size was ten people older adults.</td>
<td>There was an effect of Benson relaxation therapy on systolic blood</td>
</tr>
<tr>
<td>Source</td>
<td>Title</td>
<td>Methodology</td>
<td>Summary</td>
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<tr>
<td>Aulia et al. (2023)</td>
<td>The Effect of Combination Therapy of Benson Relaxation and Jasmine Aromatherapy on Blood Pressure in Hypertension Patients</td>
<td>Quasi-experimental with pretest-posttest with control group design. The total sample was 17 older adults with hypertension.</td>
<td>There was a significant effect of Benson relaxation combination therapy and jasmine aromatherapy on the blood pressure of hypertensive patients.</td>
</tr>
<tr>
<td>Faidah and Sulistiyaningsih (2023)</td>
<td>The Effect of Benson’s Relaxation on Reducing Blood Pressure in Hypertension Patients in The Inpatient Room RSUD Dr R. Soeprapto Cepu</td>
<td>A quasi-experimental design with one Group Pre-Post Test. The study population was patients with Hypertension at RSUD Dr R Soeprapto Cepuse, an amount of 30 people.</td>
<td>Benson’s relaxation affected reducing blood pressure in hypertensive patients in the inpatient room of RSUD Dr R Soeprapto Cepu.</td>
</tr>
<tr>
<td>Utami et al. (2023)</td>
<td>The Effect of Benson Relaxation Therapy on Blood Pressure in Hypertensive Patients</td>
<td>A pre-experimental research design with a one-group pretest and a post-test design. The sample was 26 respondents from 129 population in older adults.</td>
<td>Benson Relaxation Therapy showed an impact on the blood pressure levels of hypertensive patients in the Bawang.</td>
</tr>
<tr>
<td>Laely and Wirotomo (2022)</td>
<td>Implementation of Benson Relaxation Therapy to Reduce Blood Pressure in Hypertensive Patients at Batang Regional Hospital</td>
<td>The case study involved two subjects, older adults with hypertension.</td>
<td>Implementation of Benson Therapy effectively to lower Blood Pressure in older adults with hypertension.</td>
</tr>
<tr>
<td>Yulendiasari and Djamaludin, (2021)</td>
<td>Effect of Benson relaxation technique on blood pressure in patients with hypertension</td>
<td>Quasi-experiment design with 32 respondents' hypertension</td>
<td>Benson relaxation therapy reduced blood pressure in hypertensive patients.</td>
</tr>
<tr>
<td>Febriyanti, et al. (2019)</td>
<td>The effect of Benson relaxation therapy on systole blood pressure in older adults with hypertension</td>
<td>a pre-experimental research design with a one-group pretest and post-est design. The sample consisted of 15 respondents from 418 older adults.</td>
<td>The result showed that Benson's relaxation therapy decreased blood pressure in older adults.</td>
</tr>
</tbody>
</table>
RESULTS

This literature review uses original research articles that meet the inclusion and exclusion criteria. There are 15 articles in journals that. Fourteen articles discuss Benson’s Relaxation therapy to reduce blood pressure, and one article used a combination with Benson’s Relaxation therapy to reduce blood pressure. All studies showed that there was a significantly lower blood pressure. Two articles discussed how Benson’s Relaxation reduces systolic blood pressure in hypertensive patients, one discussed combination therapy with Benson’s therapy to lower blood pressure, and twelve articles discussed the effect of Benson’s therapy on blood pressure in patients with hypertension.

DISCUSSION

Based on the results of the analysis of 15 articles that the author has reviewed, it was found that according to Pratiwi (2021), the method of providing Benson therapy to hypertension sufferers is by breathing, such as breathing relaxation. Religious elements include chanting dhikr, listening to murottal, and praying, effectively lowering blood pressure [18]. This is in line with research conducted by Ramadhani (2023), which states that the Benson relaxation technique on blood pressure obtained a value of $p = 0.000$, which shows that there is an influence of the Benson relaxation technique on blood pressure in hypertensive patients [13].

According to research by Shohela (2022) regarding. The combination of Benson Relaxation and (reflexology massage and foot soak) in hypertension sufferers decreased the respondents’ blood pressure [1]. This is supported by Febriyanti (2021), which stated a significant difference between systolic blood pressure before and after Benson relaxation, $p$-value = 0.009. Benson relaxant can inhibit vasoconstrictor hormone [26].

Based on research conducted by Nurleny (2022), it is stated that Benson’s relaxation is carried out for five days for 5 minutes every night before bed. This is supported by research conducted by Ratnaawati (2019), which stated that Benson’s relaxation focuses on specific phrases that are repeatedly said using a regular rhythm accompanied by a resigned attitude. Repeated reading of elements of belief, faith in God can cause a strong relaxation response [20].

The advantage of religious relaxation is that apart from getting benefits from relaxation, you also benefit from using your beliefs, such as increasing your faith and gaining experiences of transcendence [19]. Apart from the method being simple because it only relies on deep breathing efforts interspersed with supplications to God Almighty, this technique can also be done anytime and anywhere without requiring a particular room.

IMPLICATION

Nurses can provide Benson relaxation therapy for hypertension to lower blood pressure. Nurses can also educate and train hypertensive patients about Benson therapy so it can be applied at home.

LIMITATION

This study only observed and described the
findings from 15 articles related to Benson relaxation on blood pressure in hypertension. This study did not test or analyze the data that was found.

CONCLUSION

In the conclusion of this literature review journal, Benson relaxation therapy helps reduce blood pressure effectively due to the vasodilation process of the vessels. Blood, which can lower blood pressure in hypertensive patients.

FUNDING

None

CONFLICT OF INTEREST

None of the authors have declared a conflict of interest.

AUTHOR CONTRIBUTION

Each author significantly contributed to the following aspects of the paper: (1) formulating and planning the study, (2) providing their final approval for the submitted version and thoroughly reviewing the article's content, (3) reviewing the article's content, and (4) reviewing the article's content.

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REFERENCES


