Asy-Syifa Journal of Science and Technology Nursing

Vol 3, No 2 September 2025
Susmission : August 2025
Revision: September 2025
Available online: September 2025

Implementation of Guided Imagery Relaxation Therapy Application on Blood Pressure Changes in Hypertension Patient at Khz Musthafa Hospital

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ABSTRAK

Purpose: The purpose of this case study is to describe the nursing care process for patients with hypertension through the application of guided imagery relaxation therapy and its effect on changes in blood pressure. **Methods:** This scientific paper uses a qualitative design with a case study approach conducted on two hypertensive patients at Khz Mushtafa Hospital. Data were collected through interviews, observations, and physical examinations. Guided imagery relaxation therapy was implemented once daily in the afternoon for 15–20 minutes over three consecutive days. **Results:** The results of the case study showed a decrease in blood pressure in both patients after the application of guided imagery relaxation therapy. Patient 1 experienced a reduction in systolic blood pressure of 38 mmHg and diastolic blood pressure of 12 mmHg. Patient 2 showed a decrease in systolic blood pressure of 20 mmHg and diastolic blood pressure of 15 mmHg. **Conclusions:** The conclusion of this case study demonstrates that guided imagery relaxation therapy is effective in lowering blood pressure in patients with hypertension. It is expected that hypertensive patients can perform guided imagery relaxation therapy routinely and regularly as a complementary nursing intervention to help improve blood pressure control and achieve values closer to normal.

Keywords: Hypertension, relaxation, *guided imagery*

Introduction

Degenerative diseases such as hypertension are a serious public health problem in Indonesia, marked by a steadily increasing incidence rate each year. Hypertension is known as a silent killer because it often shows no symptoms, yet can cause fatal complications such as heart disease, stroke, and kidney failure. According to the WHO (2015), approximately 1.13 billion people worldwide suffer from hypertension, and this number is projected to increase to 1.5 billion by 2025. In Indonesia itself, the prevalence of hypertension reached 34.1% (Riskesdas, 2018), with a significant increase compared to previous years.

Hypertension is characterized by systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg. The causes are multifactorial, ranging from unhealthy lifestyles, excessive salt consumption, stress, to genetic factors (Khasanah, 2022). If left untreated, hypertension can accelerate atherosclerosis and increase cardiovascular risk. The most common symptoms experienced by sufferers include headaches and a heavy feeling in the neck, impacting the patient's quality of life (Kusumawaty, 2021).

The management of hypertension can be done through pharmacological and non-pharmacological therapies. One proven effective non-pharmacological approach is guided imagery relaxation therapy, a technique that uses guided imagery to help reduce stress, muscle tension, pain, and blood pressure. Previous research has shown that this therapy can significantly lower blood pressure in hypertensive patients.

Based on this background, the author is interested in conducting research entitled "Implementation of Guided Imagery Relaxation Therapy on Blood Pressure Changes in Hypertensive Patients" to determine the effectiveness of this intervention in helping to lower blood pressure non-pharmacologically.

Methods

This qualitative case study explored nursing issues in hypertensive patients (≥140/90 mmHg) receiving guided imagery relaxation therapy at RSUD Khz Musthafa (April 8-28, 2025). Two cooperative patients were included, excluding those with acute health problems. Hypertension was defined as systolic ≥140 mmHg and/or diastolic ≥90 mmHg (two or more measurements). Guided imagery involved visualizing pleasant experiences. Data collection used interviews (demographics, chief complaint, history) and observation with physical examination (IPPA) to assess blood pressure changes. Instruments included a nursing assessment form, interview/observation sheets, sphygmomanometer, stethoscope, and standard operating procedures. A 3-day intervention assessed guided imagery's impact on blood pressure.

Results

This case study describes nursing care for hypertensive patients using guided imagery relaxation therapy to reduce blood pressure, pain, and stress. The intervention involved guiding patients into a relaxed state through deep breathing and visualization of a pleasant place, followed by a post-intervention blood pressure check. Patients were also instructed to independently practice the technique. The results showed a decrease in blood pressure in both patients after the intervention.

Table 1. Patient's Blood Pressure Observation Results Before *Guided Imagery Relaxation* Intervention

Day	Patient 1 (mmHg)	Patient 2 (mmHg)
Day 1	178/102	170/100
Day 2	170/90	170/95
Day 3	146/90	155/90

As shown in Table 1, pre-intervention blood pressure readings for Patient 1 were 178/102 mmHg on day one, 170/90 mmHg on day two, and 146/90 mmHg on day three. Similarly, Patient 2's pre-intervention blood pressure readings were 170/100 mmHg on day one, 170/95 mmHg on day two, and 155/90 mmHg on day three.

Table 2. Patient's Blood Pressure Observation Results After *Guided Imagery Relaxation* Intervention

Day	Patient 1 (mmHg)	Patient 2 (mmHg)
Day 1	172/95	163/95
Day 2	165/95	162/90
Day 3	140/90	150/85

As outlined in Table 2, both patients received guided imagery relaxation therapy according to standard operating procedures (SOPs) to reduce blood pressure. Post-therapy blood pressure measurements demonstrated a reduction in both patients. Specifically, Patient 1's blood pressure decreased from 172/95 mmHg on day one to 165/95 mmHg on day two, and finally to 140/90 mmHg on day three. Patient 2 showed a similar reduction, with measurements of 163/95 mmHg, 162/90 mmHg, and 150/85 mmHg on days one, two, and three, respectively. This suggests the effectiveness of guided imagery relaxation therapy in lowering blood pressure.

Picture 1. Comparison of Changes in Patients 1 and 2 After *Guided Imagery Relaxation* Therapy

Patient	Day 1 Blood Pressure (mmHg)	Day 3 Blood Pressure (mmHg)	Systolic Difference (mmHg)	Diastolic Difference (mmHg)
Patient 1	178/102	140/90	38	12
Patient 2	170/100	150/85	20	15

Analysis of Figure 1 reveals a differential pattern of blood pressure changes between the two patients. Patient 1 demonstrated a more pronounced alteration in systolic blood pressure compared to Patient 2. Conversely, Patient 2 displayed a more significant change in diastolic blood pressure compared to Patient 1.

Discussion

1. Stages of Nursing Care and *Guided Imagery Relaxation* Therapy Implementation
   This case study involved two hypertensive patients: a 55-year-old female and a 62-year-old male, both experiencing headaches and neck tension. Family history indicated a genetic predisposition to hypertension in both patients. Nursing diagnoses included risk for ineffective cerebral perfusion (D.0017), acute pain (D.0077), and disturbed sleep pattern (D.0055), consistent with the Indonesian Nursing Diagnosis Standards (SDKI, 2017). Nursing interventions focused on pain management and optimizing cerebral perfusion through guided imagery therapy (15-20 minutes daily for three days) and deep breathing relaxation techniques. Blood pressure and vital signs were monitored regularly according to standard operating procedures (SOPs).
2. *Guided Imagery Relaxation* Therapy Implementation
   Guided imagery therapy was administered according to established procedural steps. Patients were instructed to relax, calm their minds, and visualize pleasant scenarios, such as natural landscapes or calming moments (Kholifah, 2021). This method was chosen for its ease of implementation and effectiveness in lowering blood pressure through relaxation, regulation of sodium levels, and vasodilation (Mantiri et al., 2023).

3. Patient Response and Clinical Changes

   Following the three-day intervention, both patients exhibited a decrease in blood pressure. Patient 1 experienced a reduction from 178/102 mmHg to 140/90 mmHg, while Patient 2's blood pressure decreased from 170/100 mmHg to 150/85 mmHg. Furthermore, both patients reported a decrease in headache intensity, reduced neck tension, and increased relaxation. These findings are consistent with previous research demonstrating the effectiveness of guided imagery therapy in lowering blood pressure (Susanti et al., 2022). The frequency of therapy application contributes to its effectiveness (Mantiri et al., 2023), suggesting this non- pharmacological approach holds promise as a valuable adjunct in hypertension management (Marlena, 2023).

4. Analysis of Inter-Patient Response Differences

   While both patients demonstrated a decrease in blood pressure, their clinical responses differed. Patient 1 showed a more pronounced reduction in systolic pressure, whereas Patient 2 exhibited a greater decrease in diastolic pressure. This variation is likely influenced by age, gender (Ayu et al., 2022), and adherence to therapy. Patient 1 demonstrated higher adherence and received optimal family support, unlike Patient 2, who was less consistent with the therapy regimen. Adherence is a critical factor in the success of non-pharmacological interventions (Mantiri et al., 2023). Overall, guided imagery therapy proved effective in assisting with blood pressure reduction in hypertensive patients. However, individual characteristics influence the response to therapy. Therefore, further research with a larger sample size is needed to strengthen these findings.

Conclusion

Based on the comprehensive nursing care provided to two hypertensive patients using guided imagery relaxation therapy, it is recommended that this therapy be routinely implemented as part of a non-pharmacological intervention for blood pressure management. This therapy demonstrated a reduction in both systolic and diastolic blood pressure after three consecutive days of 15–20-minute sessions. Hypertensive patients are encouraged to independently and regularly practice guided imagery at home to help maintain stable blood pressure. Furthermore, nurses and healthcare professionals are urged to integrate this therapy into holistic nursing practice, particularly to improve the quality of life for hypertensive patients. Further research with a larger sample size and a longer intervention period is needed to strengthen the findings and establish the broader effectiveness of this therapy.

Suggestion

Guided imagery relaxation therapy demonstrated effectiveness in lowering blood pressure in hypertensive patients. It is recommended that this therapy be implemented routinely and regularly as part of a non-pharmacological intervention. Nurses and healthcare professionals should integrate this therapy into their practice to enhance the quality of care and patient health outcomes.

Acknowledgments

The author wishes to express sincere gratitude for the guidance and support received from various parties. Special thanks are extended to Academic Advisor; Yudi Triguna, S.Kep., Ners., M.Kep, First Supervisor; and Ns. Syaukia Adini, M.Tr.Kep, Second Supervisor.

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