MSC Journal Of Medical Surgical Concerns
ISSN 2797-8400 (Print)
ISSN 2797-8419 (Online)
Doi: 10.56922

NOMOR
286/DST/C3/HM.01.00/26

ARTICLE INFORMATION
Received: April, 19, 2026
Revised: July, 15, 2026
Available online: July, 30, 2026
at: https://e-jurnal.iphorr.com/index.php/msc

# Benson relaxation for pain-related discomfort in older adults with hypertension: A two-patient case study

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## Abstract

**Background:** Older adults with hypertension may experience pain-related discomfort, headache, dizziness, and sleep disturbance arising from multiple causes. Benson relaxation is a non-pharmacological technique intended to promote a relaxation response and may be used as an adjunct to routine nursing care.
**Purpose:** To describe nursing care using Benson relaxation for pain-related discomfort in older adults with hypertension.
**Method:** This study used a descriptive case-study design and involved two older adults with hypertension who received nursing care in the Dahlia 2 Ward of Dr. Loekmono Hadi Regional General Hospital, Kudus, Indonesia, between March 9 and 11, 2026. Data were obtained from nursing assessments, a pain assessment form, the hospital Benson-relaxation standard operating procedure, implementation records, and evaluation notes.
**Results:** Both patients presented with headache, dizziness, sleep disturbance, and pain-related discomfort. For Patient 1, for whom complete pre- and post-care numerical data were available, pain intensity decreased from 5 to 2, blood pressure from 171/93 to 155/89 mmHg, and respiratory rate from 22 to 20 breaths/min, while oxygen saturation increased from 96% to 98% over the nursing-care period. Equivalent complete numerical pre- and post-intervention outcomes were not reported for Patient 2.
**Conclusion:** Benson relaxation was documented as part of nursing care and was accompanied by reduced pain and improved comfort in the patient for whom complete outcome data were available. Because this was a two-patient descriptive case study without a control condition and with incomplete outcome documentation for the second patient, the observations cannot establish treatment effectiveness.

**Keywords: Benson Relaxation; Hypertension; Older Adults; Pain; Nursing Care.**

## INTRODUCTION

Hypertension is a major modifiable cardiovascular risk factor worldwide and becomes increasingly common with advancing age. Age-related arterial stiffening and reduced vascular compliance contribute to the predominance of systolic hypertension in later life, while frailty and comorbidity add to the complexity of blood-pressure management (World Health Organization, 2023; Karayiannis, 2022; Glazier, 2022; Chatzis, Magounaki, Pantazopoulos, Beltsios, Katsi, & Tsioufis, 2023).

Hypertension is often asymptomatic, so headache, dizziness, sleep disturbance, and discomfort in an older patient should be assessed rather than automatically attributed to elevated blood pressure. Management must also take account of treatment burden, medication effects, frailty, and postural symptoms. Individualized monitoring is especially important when dizziness occurs on standing because orthostatic hypotension is common

DOI: https://doi.org/10.56922/msc.v6i4.3964

in older adults and is associated with clinically important adverse outcomes, including falls (Egan, Mattix-Kramer, Basile, & Sutherland, 2024; Dani, Dirksen, Taraborrelli, Panagopolous, Torocastro, Sutton, & Lim, 2021).

Non-pharmacological strategies may complement pharmacological and nursing management of pain-related discomfort. Relaxation approaches typically combine controlled breathing, a comfortable posture, focused attention, and reduced environmental stimulation. Evidence from chronic-pain populations indicates that relaxation techniques can reduce pain or related symptoms in some settings, although the interventions and patient populations studied are heterogeneous (Vambheim, Kyllo, Hegland, & Bystad, 2021). Slow-breathing interventions have also been studied in hypertension, but the evidence for sustained blood-pressure reduction is mixed and should not be interpreted as a substitute for guideline-based antihypertensive care (de Freitas Gonçalves, Daniel, Lamas, Oliveira, Cloutier, De Campos Pereira Silveira, & Veiga, 2022).

Benson relaxation is a structured relaxation method that typically combines slow breathing, a relaxed body position, focused attention, and repetition of a personally meaningful word or phrase. Controlled breathing practices can influence respiratory rate and physiological arousal, which supports the plausibility of relaxation-based symptom management without establishing a disease-specific treatment effect (Balban, Neri, Kogon, Weed, Nouriani, Jo, Holl, Zeitzer, Spiegel, & Huberman, 2023). A recent systematic review of randomized trials of Benson relaxation in hemodialysis populations reported reductions in pain or stress across the included studies but also highlighted limitations in intervention reporting and in the overall evidence base (Abu Maloh, Soh, Chong, Ismail, Soh, Abu Maloh, & AbuRuz, 2024).

This case study therefore aimed to describe nursing care using Benson relaxation for pain-related discomfort in two older adults with hypertension in the Dahlia 2 Ward of Dr. Loekmono Hadi Regional General Hospital, Kudus, Indonesia.

## RESEARCH METHOD

This study used a descriptive case-study design and was conducted in the Dahlia 2 Ward of Dr. Loekmono Hadi Regional General Hospital, Kudus, Indonesia. Nursing care was documented from March 9 to 11, 2026. Two older adult patients with a medical diagnosis of hypertension and pain-related discomfort were selected purposively. Participants were required to have received nursing care for at least 3 × 24 hours and to have provided written informed consent.

Data sources comprised a standardized nursing-care form used to document assessment, nursing diagnosis, intervention, implementation, and evaluation; the hospital standard operating procedure for Benson relaxation; and a pain assessment form.

The Benson-relaxation procedure documented in the case record placed the patient in a comfortable semi-Fowler position, guided slow and deep breathing, and incorporated repetition of a personally meaningful word or prayer for approximately 10–15 minutes in a quiet environment.

Data analysis was descriptive. Each case was assessed and compared with the nursing-care standards documented in the clinical record (SDKI, SIKI, and SLKI) and with the supporting literature. No inferential statistical analysis was applied because this report describes only two cases.Written informed consent was obtained from both patients and documented in the case record.

## RESEARCH RESULTS

**Table 1. Clinical characteristics and nursing problems of the two cases**

| Characteristic | Patient 1 | Patient 2 |
|---|---|---|
| **Age, years** | 60 | 65 |
| **Age category** | 51–60 years | >60 years |
| Gender | Female | Female |

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| Characteristic | Patient 1 | Patient 2 |
|---|---|---|
| **Main complaints** | Dizziness, headache, heavy neck, sleep difficulty | Dizziness, headache, heavy neck, sleep difficulty |
| **Primary nursing diagnosis** | Acute pain associated with the clinical condition | Acute pain associated with the clinical condition |
| **Secondary nursing diagnosis** | Disturbed sleep pattern related to physical discomfort | Disturbed sleep pattern related to physical discomfort |

As presented in Table 1, both patients reported dizziness, headache, neck heaviness, and difficulty sleeping. Observed findings included pain-related facial expression, weakness, restlessness, and impaired comfort. The nursing diagnoses recorded for both cases were acute pain and disturbed sleep pattern. Table 2 demonstrates the documented pre- and post-care outcomes for Patient 1.

**Table 2. Documented pre- and post-care outcomes for Patient 1**

| Outcome | Before | After |
|---|---|---|
| **Pain intensity** | 5 | 2 |
| **Blood pressure, mmHg** | 171/93 | 155/89 |
| **Respiratory rate, breaths/min** | 22 | 20 |
| **Oxygen saturation, %** | 96 | 98 |

As shown in Table 2, pain intensity for Patient 1 decreased from 5 to 2 over the documented nursing-care period. Blood pressure decreased from 171/93 to 155/89 mmHg and respiratory rate from 22 to 20 breaths/min, while oxygen saturation increased from 96% to 98%. The patient reported less dizziness and headache, appeared more comfortable, and was documented as being able to perform the relaxation technique independently when pain recurred. Equivalent complete numerical pre- and post-intervention outcomes were not reported for Patient 2.

Sleep-related outcomes were described as improved, including the absence of nighttime awakening, a more relaxed appearance, reduced restlessness, and the ability to identify sleep-disturbing factors and coping strategies.

## DISCUSSION

The principal clinical observation was improved pain-related comfort during the nursing-care period in Patient 1, for whom complete pre- and post-care numerical data were available. The concurrent changes in pain, blood pressure, respiratory rate, and oxygen saturation were clinically observable, but they cannot be attributed solely to Benson relaxation, because routine medical and nursing care continued throughout and no control condition was available.

Benson relaxation combines controlled breathing, a comfortable posture, focused attention, and repetition of a word or phrase. The broader relaxation literature suggests that such practices may modify subjective pain and physiological arousal, although the reported effects vary according to patient group, protocol, and duration (Vambheim et al., 2021; Balban et al., 2023). The blood-pressure change observed in Patient 1 warrants particular caution, because the evidence on slow-breathing interventions for hypertension is heterogeneous and does not establish a consistent antihypertensive effect (de Freitas Gonçalves et al., 2022).

Clinical trials of Benson relaxation in other populations provide supportive but not directly transferable evidence. In patients undergoing

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hemodialysis, a cluster-randomized trial found improvements in pain and perceived stress after a structured Benson intervention (Abu Maloh, Soh, Chong, Ismail, Soh, Abu Maloh, Al Yateem, & AbuRuz, 2023). Randomized trials have also evaluated Benson relaxation for pain-related or symptom outcomes after laminectomy, in multiple sclerosis, burn care, and lumbar discectomy (Pishgooie, Akbari, Keyvanloo Shahrestanaki, Rezaei, Nasiri, & Momen, 2020; Kesik, Ozdemir, & Mungan Ozturk, 2022; Kutenai, Jafari, Shafipour, Zarghami, & Moosazadeh, 2023; Bagheri, Abbasi, Kurdi, Moslemi, & Mottahedi, 2026). These populations differ substantially from older adults hospitalized with hypertension, and the studies therefore support only the general plausibility of relaxation as an adjunct rather than the effectiveness of the intervention in the present cases.

Evidence relating to psychological and symptom outcomes is likewise drawn from contexts broader than the present one. Benson relaxation has been studied for preoperative anxiety, fatigue and emotional symptoms during hemodialysis, symptom burden in advanced heart failure, and sleep quality in bipolar disorder (Abarghoee, Mardani, Baha, Fadaee Aghdam, Khajeh, Eskandari, & Vaismoradi, 2022; Eroglu & Gok Metin, 2022; Eren & Gok Metin, 2022; Gharehbaghi, Mirhosseini, Minaei-Moghadam, Salari, Grimwood, & Vaghee, 2024). A systematic review focused on anxiety and depression among patients undergoing hemodialysis likewise reported potentially beneficial effects but noted limitations in the available trials (Abu Maloh, Soh, AbuRuz, Chong, Ismail, Soh, & Abu Maloh, 2022). Taken together, these findings reinforce the need to describe Benson relaxation as an adjunctive nursing strategy rather than as a proven treatment for hypertension-related pain.

Patient 1 was documented as being able to use the technique independently, which may be relevant to the self-management of recurring discomfort. Persistent dizziness on standing nevertheless indicates incomplete symptom resolution and warrants continued clinical assessment. In older adults, postural dizziness should prompt attention to orthostatic blood-pressure changes, medication effects, hydration status, balance, and fall risk (Dani et al., 2021). Hypertension management in later life should remain individualized, particularly when frailty, multimorbidity, or postural symptoms are present (Egan et al., 2024).

Several limitations substantially restrict interpretation of these observations. Only two patients were described, and complete numerical pre- and post-intervention outcomes were available for only one of them. The intervention protocol was incompletely documented, including inconsistent descriptions of whether Patient 2 received Benson relaxation or deep-breathing therapy. Concomitant medications and other clinical treatments were not described in sufficient detail to separate their contribution from that of the nursing intervention. The observation period was short, no control or comparison condition was available, and no longer-term follow-up was undertaken. These limitations prevent causal conclusions and greatly limit generalizability. The broader evidence base also shows considerable variability in Benson-relaxation protocols and outcome reporting, which underlines the importance of standardized intervention descriptions in future work (Abu Maloh et al., 2024).

## CONCLUSION

In this two-patient nursing case study, Benson relaxation was documented as part of care for older adults with hypertension and pain-related discomfort. Patient 1 showed reduced pain and improved comfort during the nursing-care period. Because the report was descriptive, involved only two patients, lacked a control condition, and provided incomplete outcome documentation for Patient 2, these findings should be interpreted as clinical observations rather than as evidence of treatment effectiveness.

## SUGGESTION

Benson relaxation may be considered as an adjunct to routine nursing care for clinically stable patients who are willing to use a relaxation technique, alongside continued monitoring of pain, blood pressure, dizziness, postural symptoms, and fall risk. Future studies should use standardized intervention protocols, validated pain measures, clearly documented concurrent treatments, larger samples, comparison groups, and longer follow-up. Consistent reporting of intervention frequency, duration, adherence, and patient-level outcomes is also required before effectiveness can be determined.

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