Indonesian Journal of Global Health Research
Volume 9 Number 1, February 2027
e-ISSN 2715-1972; p-ISSN 2714-9749
https://jurnal2.globalhealthsciencegroup.com/index.php/IJGHR

THE EFFECT OF BENSON RELAXATION THERAPY AND DHIKR ON REDUCING POST-OPERATIVE FRACTURE PAIN IN THE MENOREH LOR WARD OF WATES REGIONAL GENERAL HOSPITAL (CASE REPORT)

Erick Fahreza Romli[1]*, Ari Budiati Sri Hidayati[1], Ika Cahyaningsih[2]
[1]Professional Nursing Education Program, Universitas Muhammadiyah Yogyakarta, Jl. Brawijaya, Geblagan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183, Indonesia
[2]Rumah Sakit Umum Daerah Wates, Jl. Tentara Pelajar No.Km. 1 No. 5, Area Sawah, Beji, Wates, Kulon Progo, Yogyakarta 55651, Indonesia
*fahrezaerick72@gmail.com

ABSTRACT
Post-operative pain is a common issue for individuals who have experienced a fracture. It can impact a person's level of comfort, ability to move around, and overall recovery. Along with medication (pharmacological therapy), there are many different non-pharmacological interventions that can assist in managing or reducing pain levels. One of those is Benson's Relaxation Technique. It involves a combination of controlled breathing, deep muscle relaxation, and a spiritual focus. It is designed to promote relaxation and help decrease how much someone perceives their pain. This study aimed to determine the effect of Benson relaxation therapy combined with dhikr on pain intensity in postoperative fracture patients in the Menoreh Lor Ward of RSUD Wates. One patient chosen by purposive sampling participated in this study's quantitative pre-experimental design with a one-group pretest-posttest methodology. The Numeric Rating Scale (NRS) was used to gage the level of pain both before and after the intervention. Depending on the patient's state, Benson relaxation and dhikr—more especially, the recitation of Lā ilāha illallāh—were given for ten to fifteen minutes. Data analysis was planned using the Wilcoxon Signed-Rank Test. The respondent, a 43-year-old man, had fractures to his left femur and clavicle following surgery. On the Numeric Rating Scale (NRS), the level of pain was 6 out of 10 prior to the intervention. Pain dropped to 4/10 following the initial intervention, then to 3/10 and 2/10 during ongoing observation after Benson relaxation and dhikr were combined. In addition to a calmer and more relaxed state, overall pain intensity dropped by 4 points (66.7%) from baseline. Benson relaxation combined with dhikr was followed by a reduction in postoperative pain intensity and improved patient comfort.

Keywords: benson relaxation; dhikr; numeric rating scale; pain; fracture; postoperative

First Received	Revised	Accepted
05 November 2026	14 November 2026	15 November 2026
Final Proof Received		**Published**
27 November 2026		01 February 2027

How to cite (in APA style)
Romli, E. F., Hidayati, A. B. S., & Cahyaningsih, I. (2026). The Effect of Benson Relaxation Therapy and Dhikr on Reducing Post-Operative Fracture Pain in the Menoreh Lor Ward of Wates Regional General Hospital (Case Report). *Indonesian Journal of Global Health Research*, *9*(1), 343–348. https://doi.org/10.37287/ijghr.v9i1.2978.

INTRODUCTION

Patients undergoing fracture surgery frequently have postoperative discomfort, which can have a detrimental impact on comfort, movement, sleep, and the healing process. As a result, effective pain management is a crucial part of nursing care. Benson relaxation therapy is one example of a non-pharmacological technique that can be used as an adjunct to pharmaceutical therapy to enhance postoperative pain control. Fractures are a major cause of disability and continue to be a major global musculoskeletal health concern. As stated by the World Health Organization (WHO, 2022), Worldwide, there have been about 440 million recorded incidences of fractures. The estimated 5.5% prevalence of fractures in Indonesia underscores the condition's ongoing impact on public health. Traffic accidents, which often result in musculoskeletal injuries requiring extensive medical and nursing care, are one of the main causes of fractures. Using information from the Yogyakarta Special Region Regional Police's Directorate of Traffic (Direktorat Lalu Lintas Polda DIY), 5,581

people were killed in 3,791 road incidents that occurred between January 1 and June 18, 2026. These comprised 5,350 people with mild injuries, 22 people with serious injuries, and 209 fatalities.

The high frequency of traffic accidents emphasizes the continuous need for the best possible medical care, especially when it comes to treating musculoskeletal injuries like fractures in order to stop subsequent complications and aid in patient recovery. 793 occurrences of lower-extremity fractures were reported locally between January and June 2026, according to data from Wates Regional General Hospital (RSUD Wates). This number illustrates the significant burden of fracture cases at the hospital level and emphasizes the significance of proper therapy, especially for patients who are in pain following surgery.

Both pharmaceutical and non-pharmacological methods are typically used in pain treatment. Complementary non-pharmacological approaches may offer further assistance in reducing moderate pain, especially pain graded 5–6 on the Numeric Rating Scale (NRS), even if pharmaceutical therapy is frequently used to manage immediate postoperative pain. Benson relaxation therapy is one such intervention. It is a method of relaxation that includes controlling breathing, relaxing muscles, adopting a comfortable body position, and concentrating on a soothing word or phrase. By lowering psychological stress and sympathetic nervous system activity, this method may cause a relaxation response, which may lessen the experience of pain (Permata et al., 2025).

Benson relaxation treatment has been shown in several trials to help postoperative patients, especially those with moderate pain, feel less discomfort. Kaparang et al. (2022) investigated how Benson relaxation treatment affected patients' pain levels after major surgery. Marianthi et al. (2022) further discussed the use of Benson relaxation treatment in patients who had femur fractures following surgery. Furthermore, Lumuan et al. (2024) outlined the use of Benson relaxation treatment to help patients with surgical fractures feel less discomfort.. This case report aimed to describe the implementation of Benson relaxation therapy combined with dhikr as a complementary nursing intervention to reduce pain intensity in a patient with postoperative fracture.

METHOD

This study used a quantitative pre-experimental design with a one-group pretest-posttest approach. The study was conducted in the Menoreh Lor Ward of RSUD Wates, Kulon Progo, Yogyakarta. One postoperative fracture patient was selected involving one patient selected through purposive sampling. Pain intensity was assessed before and after the intervention using the Numeric Rating Scale (NRS) ranging from 0–10. Benson relaxation and dhikr were used in the intervention, which involved saying Lā ilāha illallāh and breathing slowly and deliberately for 10 to 15 minutes.. The intervention was administered according to the patient's condition. Data were analyzed descriptively, while the difference in pain intensity before and after the intervention was planned to be analyzed using the Wilcoxon Signed-Rank Test.

RESULT

The respondent was a 43-year-old male patient (Mr. S) who was hospitalized in the Menoreh Lor Ward of RSUD Wates with a diagnosis of left lateral femoral fracture and left clavicle fracture. The patient underwent surgical management and experienced postoperative pain in the thigh and shoulder area. Before the intervention, the patient reported pain with an intensity of **6/10**, described as intermittent, cramping or throbbing, and aggravated by movement. The patient tended to limit movement to reduce the pain. Benson relaxation therapy combined with dhikr was administered for approximately 10 minutes. Following the first intervention on August 18, 2026, the patient's pain intensity decreased from 6/10 to 4/10, and the patient appeared calmer and more comfortable. On August 19, 2026, the pain intensity remained at 4/10; however, the patient appeared more relaxed, with reduced facial grimacing. On August 20, 2026, the pain intensity decreased to 3/10.

Subsequently, on August 21, 2026, following another session of Benson relaxation therapy combined with dhikr, the patient's pain intensity further decreased to 2/10.

Table 1.
Respondent characteristics (n= 1)

Respondent characteristics	f	%
Age		
43 years	1	100
Gender		
Male	1	100
Pain scale		
6/10 moderete pain	1	100

Table 1 shows that the case involved one male patient aged 43 years. The patient's initial pain intensity was 6/10, categorized as moderate pain. Since this case report involved only one respondent, each characteristic had a frequency of 1 and a percentage of 100%

Tabel 2
Before and After Intervension

Date	Before	After	Change from Baseline
August 18, 2026	6	4	−2
August 19, 2026	5	3	−3
August 20, 2026	3	2	−4

The patient's pain intensity dropped from 6/10 to 2/10 after three days of intervention with three sessions of Benson relaxation therapy, a decrease of 4 points (66.7%) from the initial score.

$$\frac{6-2}{6} \times 100 = 66,7\%$$

Statistical note: p-values, group means, standard deviations (SD), and Wilcoxon results should not be included as research findings because n=1. It is more suitable to highlight the individual's long-term clinical changes in case reports. Prior to the intervention, the patient's Numeric Rating Scale (NRS) score was 6/10, indicating considerable postoperative discomfort. The pain level dropped to a 4 out of 10 after the initial Benson relaxation and dhikr session on August 18, 2026. Following the intervention, the pain score dropped from 5/10 to 3/10 on August 19, 2026. The pain level dropped from 3/10 to 2/10 on August 20, 2026. The patient's overall pain intensity decreased by 4 points (66.7%) from the original baseline score of 6/10 to 2/10.

DISCUSSION

This case study showed a progressive decrease in the severity of postoperative pain after Benson relaxation therapy and dhikr were used. Each session lasted roughly ten minutes. The patient's pain score dropped from 6/10 to 4/10 on the first day. The pain score dropped from 5/10 to 3/10 on the second day after the intervention. The pain score dropped from 3/10 to 2/10 on the third day. Benson relaxation is a relaxation technique that involves slow, controlled breathing and concentration to produce a relaxed state. In this case, the relaxation technique was combined with dhikr by reciting Lā ilāha illallāh. Additionally, the patient stated that engaging in religious practices, like as prayer and dhikr, helped them feel at ease and accepted when they were ill.

There were noticeable improvements in the patient's condition along with the decrease in discomfort. The patient showed less facial grimacing and was calmer and more at ease after the operation. These results imply that dhikr combined with relaxation may assist the patient control their perception of pain following surgery and enhance comfort. The findings are consistent with the study by Marianthi et al., (2022) which reported a reduction in pain among postoperative femoral fracture patients following Benson relaxation. The study reported statistically significant differences in pain intensity following the intervention

The patient may have felt more at ease as a result of the spiritual aspect of the treatments in addition to Benson relaxation. Hidayat et al. (2024) examined the use of prayer and dhikr in 88 patients having

appendectomies. Following the intervention, a number of physiological indicators and pain severity significantly improved, according to their quasi-experimental study. These results lend credence to the possible application of spiritual nursing interventions in the treatment of postoperative pain. The observed response could also be explained by the psychological and physiological processes of relaxation.

Trisna et al., (2024) investigated 60 postoperative patients, including those undergoing fracture surgery, using slow, deep breathing based on religion. A statistically significant difference ($p < 0.001$) was observed after the intervention, with a mean decrease in pain scores of 2.17 points. According to the authors, slow, deep breathing in conjunction with a religious approach may enhance relaxation, lower physiological stress reactions, and increase parasympathetic activity, all of which may have an impact on how pain is perceived. Because Benson relaxation and dhikr also entail controlled breathing and religious recitation, these findings are pertinent to the current situation. However, Benson relaxation and dhikr are not the only reasons for the pain reduction in this case study. During the course of treatment, the patient also underwent pharmacological pain management, which included analgesics like paracetamol and ketorolac. The patient's postoperative recuperation and the passage of time may have also played a role in the pain reduction. Therefore, rather than providing proof of the intervention's causal effect, the results should be viewed as a clinical description of the patient's response (Permata et al., 2025). The results cannot be applied to all postoperative fracture patients because this is a case report involving just one patient. However, this example shows that Benson relaxation in conjunction with dhikr can be used as a supplemental nursing intervention to improve postoperative fracture patients' comfort and pain management.

CONCLUSION

This case study shows that Benson relaxation therapy in conjunction with dhikr may help individuals who have had lower-extremity fracture surgery experience less moderate pain. The patient's pain level dropped by 4 points (66.7%) from a 6 out of 10 to a 2 out of 10. Following the intervention, the patient also seemed calmer, more at ease, and more at ease. In order to help manage postoperative pain and enhance patient comfort, Benson relaxation therapy is used as an additional non-pharmacological intervention in conjunction with pharmacological treatment with analgesics.

DECLARATIONS

Acknowledgment: In addition to the nursing staff and medical professionals of Menoreh Lor Ward, RSUD Wates, the author would like to sincerely thank the patient who took part in this case study for their help and support.

Conflicts of interest: Regarding this case study, the author discloses no conflicts of interest.

Ethical approval: This research has obtained approval, as evidenced by an ethical clearance certificate with reference number No.KEPK/)&)/1.3/RS/X/2026.

Financial support and sponsorship: This research is funded through personal resources.

Data Availability Statement: With careful consideration for patient confidentiality and relevant ethical standards, the corresponding author may provide data supporting the conclusions in this case report upon reasonable request.

Author Contributions: Conceptualization, patient evaluation, nursing intervention execution, data collecting, data analysis, manuscript writing, and final manuscript approval were under the purview of the author.

Declaration of the Use of Artificial Intelligence in Scientific Writing: During the creation of this publication, artificial intelligence (AI)-assisted techniques were employed to enhance academic writing improvement, grammar correction, and language editing. Grammarly's AI detection tool was also used to evaluate the manuscript, yielding a score of 23% for AI-generated content. The accuracy, uniqueness, and integrity of the manuscript's content are entirely the author's responsibility after reviewing and revising it.

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