



COMFORT THEORY-BASED NURSING INTERVENTIONS TO ENHANCE POSTOPERATIVE COMFORT IN ELDERLY PATIENTS

Aldilla Dwi Estri Hastuti^{a*}, Satriya Pranata^b

^a Faculty of Nursing and Health Sciences ; aldilladwi12@gmail.com, Muhammadiyah University of Semarang, Indonesia

^b Faculty of Nursing and Health Sciences; Satriya.pranata@unimus.ac.id, Muhammadiyah University of Semarang, Indonesia

* Correspondent Author: Aldilla Dwi Estri Hastuti

ABSTRACT

Elderly postoperative patients experience multidimensional discomfort affecting physical, psychological, social, and spiritual wellbeing. Kolcaba's Comfort Theory provides a holistic framework for addressing these needs. To identify comfort theory-based nursing interventions for elderly postoperative patients and analyze their effectiveness. Methods: Systematic literature review of articles from PubMed, ScienceDirect, ProQuest, and Google Scholar (2020-2025) using narrative synthesis. Ten studies demonstrated that comfort-based interventions including pain management, emotional support, non-pharmacological techniques, and environmental modifications significantly improved patient outcomes. Physical and psycho-spiritual dimensions were most influential, reducing pain, anxiety, and postoperative complications while enhancing sleep quality and satisfaction. Social and environmental dimensions provided crucial reinforcement. Nurse competency and family involvement supported implementation, while workload and limited resources posed challenges. Comfort theory-based interventions effectively enhance elderly postoperative recovery through holistic, multidimensional approaches. Integration into evidence-based practice is essential for optimal patient outcomes.

Keywords: *comfort theory, nursing interventions, elderly patients, postoperative care, holistic nursing*

Abstrak

Pasien lansia post bedah mengalami ketidaknyamanan multidimensi yang memengaruhi aspek fisik, psikologis, sosial, dan spiritual. Penelitian ini bertujuan mengidentifikasi intervensi keperawatan berbasis teori Comfort untuk pasien lansia pasca operasi dan menganalisis efektivitasnya terhadap hasil pemulihan. Tinjauan literatur sistematis dilakukan menggunakan artikel dari *PubMed, ScienceDirect, ProQuest, dan Google Scholar* periode 2020-2025 yang dianalisis melalui sintesis naratif. Sepuluh studi menunjukkan bahwa intervensi berbasis comfort mencakup manajemen nyeri, dukungan emosional, teknik non-farmakologis seperti back massage, dan modifikasi lingkungan yang secara signifikan meningkatkan outcome pasien. Dimensi fisik dan psiko-spiritual terbukti paling berpengaruh dalam pemulihan, efektif menurunkan intensitas nyeri, mengurangi tingkat kecemasan, meminimalkan komplikasi pasca operasi, serta meningkatkan kualitas tidur dan kepuasan pasien. Dimensi sosial dan lingkungan berfungsi sebagai faktor penguat penting yang melengkapi kenyamanan holistik. Faktor pendukung utama meliputi kompetensi perawat, keterlibatan keluarga, dan fasilitas rumah sakit yang memadai, sedangkan tantangan utama terdiri dari beban kerja tinggi, keterbatasan sumber daya, dan variasi budaya dalam ekspresi nyeri. Intervensi berbasis teori Comfort efektif meningkatkan pemulihan pasien lansia pasca operasi melalui pendekatan holistik multidimensional.

Kata Kunci: teori comfort; intervensi keperawatan; pasien lansia; perawatan pasca operasi; keperawatan holistik.

Received October 8 2025; Revised October 11 2025; Accepted October 10 2025; Published October 15, 2025

1. INTRODUCTION

Elderly postoperative patients represent a population highly vulnerable to various forms of discomfort. This condition arises from the combination of physiological aging processes and the effects of surgery, such as postoperative pain, limited mobility, sleep disturbances, anxiety, and uncertainty about their future health condition. Such discomfort not only affects physical aspects but also influences the psychological, social, and spiritual well-being of elderly patients. Several studies have demonstrated that the level of comfort experienced by elderly patients is closely related to the quality of postoperative recovery and satisfaction with nursing care services received (Sun et al., 2024).

In nursing practice, interventions for postoperative patients often focus mainly on physical aspects such as pain control or complication prevention, while psycho-spiritual, social, and environmental dimensions receive less attention. However, fulfilling comfort needs holistically among elderly patients has been proven to accelerate recovery and enhance quality of life following surgery (Tang et al., 2024). Therefore, nurses play a crucial role not only in delivering clinical interventions but also in creating a caring environment that supports emotional and social comfort for patients.

The Comfort Theory developed by Katharine Kolcaba serves as a relevant conceptual framework to address these needs. This theory emphasizes that comfort can be achieved by fulfilling needs across four primary contexts: physical, psycho-spiritual, social, and environmental. In the context of elderly postoperative patients, the application of this theory assists nurses in designing more targeted and comprehensive interventions that not only focus on medical healing but also foster a sense of safety, emotional support, and social connectedness (Zhang et al., 2023). Recent studies have shown that comfort-based nursing interventions are effective in reducing anxiety, improving sleep quality, alleviating pain perception, and enhancing patient satisfaction with nursing services. Furthermore, these interventions contribute to earlier mobilization and faster restoration of body function after surgery (Tang et al., 2024).

Nevertheless, the implementation of Comfort Theory in nursing practice still encounters several challenges. Common barriers include limited understanding of the theory among nurses, the absence of standardized clinical guidelines for its application in surgical wards, and the high workload that restricts nurses from providing holistic attention. These factors lead to suboptimal implementation of comfort nursing, thereby limiting its benefits for patients (Sun et al., 2024). This condition highlights the need for a comprehensive literature review examining the application of Comfort Theory among postoperative elderly patients. This review aims to explore how comfort-based nursing interventions are applied, what types of interventions are utilized, and to what extent they influence patient comfort. Through a literature review approach, researchers can gain a broader understanding of best practices in implementing comfort nursing within various surgical contexts.

The research problem in this study is focused on several key questions: what forms of nursing interventions based on Comfort Theory are applied to elderly postoperative patients, which dimensions of comfort have the greatest impact on recovery, and what factors facilitate or hinder its implementation. By clearly formulating these research questions, this review is expected to provide comprehensive answers and serve as a valuable reference for nursing practice. The main objective of this study is to identify nursing interventions based on Comfort Theory implemented among elderly postoperative patients and to analyze their impact on various outcomes, including pain, anxiety, satisfaction, and length of hospital stay. In addition, this study aims to determine which comfort dimensions are most effective in improving the quality of elderly patient care. The findings are expected to enrich the body of literature on Comfort Theory and provide an evidence-based foundation for nursing practice.

This study also offers both theoretical and practical implications. Theoretically, the results may strengthen the conceptual foundation for the application of Comfort Theory in postoperative nursing care and clarify its relevance to modern clinical practice. Practically, the findings can provide recommendations for nurses in designing more effective and holistic intervention strategies. Thus, this study contributes to improving the quality of nursing services and enhancing the patient experience during postoperative recovery. Moreover, this research holds strategic value for supporting health service policies. The results of the literature review can serve as a reference for hospital administrators in developing structured clinical guidelines based on Comfort Theory. With such guidelines, nursing interventions are expected to become more standardized, effective, and impactful on patient comfort. Ultimately, the contribution of this study is

expected to benefit not only patients but also improve the reputation and quality of nursing care across healthcare facilities.

2. RESEARCH METHOD

This study employed a literature review design aimed at identifying, examining, and analyzing scientific articles related to the implementation of nursing interventions based on Comfort Theory among elderly postoperative patients. This approach was chosen because it enables a comprehensive understanding of current research findings while mapping existing trends and research gaps (Snyder, 2022). The literature review process was conducted systematically, taking into account the quality, relevance, and recency of the selected studies.

Data sources were obtained through electronic searches in international databases such as PubMed, ScienceDirect, ProQuest, and Google Scholar. The keywords used included comfort theory, nursing intervention, postoperative patients, and patient comfort. The inclusion criteria were limited to English- and Indonesian-language publications from 2020 to 2025 to ensure that the review reflects recent and relevant nursing practices (Amato et al., 2023). The inclusion criteria consisted of original research articles, both quantitative and qualitative studies, that explored the application of Comfort Theory in elderly postoperative patients, with full-text accessibility. The exclusion criteria included editorials, commentaries, and publications not directly related to patient comfort following surgery. The article selection process involved reviewing the titles, abstracts, and full texts to confirm alignment with the study's focus (Harris et al., 2020).

Data from the selected articles were analyzed using a narrative synthesis method. The analysis process included identifying the types of interventions applied, the contexts of implementation, and the outcomes related to comfort among elderly postoperative patients. Information from various studies was then compared and synthesized to identify recurring patterns, similarities, and differences in findings. Consequently, this literature review is expected to provide a comprehensive overview of the effectiveness of nursing interventions grounded in Comfort Theory (Park, 2021).

3. RESULTS

The literature search was conducted systematically to identify articles relevant to the topic Nursing Interventions Based on Comfort Theory to Enhance Comfort in Elderly Postoperative Patients. The search was performed across four major databases PubMed, ScienceDirect, ProQuest, and Google Scholar covering publications from 2020 to 2025. The initial search yielded several articles, which were screened based on inclusion criteria such as topic relevance, research design, and the population of elderly postoperative patients. Articles meeting the inclusion criteria were further reviewed and analyzed in depth.

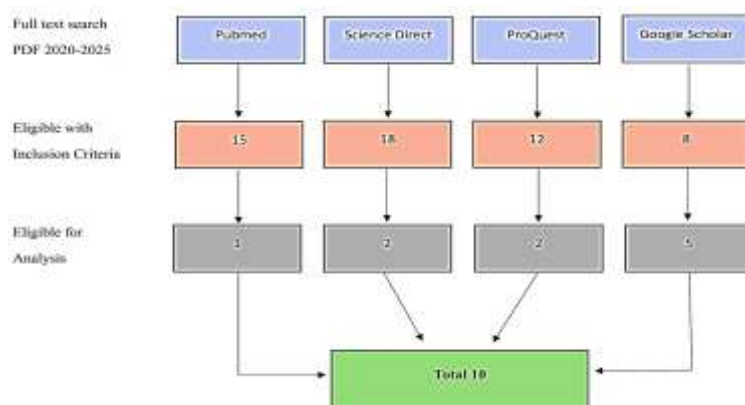


Figure 1. Flow diagram of the literature search and selection process from PubMed, Science Direct, ProQuest, and Google Scholar databases (2020–2025).

Source: (Compiled by Researchers, 2025)

Thus, the information presented is not only descriptive but also analytical, linking nursing interventions with the dimensions of Comfort Theory. The summary table served as a foundation for further discussion on intervention effectiveness, dominant comfort dimensions, and the facilitating and inhibiting factors in their application.

Table 1. Articles used in the literature review

No	Author & Year	Article Title	Method	Interventions & Key Outcomes
1.	Sun, Liu & Ye (2024)	Comfort nursing theory on the postoperative rehabilitation quality and nursing satisfaction of patients with intracranial aneurysm	Quasi-experiment	Comfort care improves the quality of rehabilitation and patient satisfaction (physical, psycho-spiritual).
2.	Chen, Liu & Wen Yue (2024)	Effect of comfortable nursing on postoperative nausea and vomiting in patients with idiopathic scoliosis	Clinical trial	Comfort care reduces the incidence of postoperative nausea and vomiting (Physical)
3.	Deng, Li & Zhang (2024)	The application of concept map thinking combined with Kolcaba's comfort nursing in perioperative care	RCT	Concept map-based comfort care + ERAS accelerates recovery (Physical, Environmental)
4.	Lin, Peng & Li (2023)	Interventions and practices using Comfort Theory: A scoping review	Scoping review	Comfort care improves compliance and clinical outcomes (Physical, Psycho-spiritual, Social, Environmental)
5.	Wu, Chen, Zhang & Yu (2024)	Review on Comfort Nursing Interventions for Patients Undergoing Neurosurgery and General Surgery	Narrative review	Comfort nursing interventions involving psychological, physical, spiritual, and TCM-based care effectively enhance patients' recovery, comfort, and overall quality of life after surgery and neurological treatment.
6.	Harefa, Syafrinanda & Olivia (2023)	Asuhan keperawatan post appendiktomi dengan teknik back massage	Case study	Back massage techniques reduce post-operative pain (Physical)
7.	Kusnaningsih (2020)	Penerapan teori Comfort Kolcaba dan Self Care Orem pada pasca bedah sesar	Case study	Education and emotional support enhance mothers' independence (Psycho-spiritual, Social)
8.	Sesrianty & Primal (2024)	Hubungan lingkungan perawatan dengan kualitas tidur pasien post operasi mayor	Cross-sectional	A comfortable environment improves patients' sleep quality (Environment)
9.	Qian, H., Zhang, L., & Liu, Y. (2021)	Comfort nursing can alleviate pain and negative emotion of patients after surgery for lumbar vertebral compression fractures (LVCFs) and improve their living ability	Quasi-experiment	Comfort nursing interventions reduce pain and anxiety and improve the functional abilities of elderly patients after orthopedic surgery. (Physical & Psychological)
10.	Gomes, A., Silva, M., & Fernandes, R. (2024)	Comfort-Promoting Interventions for the Elderly in Hospital Settings	Mixed-method	The comfort care approach for elderly inpatients/post-surgery patients improves sleep quality, relaxation, and patient

satisfaction. (Physical, Social, Environmental)

The application of Comfort Theory among postoperative patients has shown substantial benefits in the recovery process. This approach emphasizes fulfilling patients' comfort needs through physical, psycho-spiritual, social, and environmental dimensions. Lin, Peng, and Li. Lin, Peng, dan Li (2023) found that comfort-based interventions improve recovery quality and enhance the overall patient care experience.

One of the most dominant interventions identified was pain management. Postoperative patients frequently experience acute pain that limits mobility.. Sun et al. (2024), reported that comfort interventions significantly reduced pain intensity in patients with intracranial aneurysms, accelerating recovery. Similarly, in Indonesia,. Kusniansih (2020), demonstrated that combining Kolcaba's Comfort Theory with Orem's Self-Care Theory in primiparous post-cesarean patients reduced pain and improved self-care independence, underscoring the theory's local applicability.

In addition to pharmacological management, non-pharmacological interventions were also widely utilized. Harefa et al. (2023), found that back massage effectively decreased pain and fostered a sense of security among post-appendectomy patients, highlighting that simple manual methods can enhance patient comfort. Comfort interventions also targeted postoperative nausea and vomiting management. Chen et al. (2024), reported that scoliosis patients who received comfort-based care experienced a significant reduction in nausea and vomiting compared to control groups, indicating that physical comfort encompasses more than pain alone.

The environmental dimension emerged as a key factor in comfort care. Sesrianty & Primal (2024), discovered that postoperative patients' sleep quality was strongly linked to the comfort of their hospital environment. Factors such as noise, lighting, and temperature significantly influenced patients' rest quality. The psycho-spiritual dimension was also emphasized. Sun et al. (2024), observed that patients who received emotional support and education showed lower anxiety levels, which is crucial since anxiety can exacerbate pain perception and delay recovery.

Emotional support from nurses was found to enhance subjective comfort, with therapeutic communication and responsive presence fostering trust and security during recovery (Lin et al., 2023). Comfort interventions have also been integrated with the Enhanced Recovery After Surgery (ERAS) protocol. Deng et al. (2024), Demonstrated that combining ERAS with comfort care accelerated recovery and improved patient satisfaction, confirming its relevance to modern surgical nursing standards.

The social dimension was identified as a supporting factor in recovery, as family involvement increased patients' motivation and adherence to medical advice. Kusniansih (2020), Among the four comfort dimensions, the physical dimension was found to have the most significant impact on postoperative recovery, as issues like pain, limited mobility, and physical discomfort were the main barriers to improvement (Sun et al., 2024).

Nonetheless, the psycho-spiritual dimension also played a vital role. Harefa et al. (2023), showed that patients receiving emotional and spiritual interventions were more cooperative and reported higher satisfaction levels. Meanwhile, the environmental dimension, though often overlooked, was found to influence patients' sleep quality and emotional stability (Sesrianty & Primal 2024). Overall, the findings indicated that physical and psycho-spiritual aspects had the most dominant influence, while social and environmental dimensions acted as complementary factors. Supporting factors in implementing comfort interventions included nurse competence, family involvement, and institutional support. Trained nurses were better able to identify patients' holistic needs (Lin et al., 2023). However, several barriers were identified, such as limited time and heavy workloads that reduced the quality of non-pharmacological interventions (Wu et al. 2022).

Inadequate hospital facilities also hindered effective implementation for example, noisy or uncomfortable rooms negatively affected patients' rest and recovery (Sesrianty & Primal 2024). Additionally, a lack of patient and family education regarding comfort interventions reduced compliance, whereas effective education was shown to improve acceptance (Lin et al. 2023). Qian, Zhang, dan Liu (2021) studied the application of comfort nursing among elderly patients undergoing surgery for lumbar vertebral compression

fractures. The study revealed that comfort-based interventions significantly reduced pain levels, alleviated negative emotions such as anxiety and fear, and enhanced patients' ability to perform daily activities post-surgery. These results demonstrated that comfort theory not only addresses physical recovery but also fosters psychological adaptation and quality of life among elderly postoperative patients.

Gomes, Silva, dan Fernandes (2024) investigated comfort-promoting interventions in hospitalized elderly patients. Their findings showed that strategies such as position adjustment, emotional support, and environmental modification improved physiological stability, reduced stress, and prevented delirium during postoperative recovery. This study strengthened evidence that comfort theory interventions exert multidimensional effects on elderly patients' well-being.

Overall, despite some challenges, the findings consistently indicate that Comfort Theory–based interventions have a positive impact on postoperative patients. These interventions effectively reduce pain, decrease anxiety, improve sleep quality, and enhance patient satisfaction (Kusniansih, 2020; Sesrianty & Primal, 2024; Sun et al., 2024). Therefore, the implementation of Comfort Theory in postoperative nursing practice is highly relevant, with physical and psycho-spiritual interventions as primary priorities and social and environmental dimensions serving as reinforcing components that optimize the overall effectiveness of comfort care.

4. DISCUSSION

Elderly postoperative patients are among the most vulnerable groups to experience discomfort across physical, emotional, social, and environmental dimensions. The recovery process is often determined not only by the success of medical procedures but also by the quality of nursing care that emphasizes patient comfort. In this context, nurses play a strategic role in ensuring that patients not only recover physiologically but also undergo a meaningful and soothing care experience.

Kolcaba's Comfort Theory provides a relevant conceptual framework for analyzing nursing interventions in elderly postoperative patients. The theory emphasizes that comfort is not merely the absence of pain but a holistic state encompassing physical, psycho-spiritual, social, and environmental dimensions. Using Comfort Theory as an analytical lens, this discussion aims to explore how nursing interventions can be implemented holistically according to patients' needs. The analysis focuses on three main aspects: (1) the forms of comfort-based nursing interventions applied to postoperative patients, (2) the dimensions of comfort most influential in the recovery process, and (3) the facilitating and inhibiting factors in applying Comfort Theory in clinical practice. Through this approach, a comprehensive understanding can be gained regarding the contribution of Comfort Theory to modern nursing practice, particularly in managing elderly postoperative patients. Furthermore, this discussion serves as a foundation for evidence-based nursing practices that highlight comfort as an essential indicator of healthcare quality improvement.

4.1 Physical Dimension

Physical comfort remains the primary focus of nursing interventions for elderly postoperative patients. Symptoms such as pain, nausea, vomiting, and sleep disturbances are among the most common postoperative complaints. Nurses applying Comfort Theory must adopt both pharmacological and non-pharmacological strategies to alleviate these symptoms (Sun et al., 2024). Pain management is the dominant intervention within this dimension. The use of analgesics according to protocol, combined with relaxation techniques, has been shown to effectively reduce pain intensity. Harefa et al., (2023), reported that back massage significantly enhanced the comfort of patients following appendectomy. Moreover, Penelitian (Chen et al., 2024) found that comfort care interventions effectively reduced postoperative nausea and vomiting among patients undergoing scoliosis surgery. These findings highlight the strong relationship between physical comfort and recovery quality. Physical comfort is also related to early mobilization, as patients who experience less discomfort are more likely to engage in light activities, accelerating wound healing and restoring physiological function.

4.2 Psycho-Spiritual Dimension

Anxiety is the most dominant psycho-spiritual issue experienced by patients before and after surgery. Interventions such as education, counseling, and spiritual care have been shown to reduce anxiety and enhance patient readiness for postoperative recovery (Lin et al., 2023). Kusniansih (2020), demonstrated that emotional support based on Comfort Theory for mothers after cesarean section increased their self-care independence. This finding suggests that reducing anxiety not only improves psychological well-being but also positively influences physical recovery. Spirituality also plays an integral role; patients who are

allowed to practice their religious activities during hospitalization report greater emotional stability. Thus, facilitating patients' spiritual needs helps nurses provide a sense of meaning and peace throughout the recovery process. Overall, the psycho-spiritual dimension is vital in reducing emotional stress, which indirectly accelerates physiological recovery and improves postoperative quality of life.

4.3 Social Dimension

The social dimension highlights the importance of family support and therapeutic interaction between nurses and patients. In Indonesia, family involvement plays a crucial role in the healing process. Family support has been shown to increase patient motivation for mobilization and self-care (Kusniansih, 2020). In addition, effective communication between nurses and patients is a critical form of social comfort intervention. Sun et al. (2024), found that good communication enhances patient satisfaction and trust in healthcare providers. Social comfort also involves a sense of acceptance by the community and the surrounding environment. Patients who receive social support adapt more easily to physical changes after surgery. Therefore, the social dimension reinforces both physical and psycho-spiritual comfort, promoting overall well-being.

4.4 Environmental Dimension

The care environment represents an external factor that significantly influences patient comfort. Environmental factors such as noise, lighting, and room temperature often disrupt patients' rest. Sesrianty & Primal (2024), reported that an uncondusive hospital environment negatively affected the sleep quality of patients after major surgery. A comfortable environment facilitates proper rest, boosts immunity, and accelerates wound healing. Deng et al. (2024), also emphasized that integrating Enhanced Recovery After Surgery (ERAS) protocols with comfort care creates a more structured treatment setting, allowing patients to feel safe and secure during hospitalization.

4.5 Comparative Analysis Across Dimensions

Among all dimensions, physical and psycho-spiritual comfort appear to be the most dominant factors influencing the recovery of elderly postoperative patients. Pain and anxiety are the two main elements that significantly impact patient comfort and, if left unaddressed, may slow down the healing process (Lin et al., 2023). However, social and environmental dimensions should not be overlooked. Family involvement and a supportive care environment serve as catalysts that strengthen the effectiveness of physical and psycho-spiritual interventions. Hence, the four dimensions are interrelated and mutually reinforcing in achieving holistic comfort in line with Comfort Theory. Supporting factors for the implementation of Comfort Theory include nurse competence, family engagement, and institutional support. Skilled nurses can effectively identify comfort needs across all dimensions (Lin et al., 2023).

Conversely, challenges such as high nurse workloads, limited facilities, and cultural variations in expressing pain or anxiety (Vasilevski et al., 2023). Hinder its full implementation. Therefore, adapting Comfort Theory to local contexts is essential to maximize its effectiveness. Ultimately, applying comfort-based nursing interventions for elderly postoperative patients must be holistic, integrating all four dimensions. While physical and psycho-spiritual aspects are more prominent, social and environmental dimensions remain indispensable in achieving comprehensive comfort outcomes.

5. CONCLUSION

Based on the results of this literature review, comfort theory-based nursing interventions play a crucial role in improving the quality of care for elderly postoperative patients. Commonly applied interventions include pain management, health education, emotional support, non-pharmacological techniques such as back massage, and the management of the care environment. Analysis using comfort theory indicators shows that the physical and psycho-spiritual dimensions are the most dominant factors influencing recovery, while the social and environmental dimensions act as complementary elements that enhance overall patient comfort. The implementation of comfort theory in nursing practice is influenced by both facilitating and inhibiting factors. Family support, nurse competence, and adequate hospital facilities serve as key enablers in promoting patient comfort, particularly among elderly individuals. Conversely, limited resources, high nurse workloads, and cultural influences on the expression of pain or anxiety pose significant challenges. Therefore, the application of comfort theory-based nursing interventions must be carried out holistically and integratively, ensuring that patient comfort is achieved not only through physical care but also through psycho-spiritual, social, and environmental support that optimizes the recovery process.

DAFTAR PUSTAKA

- [1] A. Amato, B. P. Imbimbo, and B. Falsini, "Neurofibromatosis type 1-associated optic pathway gliomas: pathogenesis and emerging treatments," *Eur. Rev. Med. Pharmacol. Sci.*, vol. 27, 2023.
- [2] Z. Chen, C. Liu, and W. Chen, "Effect of comfortable nursing on postoperative nausea and vomiting in patients with idiopathic scoliosis after posterior orthopedic surgery," *Front. Surg.*, vol. 11, p. 1395013, 2024. doi: 10.3389/fsurg.2024.1395013.
- [3] Y. Deng, Y. Tian, C. Guo, Y. Fan, J. Guan, and Y. Wang, "The application of concept map thinking combined with Kolcaba's comfort nursing in the perioperative care of patients undergoing nasal deformity correction," *Brit. J. Hosp. Med.*, vol. 85, no. 12, 2024. doi: 10.12968/hmed.2024.0562.
- [4] A. Gomes, M. Silva, and R. Fernandes, "Comfort-promoting interventions for the elderly in hospital settings," *Geriatrics*, vol. 9, no. 2, p. 17, 2024. [Online]. Available: <https://www.mdpi.com/2308-3417/9/2/17>.
- [5] N. Harefa, V. Syafrinanda, and N. Olivia, "Asuhan keperawatan pada pasien post op appendiktomi dengan gangguan rasa aman nyaman nyeri melalui tindakan teknik back massage di Rumah Sakit Tk II Putri Hijau Medan," *SENTRI: Jurnal Riset Ilmiah*, 2023.
- [6] K. Harris et al., "Patients' and healthcare workers' recommendations for a surgical patient safety checklist—A qualitative study," *BMC Health Services Res.*, vol. 20, no. 1, 2020. doi: 10.1186/s12913-020-4888-1.
- [7] A. Kusnianingsih, "Penerapan teori comfort Kolcaba dan self care Orem pada pasca bedah sesar primipara," *Jurnal Surya Medika*, 2020.
- [8] Y. Lin, Y. Zhou, and C. Chen, "Interventions and practices using comfort theory of Kolcaba to promote adults' comfort: An evidence and gap map protocol of international effectiveness studies," *Systematic Reviews*, vol. 12, no. 1, 2023. doi: 10.1186/s13643-023-02202-8.
- [9] J. W. Park, "Near-exact CASSCF-level geometry optimization with a large active space using adaptive sampling configuration interaction self-consistent field corrected with second-order perturbation theory (ASCI-SCF-PT2)," ACS Publications, 2021.
- [10] H. Qian, L. Zhang, and Y. Liu, "Comfort nursing can alleviate pain and negative emotion of patients after surgery for lumbar vertebral compression fractures (LVCFs) and improve their living ability," *Amer. J. Transl. Res.*, vol. 13, no. 8, pp. 9313–9320, 2021. [Online]. Available: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8394208/>.
- [11] V. Sesrianty and D. Primal, "Hubungan lingkungan perawatan dengan kualitas tidur pasien post operasi mayor," *Jurnal Kesehatan Tambusai*, 2024.
- [12] L. Sun, P. Liu, and L. Ye, "Comfort nursing theory on the postoperative rehabilitation quality and nursing satisfaction of patients with intracranial aneurysm," *Medicine (United States)*, vol. 103, no. 24, p. e38337, 2024. doi: 10.1097/MD.00000000000038337.
- [13] M.-D. Tang, J. Zhang, Y.-S. Gong, S.-Y. Li, and H. Sui, "Effect of comfort care on perioperative outcomes and postoperative recovery of breast cancer patients," *Alternative Therapies*, 2024. [Online].
- [14] V. Vasilevski, J. Huynh, A. Whitehead, C. Noble, C. Machado, and L. Sweet, "The Green Maternity project: A midwife-led initiative to promote correct waste segregation on an Australian postnatal ward," *J. Adv. Nursing*, 2023. doi: 10.1111/jan.15789.
- [15] L. Wu, Y. Chen, J. Zhang, and H. Yu, "Review on comfort nursing interventions for patients undergoing neurosurgery and general surgery," *Evidence-Based Complementary Alternative Med.*, vol. 2022, Art. no. 6735054, 2022. doi: 10.1155/2022/6735054.
- [16] B. Zhang, L. Yang, and X. Ji, "Effect of comfort nursing on postoperative recovery and life quality of patients undergoing thoracic surgery," *Amer. J. Transl. Res.*, vol. 15, no. 12, pp. 6797–6804, 2023. [Online]. Available: www.ajtr.org.