Knowledge of Nursing Journal Winter 2024, 1(4):370-381

http://Knjournal.ir

Original Article **Open Access**

Application of Kolcaba's Comfort Theory in Palliative Care: A Review Study

Behnaz Asadizaker[*1]

[1] *PhD Student in Nursing, Department of Nursing, TeMS.C., Islamic Azad University, Tehran, Iran.*

Abstract

Background and Aim: Comfort is a complex and multidimensional concept that is recognized as a primary goal of healthcare. This review study was conducted to examine the application of Kolcaba's Comfort theory (CT) in palliative care.

Materials and Methods: Through a systematic search of scientific databases including CINAHL, PubMed, Scopus, Web of Science, and Google Scholar using keywords such as "Kolcaba's Comfort Theory" "comfort," and "palliative care", we identified 163 articles published between 2015 and 2025 relevant to this study. From these, 10 articles were selected for inclusion.

Results: The findings showed that Kolcaba's CT is recognized as a more comprehensive framework for understanding and promoting comfort in palliative care. This theory, which defines comfort as the satisfaction of three types of needs (relief, ease and transcendence) in four human dimensions provides a strong foundation for planning a comprehensive nursing care. Research indicates that this theory has been effectively used in nursing diagnoses, design of complementary intervention, pain management and spiritual care. The application of this theory in palliative care, including pediatric and neonatal care, has led to improved quality of life for patients and their families.

Conclusion: Given the increasing importance of palliative care and the need for a comprehensive approach in this field, Kolcaba's CT can serve as an appropriate guide for providing higher quality and more humane care.

Keywords: Patient comfort, palliative care, nursing diagnosis.

[1] **Corresponding author:** Behnaz Asadizaker, PhD Student in Nursing, Department of Nursing, TeMS.C., Islamic Azad University, Tehran, Iran. ORCID ID: 0000-0003-2253-9093, Email: b_asadi1993@yahoo.com, **Received**: November 2023, **Accepted**: December 2023, **ePublish**: Winter 2024. Citation: Asadizaker B, Application of Kolcaba's Comfort Theory in Palliative Care: A Review Study, Knowledge of Nursing Journal. 2024;1(4):370-381.

[DOI: 10.61882/knjournal.1.4.370]

Introduction

Comfort is a complex and multidimensional concept that is recognized as the primary objective of healthcare interventions. It encompasses pleasurable experience, satisfaction, and empowerment in facing challenges [1]. According to Kolcaba, comfort constitutes a subjective mental state that encompasses physical, social, emotional, and transcendent well-being for individuals and families, serving as a valuable theoretical framework for evaluating and improving patient comfort in palliative care settings [2].

The increasing necessity for palliative care services, driven by growing elderly populations and increasing cancer rate, necessitates the development of comprehensive support systems that are required by over 20 million individuals worldwide annually [3]. These interventions comprise comprehensive and active care approaches for patients with incurable conditions, primarily aimed at reducing and preventing physical, psychological, social, and existential suffering associated with illness. This caregiving approach acknowledges death as a natural aspect of life while providing physical and psychological support to optimize patients' remaining life span [4].

Kolcaba's Comfort theory (CT) provides an effective framework for assessing and enhancing palliative care, particularly in managing patient's symptoms and psychosocial needs. As comfort is a desirable outcome in patient experience, maximizing comfort is considered a universal objective for healthcare interventions. Comfort encompasses pleasant experiences, satisfactory state of mind, positive feelings, and enhanced capacity to cope with crises and challenges. Increased comfort following therapeutic interventions can enhance hope and self-confidence while facilitating recovery, rehabilitation, and peaceful dying [5].

According to Kolcaba's definition, comfort constitutes a comprehensive experience derived from fulfilling threefold needs across four distinct domains. The three types of comfort include: relief related to severing unmet needs, ease concerning prevention of known risk factors affecting comfort perception, and transcendence that involves coping beyond discomforts in situations where they cannot be eliminated or prevented. These three comfort types are categorized within physical, psychospiritual, environmental, and sociocultural domains [6]. Kolcaba's CT, which focuses on patients' physical, psychological and social needs, provides an appropriate framework for delivering structured care and support to patients [7].

Some studies have referred to the limitations of comfort theory in palliative care, including the need for standardized tools to assess comfort and difficulties in precisely distinguishing between physical and psychospiritual dimensions in critical situations. Additionally, this theory faces operational limitations such as the need for greater clarity in its application in research and clinical practice, and problems in implementing it uniformly across different settings [1, 6]. Furthermore, the need for better adaptation of this theory to specific palliative care conditions, development of specialized versions for different disease conditions, and adaptation to the cultural and

[DOI: 10.61882/knjournal.1.4.370]

social needs of different patients are considered major limitations of this theory [6, 8]. This literature review aims to present a framework for the application of Kolcaba's CT in palliative care in order to assist nurses and healthcare team in providing higher quality and more effective care through deeper understanding of comfort in clinical context.

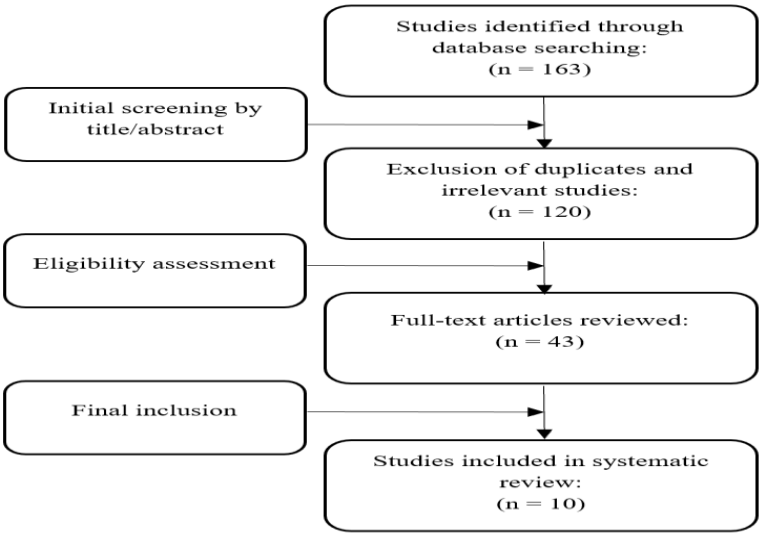
Methods

This narrative literature review intends to examine the application of Kolcaba's CT in palliative care. A targeted search was conducted in scientific databases including CINAHL, PubMed, Scopus, Web of Science and Google Scholar using keywords such as; "Kolcaba's Comfort theory", "comfort" and "palliative care". Studies published between 2015 and 2025 in English or Persian language were selected with focus on empirical, qualitative and review articles. Exclusion criteria included Studies that did not explicitly apply or reference Kolcaba's CT, articles with unclear or insufficient methodological descriptions, research focusing on non-palliative care populations and studies whose full texts were not available.

Initially, titles and abstracts of selected articles were screened and irrelevant or duplicate articles were removed. Full texts of the remaining articles were reviewed, and final selections were made based on inclusion and exclusion criteria. Key information including author's name, year of publication, study design, interventions, target groups, and main findings were extracted and summarized in Table 1. The qualitative content analysis was carried out, with 163 articles initially identified and 10 ultimately reviewed.

Due to the nature of the narrative review, quantitative bias or quality assessment was not feasible, although efforts were made to use diverse and credible sources.

Flowchart 1: Study Selection



[DOI: 10.61882/knjournal.1.4.370]

Results

Table 1: Characteristics and main findings of reviewed articles

No.	Title	Author & Year	Journal	Study Design & instruments	Population/Sample	Main Findings
1	Nursing Diagnoses Clusters: Survival and Comfort in Oncology End-of-Life Care	Marques & Alves (2020) [2]	International Journal of Palliative Nursing	Study Design: prospective cohort instruments: 1.The 'End of life comfort questionnaire patient,' created by Kolcaba 2.NANDA international taxonomy	Cancer patients (n=66)	A prospective study of cancer patients in end-of-life care showed that nursing diagnoses based on Kolcaba's theory improved palliative care.
2	The Effects of Guided Imagery on Comfort in Palliative Care	Coelho et al. (2018) [10]	Journal of Hospice & Palliative Nursing	Study Design: Pre-Experimental Instruments: 1.Holistic Comfort Scale 2.visual analog comfort scale 3.visual analog pain scale	Adult palliative care patients (n=26)	Guided imagery significantly increased patient comfort and reduced physiological distress.
3	Total pain and comfort theory: implications in the care to patients in oncology palliative care	de Castro et al. (2021) [9]	Revista Gaúcha de Enfermagem	Study Design: literature review	Theoretical study	Kolcaba's theory and Saunders' total pain concept are used as complementary therapy in cancer palliative care patients.
4	Comfort Experience in Palliative Care: A Phenomenological Study	Coelho A et al. (2016) [14]	BMC Palliative Care	Study Design: phenomenological descriptive study instruments: non-structured interviews	Palliative care inpatients (n=17)	Patients experience comfort through humanistic care, symptom control, and hope, while losses cause distress.
5	Integrating the Comfort Theory into Pediatric Primary Palliative Care	Lafond et al. (2019) [16]	Journal of Hospice & Palliative Nursing	Study Design: Mixed method Quantitative Instruments: 1.Unit-Based Projects 2.Institutional Guidelines Qualitative Instruments: 1.Clinician Reports 2.Debriefing Sessions 3.Case Study Presentations 4.Mentor Feedback	Healthcare staff (n=149)	Integrating palliative care into pediatric primary care improved access and quality.
6	Spirituality-Focused Palliative Care to Improve Indonesian Breast Cancer Patient Comfort	Nuraini et al. (2018) [15]	Indian Journal of Palliative Care	Study Design: cross-sectional study instruments: 1.Brief COPE Inventory 2.Family Support Scale 3.Spiritual Perspective Scale (SPS) 4.breast symptom scale 5.Depression Anxiety Stress Scale	Breast cancer patients (n=308)	Spiritual-focused palliative care improved comfort in breast cancer patients.
	Comfort Conversations in Complex Continuing	Konietzny & Anderson	Perspectives	Study Design: qualitative research instruments:	Patients, families, and	"Comfort Conversations" tool facilitated

[DOI: 10.61882/knjournal.1.4.370]

7	Care: Assessing Patients' and Families' Palliative Care Needs	(2018) [11]		interview	healthcare teams	interdisciplinary palliative care planning
8	A Critical Realist Evaluation of a Music Therapy Intervention in Palliative Care	Porter et al. (2017) [5]	BMC Palliative Care	Study Design: qualitative study instruments: interview	Patients (n=16), professionals (n=19)	Music therapy provided physical, emotional, and social support in palliative care.
9	End-of-Life Care in the Neonatal Intensive Care Unit: Applying Comfort Theory	Marchuk (2016) [17]	International Journal of Palliative Nursing	Study Design: Case study	Neonates in NICU	Kolcaba's theory guided dignified end-of-life care for neonates and families.
10	Application of Kolcaba's Comfort Theory in Nutritional Problems in Children with Cancer: Case Study	Sriasih et al. (2023) [32]	Indonesian Journal of Global Health Research	Study Design: Case study	children with cancer (n=5)	The theory proved effective in guiding holistic care, enhancing comfort, and optimizing nutritional intake, though ongoing challenges highlight the need for tailored interventions in high-risk cases.

Comfort is one of the most important objectives of healthcare interventions, and is positioned at the center of patient experience. While this concept is complex and challenging to evaluate, Kolcaba's CT is recognized as the most comprehensive framework. Most global studies in comfort care have been conducted based on this theory [1].

Nursing Diagnosis

In palliative care, nursing diagnosis plays a crucial role in planning care and improving patients' quality of life. These diagnoses help nurses identify patients' actual needs and design appropriate interventions to meet them. Using these diagnoses, nurses can provide more targeted care plans improve the quality of life of patients in their final stages of life [3]. Studies have also shown that this theory has been beneficial for nursing diagnoses and their clustering [2].

Complementary Therapies

Kolcaba's CT suggests that comfort can be enhanced through three types of comfort measures: technical comfort interventions, coaching, and spiritual comfort food [6]. Based on these measures, various interventions have been implemented by nurses as complementary therapies to improve patient comfort [10]; also The comfort conversations tool was designed based on Kolcaba's CT to examine patients' physical, psychospiritual, environmental, and sociocultural needs. This tool gradually expanded from two nursing specialties to the entire interdisciplinary team, leading to collaborative decision-making in care planning and improving patients' quality of life [11].

Pain Management

Palliative care should encompass all dimensions of comfort, including physical, psychospiritual, sociocultural and

[DOI: 10.61882/knjournal.1.4.370]

environmental. This multidimensional approach can help improve quality of life and increase patients' will to live. Palliative care is performed with the aim of creating comfort and preventing patient suffering at the end of life, and pain management is an important part of this care [12]. Understanding the relationship between Saunders' pain concepts and Kolcaba's comfort reveals that these two concepts are interconnected and each covers different aspects of patient experience. This understanding helps nurses provide more targeted care and prevent inappropriate actions such as excessive use of analgesics. Additionally, this understanding helps to improve patients' quality of life and increase their active participation in the care process [13].

Patient Comfort Level in Palliative Care

Patients in palliative care centers recognize this environment as a space that better meets their physical and psychological needs than other departments. Symptom control, human care, peaceful environment, and quick response to needs are key factors that increase comfort. Some patients maintain hope for recovery and returning home through successful symptom control. However, loss of physical independence and dependence on others lead to feelings of discomfort. Understanding patient experiences using Kolcaba’s CT can help to provide more effective and humane palliative care [14].

Spirituality-Centered Palliative Care

Palliative care is performed with the aim of reducing pain and distressing symptoms along with preparing for peaceful death by using coping techniques. These care services can be provided simultaneously with pharmaceutical treatments and are suitable for patients of any age and at any stage of illness. The ideal time to start palliative care is at the initial stage of cancer diagnosis and should continue throughout treatment and until the end of life. Evidence shows that palliative care can reduce complications, mortality, and costs associated with cancer treatment. Using Kolcaba’s CT, a spirituality-centered care model that considers individual resources can be developed to improve comfort in palliative care patients [15].

Pediatric Palliative Care

Kolcaba’s CT has been adapted for pediatric palliative care while maintaining its core principles. This adaptation includes four main domains: physical, psychospiritual, environmental and sociocultural. The comfort needs of children with serious illnesses include physical symptoms such as pain and fatigue, psychospiritual issues such as anxiety, and environmental limitations. Comfort interventions include both pharmacological and non-pharmacological measures that are designed based on the child's age and specific condition. This adaptive approach leads to increased health-seeking behaviors and ultimately, improves children's quality of life. This adaptive approach also helps nurses to better understand children's specific needs and design more effective interventions, ultimately contributing to improved quality of life and increased patient comfort [16].

[DOI: 10.61882/knjournal.1.4.370]

Neonatal End-of-Life Care

Neonates and their families have unique comfort needs that must be met with a targeted approach. Therapeutic relationships between nurses, neonates and their families play a crucial role in identifying and meeting these needs. Private and peaceful environments for spending time with neonates and conducting religious and cultural ceremonies are important aspects of this care that can be achieved through the application of Kolcaba's CT. This approach leads to dignified death, reduces family burden, and improves grieving process. Additionally, creating positive memories and participating in support groups that have access to appropriate palliative care helps to improve the care experience [17].

Discussion

Modern healthcare has evolved to recognize the importance of dignified death, leading to the emergence of palliative care as an integrated model that bridges life and death transition. Palliative care focuses on improving the quality of life of patients facing life-threatening illnesses through comprehensive symptom management and prevention of suffering that encompasses physical, psychological and spiritual aspects. This approach aligns with Kolcaba's CT, which defines comfort as the satisfaction of three types of needs - relief, ease, and transcendence - across four human dimensions: physical, psychospiritual, environmental, and sociocultural[18].

On the other hand, the utilization of comfort theory in healthcare has proven beneficial for nursing diagnoses. Marques and Alves (2020) conducted a study using Kolcaba's CT to cluster nursing diagnoses in end-of-life care of cancer patients, and highlighted the importance of comprehensive nursing diagnoses in end-of-life care [2].A study by Deng et al. (2024) demonstrated that integrating conceptual mapping with Kolcaba-based nursing significantly improved post-operative recovery for patients undergoing rhinoplasty [19]. These studies indicate that Kolcaba's theoretical framework can help organize and prioritize patient needs and structure nursing diagnoses in a more targeted manner [20]. However, further analysis reveals that the effectiveness of this clustering method depends on the care setting, type of illness, and nurse's analytical skills. In other words, while comfort theory provides an appropriate conceptual structure, it cannot be considered a complete replacement for clinical judgment and contextual analysis [6].

Various complementary therapies have been implemented alongside pharmaceutical treatments to enhance patient comfort, such as those used by Coelho et al. (2018) and Porter et al. (2017) who utilized guided imagery and music therapy as complementary treatments [5, 10]. This approach focuses on factors that support health and well-being rather than solely addressing illness [21]. Ebrahimpour and Mirlashari (2024) used comfort theory to identify psychological and social needs in Afghan immigrant children with thalassemia, with results showing positive outcomes in increasing social-psychological support and subsequent resilience [22]. Analysis of these studies indicates that the effectiveness of such interventions is heavily influenced by

[DOI: 10.61882/knjournal.1.4.370]

cultural context, patient beliefs, and healthcare team's educational background [23]. Additionally, comfort theory has primarily been used as an operational framework rather than a conceptual tool for analyzing deeper dynamics such as meaning, grief, or personal identity in the face of serious illness [24, 25]. Therefore, it appears that combining Kolcaba's CT with other psychosocial theories could better facilitate the development of more comprehensive palliative care frameworks that promote not only comfort but also patient empowerment [26].

Studies have shown that physical discomfort can affect mental status and even lead to stress and depression. Therefore, a comprehensive approach including palliative care, family support, and spiritual resources can help better control discomfort and improve patient quality of life, as demonstrated in studies by Nuraini et al. (2018)[15]. While spiritual care is recognized by the World Health Organization as an essential component of palliative care, it remains one of the most neglected aspects of healthcare systems [27]. Since research indicates that inadequate spiritual support can lead to lower quality of life and increased healthcare costs [28], Kolcaba's CT can guide the provision of appropriate spiritual care services. However, for effective implementation of spiritual care, structural, educational and cultural barriers must also be considered. Comfort care interventions, due to their complexity in measurement and evaluation, fall into the category of complex interventions. These challenges make the development of effective comfort interventions particularly difficult [1]. To overcome these barriers, there is a need for a comprehensive theory of change mechanisms and their interaction with environmental factors; therefore, integrating comfort theories with spirituality-based models and enhancing interdisciplinary capabilities in care teams could be beneficial [29].

A study by Lafond et al. (2019) investigated pediatric palliative care with the aim of preventing, reducing, and alleviating symptoms of serious illnesses while maintaining quality of life. This approach was designed based on Kolcaba’s CT, which includes three main aspects: symptom relief, discomfort reduction, and transcendence beyond disease limitations. The study's findings demonstrated that a one-year educational program for nurses, including in-person training, quarterly educational sessions, group discussions, and individual guidance designed to improve palliative care skills, could enhance these services [16].

Additionally, findings of Washington et al. (2022) regarding nurses' palliative care role in families of cancer patients showed clear implications, as they directly addressed family caregivers' needs in five of the eight care domains specified by the National Consensus Project for Quality Palliative Care Clinical Practice Guidelines [30]. Studies indicate that Kolcaba's CT has capabilities extending beyond clinical application and can play a role in designing nursing professional education programs, but it remains unclear whether theory-based education leads to deeper understanding of comfort in nursing practice or merely strengthens technical and behavioral skills [31].

[DOI: 10.61882/knjournal.1.4.370]

Another study by Sriasih et al. (2023) examined the application of comfort theory in nutritional problems of children with cancer. The study's findings supported the effectiveness of Kolcaba's CT in pediatric cancer care, particularly for addressing nutritional disorders while highlighting its potential for developing innovative nursing interventions to improve care quality for children experiencing chemotherapy-related discomfort (32). However, the complex nutritional aspects in pediatric cancer patients are typically intertwined with physiological, psychological, social, and pharmaceutical factors [33]. In research conducted by Sulistyawati et al. (2023), progressive muscle relaxation technique was used as a Kolcaba's CT-based intervention to reduce fatigue in children undergoing chemotherapy. The findings showed that the intervention had no significant effect on fatigue reduction, although changes in fatigue scores were observed [34]. These results indicate that Kolcaba's CT in such specific clinical contexts requires adaptation and reinterpretation, and needs to be combined with other interventions or theories [35].

A case study by Marchuk (2016) investigated how Kolcaba's CT could standardize and improve end-of-life care for neonates in neonatal intensive care units (NICUs) and address the needs of neonates and their families. The study provided a structured and comprehensive framework to ensure dignified end-of-life care for neonates and compassionate support for families. Considering physical, emotional, and environmental needs, NICUs can reduce trauma and foster meaningful end-of-life experiences [17]. However, end-of-life decision-making, particularly regarding neonates, cannot be based solely on physical or emotional comfort. The intersection of ethical, cultural, and family factors in this context requires comfort theory to be integrated with other ethical and supportive models to address the complex and sometimes ambiguous decisions in these critical situations [36]. Therefore, extending Kolcaba's CT into ethical and family decision-making domains could facilitate its broader and more effective application in neonatal end-of-life care [17].

Although Kolcaba's CT, with its emphasis on three types of needs (relief, ease, and transcendence) and four human dimensions (physical, psychospiritual, environmental, and sociocultural), has been mentioned in most reviewed studies, in-depth examination of how these domains are applied in a structured manner has been less frequently considered. Most studies have focused on physical comfort, such as pain and symptom control, while psychospiritual dimensions have been addressed in approximately two-thirds of the studies with interventions such as spiritual care and soothing conversations. Only a limited number of studies have addressed environmental or sociocultural dimensions, such as providing private spaces or considering cultural values of the family. Regarding types of needs, relief need has had the highest frequency, while ease and transcendence needs have been analyzed less directly. Overall, despite the scattered use of theoretical concepts, there are significant opportunities for more systematic and comprehensive application of Kolcaba's theory in future studies.

[DOI: 10.61882/knjournal.1.4.370]

Among the study's limitations, we can point to the low number of articles meeting inclusion criteria, which may have limited the generalizability of findings. The selection of articles may have also been influenced by publication and language biases, as only English and Persian language sources were considered. Additionally, methodological heterogeneity among the reviewed studies, including differences in sample size, research design, and outcome measures, may have affected the stability of results. These limitations should be considered when interpreting the findings and applying them to clinical practice.

Conclusion

The review of studies on the application of Kolcaba's CT in palliative care indicates that, this theory has effectively served as both a conceptual and operational framework in improving patients' quality of life and that of their families. From nursing diagnoses and design of complementary intervention to end-of-life care and nursing education, evidence shows that Kolcaba's CT has the capacity to meet the diverse needs of patients in various clinical and cultural contexts.

However, the findings indicated that the comprehensive application of this theory, as a care guide, faces several challenges, including dependency on nurses' individual skills, patient's cultural backgrounds, and theoretical limitations in addressing complex situations such as end-of-life care or nutritional problems. Additionally, in some studies, the Kolcaba's theory-based interventions have not been proven effective in reducing symptoms such as fatigue, which highlights the need for reinterpretation and expansion of theoretical dimensions.

In summary, while Kolcaba's CT has been widely used in palliative care, its effectiveness and practical application requires the use of complementary psychosocial, ethical, and spirituality-based models, as well as enhancement of interdisciplinary team skills. The dynamic development and adaptation of this theory could facilitate the design of more comprehensive, humane, and patient-centered interventions.

Acknowledgement

We extend our sincere gratitude to Dr. Mohtashami, Dr. Ashktorab and Dr. Sadathosseini for their invaluable guidance, insightful feedback, and unwavering support throughout the preparation of this manuscript.

Conflict of Interest

The author declares no conflicts of interest in the preparation or publication of this manuscript. No financial or personal relationships influenced the work, and all cited studies were selected based on academic relevance.

[DOI: 10.61882/knjournal.1.4.370]

References

1. Lin Y, Zhou Y, Chen C. Interventions and practices using Comfort Theory of Kolcaba to promote adults' comfort: an evidence and gap map protocol of international effectiveness studies. Systematic Reviews. 2023;12(1):33.
2. Marques K, Alves C. Nursing diagnoses clusters: survival and comfort in oncology end-of-life care. International Journal of Palliative Nursing. 2020;26(8):444-50.
3. do Amaral Passarelles DM, Rios AA, Santana RF. Nursing diagnoses in oncology palliative care: integrative review. Enfermería Global. 2019;18(3):601-10.
4. Kraemer D, Rintamaa M. Assessment and management of cancer pain in palliative care [dissertation]. Finland: Arcada University of Applied Sciences; 2018.
5. Porter S, McConnell T, Clarke M, Kirkwood J, Hughes N, Graham-Wisener L, et al. A critical realist evaluation of a music therapy intervention in palliative care. BMC palliative care. 2017;16(1):1-12.
6. Lin Y, Zhou Y, Chen C, Yan C, Gu J. Application of Kolcaba's Comfort Theory in healthcare promoting adults' comfort: a scoping review. BMJ open. 2024;14(10):1-10.
7. Liu B, Liu S, Wang B, Liu W, Chen L, Zheng T, et al. Effectiveness and safety of implementing an enhanced patient comfort programme for elective neurosurgical patients: a randomised controlled trial protocol. BMJ open. 2023;13(4):1-7.
8. Logan R. Katharine Kolcaba Comfort Theory 2025. Available from: https://studyingnurse.com/nursing-theory/kolcaba-comfort-theory/.
9. de Castro MCF, Santos FPdSC, MLSCd, Chagas MC. Total pain and comfort theory: implications in the care to patients in oncology palliative care. Revista Gaúcha de Enfermagem. 2021;42:1-8.
10. Coelho A, Parola V, Sandgren A, Fernandes O, Kolcaba K, Apóstolo J. The effects of guided imagery on comfort in palliative care. Journal of Hospice & Palliative Nursing. 2018;20(4):392-9.
11. Konietzny C, Anderson B. comfort conversations in complex continuing care: assessing patients'and families'palliative care needs. Perspectives. 2018;39(4):14-22.
12. Sholjakova M, Durnev V, Kartalov A, Kuzmanovska B. Pain relief as an integral part of the palliative care. Open access Macedonian Journal of Medical Sciences. 2018;6(4):739.
13. Castro MCFd, Fuly PdSC, Santos MLSCd, Chagas MC. Total pain and comfort theory: implications in the care to patients in oncology palliative care. Revista Gaúcha de Enfermagem. 2021;42:1-8.
14. Coelho A, Parola V, Escobar-Bravo M, Apóstolo J. Comfort experience in palliative care: a phenomenological study. BMC palliative care. 2016;15:1-8.
15. Nuraini T, Andrijono A, Irawaty D, Umar J, Gayatri D. Spirituality-focused palliative care to improve Indonesian breast cancer patient comfort. Indian Journal of Palliative Care. 2018;24(2):196.
16. Lafond DA, Bowling S, Fortkiewicz JM, Reggio C, Hinds PS. Integrating the Comfort Theory into pediatric primary palliative care to improve access to care. Journal of Hospice & Palliative Nursing. 2019;21(5):382-9.
17. Marchuk A. End-of-life care in the neonatal intensive care unit: applying comfort theory. International Journal of Palliative Nursing. 2016;22(7):317-23.
18. dos Santos Souza MC, Jaramillo RG, da Silva Borges M. Comfort of patients in palliative care: an integrative review. Enfermería Global. 2021;20(1):451-65.
19. Deng Y, Tian Y, Guo C, Fan Y, Guan J, Wang Y. The Application of Concept Map Thinking Combined with Kolcaba's Comfort Nursing in the Perioperative Care of Patients Undergoing Nasal Deformity Correction. British Journal of Hospital Medicine. 2024: 85(12):1-17.
20. Craig JA. Nursing knowledge and attitudes toward pain management. Gardner-Webb University; 2014.
21. Ramesh B. Role of Music Therapy in Palliative Care—Methods and Techniques. Journal of Palliative Care. 2024.DOI: 10.1177/08258597241235110
22. Ebrahimpour F, Mirlashari J. Using Comfort Theory for Addressing the Psychosocial Needs of an Afghan Refugee Child with Thalassemia: A Case Report. Global Pediatric Health. 2024;11:1-5.
23. Wensley C, Botti M, McKillop A, Merry AF. Maximising comfort: how do patients describe the care that matters? A two-stage qualitative descriptive study to develop a quality improvement framework for comfort-related care in inpatient settings. BMJ open. 2020;10(5):1-18.
24. Jouybari L, Sanagou A, Haghparast A. Application of Kolcaba Comfort Theory in the Postpartum Period to Promote the Effective Breastfeeding: A Case Study. Journal of Nursing Education. 2023;12(3):62-74. [Persian]
25. Valizadeh F, Sepahvand F, Khanjarian F. Application of Kolcaba's theory of comfort for a 12-year-old epileptic adolescent admitted to the emergency room: a case study. Interdisciplinary Journal of Acute Care. 2021;2(1):31-41.
26. Prasetyo SN, Setyawan KB, Trisnawati D, Astuti R, Pranata S, Aisah S. Psychosocial and Spiritual Support to Improve Comfort in Adult Isolated Patients of Covid-19: A Comfort Theory Application.

[DOI: 10.61882/knjournal.1.4.370]

International Journal of Aging Health and Movement. 2022;4(2):17-21.
27. Quinn B, Connolly M. Spirituality in palliative care. BMC palliative care. 2023;22(1):1.
28. Gijsberts M-JH, Liefbroer AI, Otten R, Olsman E. Spiritual care in palliative care: a systematic review of the recent European literature. Medical Sciences. 2019;7(2):25.
29. Roberto A. Integrating a psychospiritual approach of holistic wellness in treating those with mental health disorders. Sigma's 30th International Nursing Research Congress.2019
Available from: https://stti.confex.com/stti/congrs19/webprogram/Paper95748.html
30. Washington KT, Benson JJ, Chakurian DE, Popejoy LL, Demiris G, Rolbiecki AJ, et al. Comfort needs of cancer family caregivers in outpatient palliative care. Journal of Hospice & Palliative Nursing. 2021;23(3):221-8.
31. Martins AG, Sousa PP, Marques RM. Comfort: theoretical contribution to nursing. Cogitare Enfermagem. 2022;27:e85214.
32. Sriasih NK, Allenidekania A , Hayati H. . Application of Calcbaba Comfort Theory in Nutritional Problems in Children with Cancer: Case Study. Indonesian Journal of Global Health Research. 2023;5(4). DOI: 10.37287/ijghr.v5i4.3270
33. Pedretti L MS, Leardini D, Muratore E, Rahman S, Pession A, Esposito S, et al. Role of nutrition in pediatric patients with cancer. Nutrients. 2023;15(3):710.
34. Sulistyawati E, Allenidekania A, Aprilia Z, Bangun M, editors. Application of Katherine Kolcaba's Comfort Theory in Overcoming Fatigue in Children with Cancer Undergoing Chemotherapy. 1st Lawang Sewu International Symposium 2022 on Health Sciences (LSISHS 2022); 2023: Atlantis Press.
35. Shafiq UR R, Uzma A. Optimizing Care by Integrating Virginia Henderson Needs Theory & Kolcaba's Theory of Comfort in a Case Study. i-Manager's Journal on Nursing. 2024;14(1):3137.
36. Akdeniz M, Yardımcı B, Kavukcu E. Ethical considerations at the end-of-life care. SAGE open Medicine. 2021;9:1-9.

[DOI: 10.61882/knjournal.1.4.370]