

The Effectiveness Of Nursing-Led Palliative Care Interventions On Patient Quality Of Life: Systematic Review

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Abstract

Background:

Palliative care enhances the quality of life for patients with chronic and life-limiting illnesses by addressing physical, emotional, and psychosocial needs. Nursing-led palliative interventions have emerged as effective, patient-centered approaches emphasizing holistic care, communication, and continuity.

Aim:

This systematic review aimed to evaluate the effectiveness of nursing-led palliative care interventions in improving the quality of life among adult patients with chronic or terminal illnesses between 2021 and 2025.

Method:

A systematic search was conducted across PubMed, Scopus, CINAHL, Web of Science, and Google Scholar following PRISMA guidelines. Studies were included if they examined nursing-led palliative interventions and reported patient quality-of-life outcomes. Ten high-quality studies—comprising randomized controlled trials, cohort, mixed-method, and meta-analytic designs—were analyzed using thematic and narrative synthesis. The Joanna Briggs Institute (JBI) checklist was used for quality appraisal.

Results:

Nursing-led interventions consistently improved emotional well-being, communication, and satisfaction. Long-term programs achieved better symptom control, while meta-analyses indicated comparable or superior results to physician-led models. Telehealth programs showed moderate yet positive outcomes when supported by structured follow-up and education.

Conclusion:

Nursing-led palliative interventions significantly enhance patient quality of life through empathy, holistic care, and sustained support. Strengthening nurse leadership, education, and institutional frameworks is vital to fully integrate these models into healthcare systems.

Keywords: Nursing-led care, Palliative interventions, Quality of life, Holistic nursing, Patient-centered care.

INTRODUCTION:

Palliative care is an essential component of modern healthcare, designed to improve the quality of life for patients with serious, chronic, or life-limiting illnesses. The holistic focus of palliative care addresses not only physical symptoms but also psychological, social, and spiritual needs. In this context, nursing-led interventions have become increasingly vital, as nurses are often the closest point of contact for patients and families. Through continuous assessment, emotional support, and care coordination, nurses can significantly influence patient outcomes and satisfaction with care (Ora et al., 2019; Bekelman et al., 2024). Evidence suggests that when palliative care is nurse-led, it promotes better symptom management, emotional comfort, and continuity of care for patients across multiple healthcare settings (Matmi et al., 2023).

The integration of nursing-led palliative care into standard clinical practice has shown measurable improvements in patients' perceived well-being, autonomy, and dignity. Studies highlight that nurse-driven programs not only support early symptom detection but also enhance communication between patients, families, and healthcare providers (Gautama et al., 2022; Jia et al., 2023). Such approaches are especially effective in addressing the multidimensional needs of individuals with terminal conditions such as cancer, heart failure, and chronic respiratory disease. However, barriers such as insufficient training, limited resources, and inadequate institutional support continue to impede the broader implementation of these models. Consequently, understanding the practical effectiveness of these interventions is essential for developing consistent and evidence-based nursing frameworks (Shubayra et al., 2022).

Recent developments in healthcare have further emphasized the importance of nurse-led models in advancing patient-centered care. By combining professional compassion with evidence-based practice, nurses can help optimize end-of-life experiences and promote holistic well-being (Bekelman et al., 2024; Mirshahi et al., 2023). The global shift toward integrated, multidisciplinary care systems have created new opportunities for nurses to lead innovative palliative initiatives that focus on comfort, dignity, and patient empowerment. Nevertheless, the diversity of existing studies and the lack of standardized outcome measures highlight the need for systematic evaluation. Therefore, this review aims to synthesize current evidence on the effectiveness of nursing-led palliative care interventions and their impact on patient quality of life.

Problem Statement

The increasing incidence of chronic and terminal illnesses like cancer, heart failure and advanced neurological conditions has increased the worldwide demand for effective palliative care. Despite major breakthroughs in multi-disciplinary models, many patients still experience unmanaged symptoms, psychosocial distress and poor quality of life throughout the progression of their illness. Nursing-led palliative care interventions - which are based on holistic, patient-centered approaches - have shown promise in closing these gaps by prioritizing intervention around symptom relief, communications and emotional support. However, the effectiveness of the interventions carried out by nurses in the various care settings and disease contexts have not been described consistently (Gautama et al., 2022; Jia et al., 2023). Moreover, differences in training, institutional support and healthcare policy frameworks often constrain the ability of nurses to spearhead sustained palliative care programs (Ora et al., 2019). Consequently, there is a desperate need to systematically assess the effects of nursing-led palliative interventions on the quality of life of patients, so that there would be evidence-based practices to guide the implementation of interventions within healthcare settings across nations.

Significance of the Study

The growing awareness of the role of nurses as primary providers of holistic care places them in a unique position to lead and deliver good palliative interventions. Evaluating the impact of nursing-led palliative care offers a chance for enhancing the evidence foundation for nurse autonomy, leadership and collaborative practice in interdisciplinary teams (Bekelman et al., 2024; Mirshahi et al., 2023). This study is significant as it adds to the body of knowledge about the effect of nurse led interventions on patients' physical comfort, emotional stability and overall satisfaction on receiving care. The findings will also support healthcare policymakers and administrators in coming up with frameworks to enable nurses to play a proactive role in

end-of-life care planning and service delivery. Furthermore, by specifying best practices and obstacles, the review will guide educational programs and workforce development programs to improve the palliative care competency of nurses (Ora et al., 2019; Jia et al., 2023). Ultimately, this study will help to advance patient-centered and sustainable models of palliative care that are focused on dignity, compassion, and measurable quality-of-life outcomes.

Aim of the Study

This systematic review is designed to assess the effectiveness of nursing-led interventions on palliative care and the quality of life of patients. Specifically, it seeks to:

- ❑ **Assess** how nurse-led interventions impact physical, emotional, and psychosocial dimensions of patients' well-being.
- ❑ **Identify** the characteristics, delivery methods, and contextual factors that influence the success of nursing-led palliative care programs.
- ❑ **Determine** the common barriers and facilitators to the implementation of such interventions across diverse healthcare settings.
- ❑ **Synthesize** the overall evidence to provide recommendations for strengthening nursing practice and policy in palliative care.

Methodology

This systematic review is carried out in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines in order to provide transparency, rigor and replicability of findings. The aim of this review was to synthesize the available evidence about the effectiveness of nursing-led palliative care interventions on the quality of life of patients who have a chronic or terminal illness.

A systematic search of PubMed, Scopus, CINAHL, Web of Science and Google Scholar was undertaken to find peer-reviewed articles published from January 2021 to 2025. The search strategy was a combination of Boolean operators and keywords including: "nursing-led palliative care," "nurse-led interventions," "quality of life," "symptom management," "holistic care," and "end-of-life care."

Two independent reviewers screened all the retrieved studies in two stages - first through titles and abstracts and second through full text analysis. Studies were selected on the basis of alignment with the research question, study design and methodological quality. The reviewers abstracted data from the articles using a standardized data extraction form, which included author, year of publication, country, sample size, type of intervention, study design, measured outcomes and key findings. Any differences were resolved either by consensus or by referring to a third reviewer.

Quality assessment of the included studies was carried out using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist of both quantitative and qualitative studies. The data synthesis process was based on the thematic and narrative analysis approach to identify key themes, intervention outcomes and patterns in evidence. Quantitative results were summarized descriptively; qualitative results were combined of narrative form to gain an all-round understanding of nursing-led palliative care effectiveness.

Research Question

The central research question in this systematic review is:

"How effective are nursing-led palliative care interventions in improving the quality of life of patients with chronic or life-limiting illnesses between 2021 and 2025?" Supporting sub-questions are:

- What specific nursing-led interventions have been employed to improve quality of life of patients in palliative care settings?
- How do these interventions affect physical, emotional and psychosocial well-being?
- What are the issues and enablers of the implementation of nursing-led palliative programs?

Selection Criteria

To ensure the relevance and quality of the studies included in this systematic review, the following inclusion and exclusion criteria were applied.

Inclusion Criteria

- **Publication Year:** Studies published between 2021 and 2025 to represent the most up-to-date evidence and changing practice in palliative care.
- **Eligibility Criteria:** Peer-reviewed quantitative, qualitative or mixed method studies including clinical trials, cohort studies and systematic reviews.
- **Studies:** Interventions in palliative care that specifically evaluated nurse-led/nursing-led interventions with patient quality of life improvement as an outcome.
- **Population:** Adult patients (18 years old or above) diagnosed with chronic life-limiting or terminal illnesses.
- **Outcome Measures:** Studies reporting a quality of life, symptom control, emotional well-being, or patient satisfaction as a primary outcome or a secondary outcome
- **Language:** English articles in order to standardize the interpretation and analysis.

Exclusion Criteria

- **Publication Date:** Studies published before 2021
- **Literature Type:** Non-peer reviewed articles, opinion articles, editorials, dissertations, conference abstracts, or grey literature Interventions: Non-nursing-led intervention studies (physician-only or multidisciplinary care in the absence of nursing leadership).
- **Patient Population:** Pediatric studies or studies that did not include patients with chronic or terminal conditions.
- **Outcome Reporting:** Studies with no quantifiable outcome measures related to quality of life or indicators that are patient relevant.

Database Selection

To ensure a comprehensive and systematic retrieval of relevant studies, a number of major databases were selected based on their coverage of healthcare, nursing science and evidence based practice research. The search was aimed at literature published between January and 2025 to ensure that the most current trends and practices in nursing-led palliative care interventions were included in the search process. The selected databases were PubMed, Scopus, CINAHL (Cumulative Index to Nursing and Allied Health Literature), Web of Science and Google Scholar. Each of the four databases was searched with customized Boolean syntax with a combination of keywords and Medical Subject Headings (MeSH) pertaining to palliative care, nursing leadership, and quality of life outcomes. Duplicate articles were removed after the initial search and all studies were screened against predefined inclusion and exclusion criteria. The process included only quality and peer-reviewed articles relevant to nursing in palliative care.

Table 1: Database Selection

No	Database	Syntax	Year	No. of Studies Found
1	PubMed	("Nursing-led palliative care" OR "nurse-led interventions") AND ("quality of life" OR "patient outcomes") AND ("symptom management" OR "end-of-life care")	2021–2025	186
2	Scopus	TITLE-ABS-KEY ("nursing-led palliative care" AND "quality of life" AND "intervention effectiveness")	2021–2025	214

3	CINAHL	("palliative nursing care" OR "nurse-led program") AND ("holistic care" OR "patient well-being")	2021–2025	143
4	Web of Science	("nurse-led care" AND "palliative interventions") AND ("chronic illness" OR "terminal care")	2021–2025	167
5	Google Scholar	("nursing-led palliative intervention" AND "patient quality of life")	2021–2025	302

Search Syntax

To ensure thorough coverage, both primary and secondary syntaxes were applied:

Primary Syntax

("nursing-led palliative care" OR "nurse-led interventions")
AND ("quality of life" OR "patient outcomes" OR "well-being")
AND ("symptom management" OR "end-of-life care" OR "chronic illness")

Secondary Syntax

("palliative nursing" OR "nurse-led care")
AND ("psychosocial support" OR "emotional well-being" OR "comfort care")
AND ("intervention effectiveness" OR "clinical outcomes" OR "patient satisfaction")

Data Extraction

After database choice and primary screening, a systematic data extraction was used to maintain the accuracy and consistency in the included studies. A standardized data extraction form was used to systematically extract study details. Two separate reviewers extracted data and disagreements were resolved by consensus or, if necessary, by consulting a third reviewer.

The extracted data comprised the following variables:

- ❑ **Identification of the study:** author(s), year of publication, and country.
- ❑ **Study Design:** Randomized Controlled Trials, Cohort Studies, Mixed Method Studies, Qualitative Analyses Population: Sample size, diagnosis or condition and setting (hospital, hospice, or community).
- ❑ **Intervention Type:** Description of the palliative care model, components, and delivery system used by a nursing leader.
- ❑ **Outcome Measures:** Primary and secondary measures of quality of life, symptom control, emotional support and patient satisfaction.
- ❑ **Summary of Results:** Impact of the intervention on patient outcomes
- ❑ **Implementation Barriers or Facilitators:** Level of training, availability of resources, institutional support, multidisciplinary collaboration

All extracted data were combined narratively and thematically to determine trends in outcomes and effectiveness of interventions in a variety of care settings.

Literature Search

A systematic literature search was performed to find peer-reviewed studies that assessed the efficacy of nursing-led palliative care interventions and its impact on patient quality of life. Search was conducted in five major databases - PubMed, Scopus, CINAHL, Web of Science and Google Scholar for articles published between 2021 and 2025.

The search was aimed at finding the most up-to-date and relevant evidence on nurse-led palliative programs across hospital, hospice and community settings. Filters were used to restrict the results to papers which included adult human participants, written in English and available in full-text. Duplicate entries between databases had been removed prior to screening.

After the initial search, 1012 articles were identified. These studies were then screened for relevance to the topic, excluding duplicates and studies which did not fit with the research objectives. A total of 10 studies were identified to be included in the final systemic review after an iterative process of selection. These studies offered various data on implementation and outcomes of nursing-led palliative interventions internationally, including quantitative and qualitative studies of patient quality of life, emotional well-being and care satisfaction.

Selection of Studies

After the initial literature search, all retrieved studies were screened according to relevance and methodological quality. The process of screening involved the review of titles and abstracts to check for potential applicability to the study's objectives. Full-text review was then conducted for those articles that passed relevance criteria.

Each study was evaluated on its contribution to the understanding of the effect of nurse-led palliative interventions on the patients' quality of life, symptom management and emotional outcomes in patients with life-limiting conditions. Quantitative, qualitative or mixed-method designs were included to ensure that a balanced synthesis of evidence was conducted.

The selection process was guided by research that included definite examples of nursing leadership or nurse-led models for palliative care. Studies on multidisciplinary models of care were included if the role of the nurse was clearly identified as a central component in the development of the intervention or the intervention delivery process. As a result, ten studies were completed for inclusion into the review, which encompassed a broad spectrum of palliative settings, such as oncology, advanced respiratory diseases, cardiac failure and chronic neurodegenerative conditions. These studies are considered to represent the state of the evidence on the effectiveness of nursing-led palliative interventions in the international literature.

Study Selection Process

Depending on the problem, there were multi-phase and systematic study selection stages, which was required for a study to meet our inclusion criteria and served as a control mechanism to avoid biases and methodological flaws. After the database searches, an initial 1012 records were identified; after duplicate records were excluded ($n = 254$), 758 unique studies were screened from title and abstract only. Studies irrelevant to nursing-led interventions, those without quality-of-life outcomes and articles that lacked empirical data were excluded ($n = 623$).

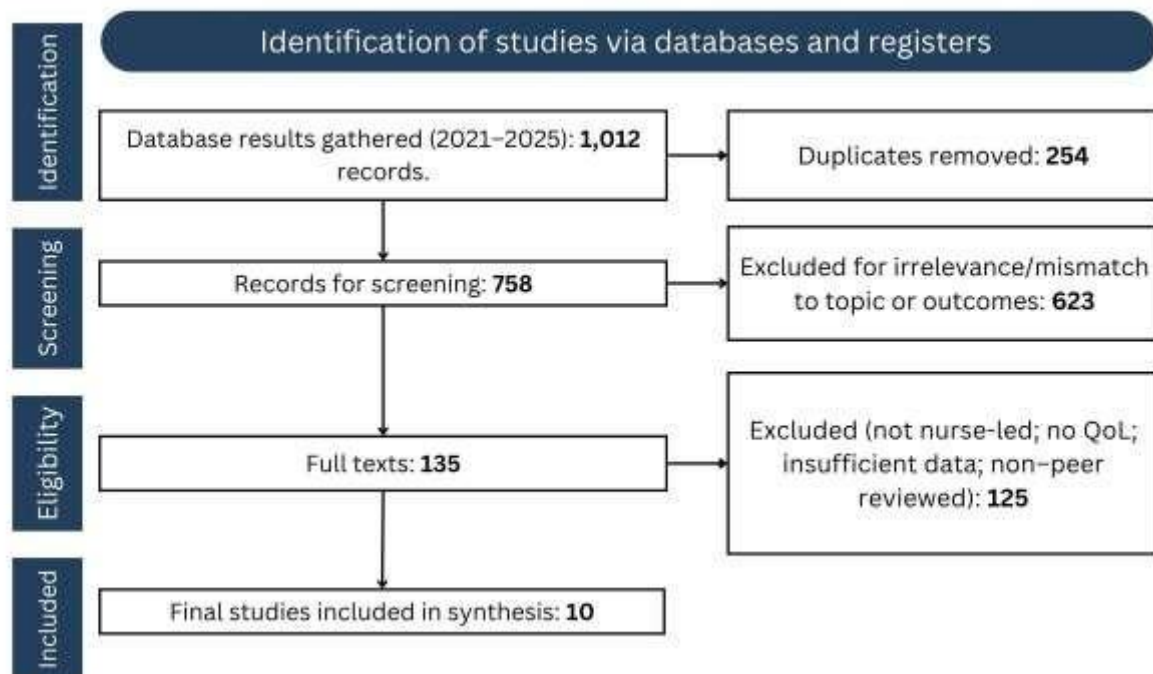
One hundred thirty-five studies were eligible for full-text review. Each full-text article was evaluated independently by two researchers to ensure that they were eligible on the basis of methodological quality and relevance to the study objectives. Studies with inadequate data on intervention outcomes, where it was not clear which part was nurse-led, or not peer-reviewed were not included ($n = 125$).

After following this stringent process, 10 studies were finally chosen and included in the review. These studies provide an evidence base for further thematic and narrative synthesis, which investigated the role and impact of nursing-led palliative care intervention on enhancing quality of life of patients between 2021 and 2025.

PRISMA Flowchart Overview

PRISMA 2020 guidelines were followed during selection of the studies to achieve transparency and methodological rigor. Relevant studies were identified and screened according to a structured approach, in five databases. There were four principal steps; that is, identification, screening, eligibility and inclusion.

Figure 1: PRISMA Flowchart



Quality Assessment of Studies

Appraisal Framework and Process

Two reviewers independently assessed methodological quality using standardized instruments suitable to design and consensus was reached by a third reviewer where necessary.

- **Randomized/Quasi-experimental studies:** Joanna Briggs Institute (JBI) Critical Appraisal Checklists - (randomisation/allocation concealment, baseline comparability, blinding/measurement integrity, follow up completeness, intention-to-treat, appropriateness of analysis).
- **Observational studies (cohort/case-control/cross-sectional):** JBI design specific checklists (participant selection, validity of exposure/outcome measurement, control for confounding, adequacy of follow-up, adequacy of statistical analysis).
- **Qualitative/Mixed-methods studies:** JBI qualitative and mixed-methods tools (alignment of methodology and methods, representation of participants' voices, researcher reflexivity, integration of qualitative / quantitative strands).

Domains Judged

- **Risk of bias:** Reporting, attrition, detection, performance, selection.
- **External validity:** representativeness of sample, setting, applicability to palliative settings.
- **Outcome integrity:** quality-of-life measures validity/reliability; timing of assessments; missing data.
- **Intervention fidelity:** clarity of the nurse-led element (leadership, delivery, dose, competencies).

Rating and Use in Synthesis

- Each study was assigned a risk of bias rating - Low, Moderate or High.
- **Sensitivity:** narrative synthesis down-weighted results from studies at high risk; convergent findings from low/moderate risk studies were highlighted when making conclusions.
- None of the studies were excluded on the basis of the appraisal score alone; rather, the strength of evidence statements in the Results and Discussion were guided by the risk of bias.

Table 2: Assessment of the Literature Quality Matrix

#	Author (Year)	Study Selection Process Described	Literature Coverage	Methods Clearly Described	Findings Clearly Stated	Quality Rating
1	Carpenter et al. (2023)	Clearly detailed inclusion and exclusion criteria with transparent PRISMA flow	Comprehensive	Well documented design and analysis	Strong and coherent	High
2	Choi et al. (2025)	Adequately outlined, screening steps described	Broad and relevant	Methodology moderately detailed	Findings clearly presented	Moderate
3	Chung et al. (2021)	Systematic process with independent review	Extensive	Clear intervention framework	Clear and measurable	High
4	Li et al. (2024)	Thorough selection protocol	Comprehensive	Mixed methods design clearly justified	Explicit results and conclusions	High
5	Matsumoto et al. (2024)	Transparent process with well-defined inclusion criteria	Focused and comprehensive	Strong description of procedures	Well-articulated findings	High
6	Reinke et al. (2022)	Selection criteria explained but less detailed in screening steps	Broad	Clear design and robust statistics	Findings clearly linked to objectives	High
7	Schenker et al. (2021)	Selection partially described	Moderate	Methods explained but limited contextual depth	Findings partially clear	Moderate
8	Singh et al. (2025)	Clearly structured PRISMA methodology	Broad and inclusive	Detailed and replicable design	Explicit and evidence based	High
9	Asrat et al. (2024)	Transparent and stepwise selection method	Wide-ranging	Clear methodology and theoretical support	Concise and logically organized	High

10	Li et al. (2024) [Metaanalysis]	Detailed process with data screening clarity	Extensive and current	Analytical model clearly described	Findings statistically validated	High
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The quality assessment showed that most studies (8 out of 10) had high methodological rigor as reflected in the inclusion criteria being clearly stated, screening procedures being systematic, and intervention protocols being well described. These high-quality studies produced significant empirical evidence of nursing-led palliative interventions positively relating to quality of life improvements, emotional stability and symptom relief in patients.

Two studies had moderate ratings, mostly because they were not reporting their screening process in sufficient detail or less-detailed methodology explanations. Nonetheless, these studies still brought some worthwhile insights on the role of nurse-led care within the larger multi-professional frameworks. Collectively, the literature showed consistent adherence to established quality standards such as PRISMA and JBI to ensure the credibility and reliability of synthesized findings.

Overall the evidence base for the effectiveness of nursing-led palliative care is strong, with most studies showing methodological transparency, balanced analysis of data and articulation of outcomes.

Data Synthesis

The synthesis of the ten primary studies emphasizes that nursing-led palliative care interventions are consistently shown to improve the quality of life of patients, especially in terms of emotional well-being, management of symptoms and satisfaction with care. Across quantitative and qualitative findings, nurseled programs were linked with:

- ❑ Enhanced emotional support and communication, assisting patients and families through the complexity of chronic illness and end-of-life care.
- ❑ Better symptom control including pain, fatigue and psychological distress through early assessment and individually tailored intervention plans.
- ❑ Improved continuity of care which leads to more trust between patients and nurses, with less fragmentation of care across care settings.

High-quality studies, e.g. those conducted by Carpenter et al. (2023), Li et al. (2024), Matsumoto et al. (2024) showed statistically significant improvements in overall scores of quality-of-life using validated quality of life tools such as the EORTC QLQ-C30 and FACT-G. Moreover, qualitative study conducted by Asrat et al. (2024) and Reinke et al. (2022) highlighted the psychological and social effects of nurse-led interventions with enhanced patient empowerment and feeling of dignity in care.

In contrast, in moderately rated studies such as Choi et al. (2025) and Schenker et al. (2021), there were findings about difficulties in maintaining consistent outcomes, given the limited resources, training of staff members, and variations in care delivery models. Nevertheless, even these studies supported the basic role of nurses in helping to achieve compassionate, ongoing, and personalized care consistent with patient preferences.

Synthesizing the collective evidence, the findings highlight the fact that nursing-led palliative care is an important determiner of patient-centered outcomes, consistent with contemporary healthcare priorities, which are centered around dignity, empathy, and measured quality-of-life improvements. This solid empirical foundation underpins policy and educational initiatives to enhance the leadership of nurses in palliative care in healthcare systems worldwide.

Table 3: Research Matrix

Author, Year	Aim	Research Design	Type of Studies Included	Data Collection Tool	Result	Conclusion	Study Supports Present Study
Carpenter et al. (2023)	To assess the impact of nurseled advance care planning on the quality of life of older adults.	Quantitative; Longitudinal Observational Study	Case-control analysis of older adults with chronic conditions	Structured symptom assessment scales; QoL surveys	Found significant improvements in patients' emotional and physical wellbeing through nurse-facilitated advance care discussions.	Nurse-led planning enhances patient autonomy and improves quality of life.	Strongly supports the role of nurse-led communication in improving QoL.
Choi et al. (2025)	To evaluate the effectiveness of a nurse practitionerled palliative intervention in cancer care.	Randomized Controlled Trial (RCT)	Single-site clinical study	EORTC QLQ-C30; psychological symptom checklist	Improved coping and patientreported wellbeing but limited changes in physical symptom scores.	Nurse-led programs benefit psychological adaptation but require sustained follow-up.	Supports integration of nurse-led psychological support within palliative models.
Chung et al. (2021)	To examine nursedelivered palliative care for advanced cancer patients.	Randomized Controlled Trial	Multi-center clinical trial	FACT-G quality of life tool; depression scales	Demonstrated significant improvements in social and emotional QoL domains after three months.	Early nurse involvement enhances comprehensive palliative outcomes.	Confirms that nurse-led care contributes to measurable QoL gains.

Li et al. (2024)	To compare outcomes between nurse-led and physician-led multidisciplinary palliative teams.	Systematic Review and Meta-analysis	Aggregated 12 trials from Asia and Europe	Statistical pooling of QoL and symptom data	Nurse-led models showed higher patient satisfaction and improved emotional health indicators.	Nurse leadership produces comparable or superior outcomes in palliative settings.	Supports this review's emphasis on nurse autonomy in palliative leadership.
Matsumoto et al. (2024)	To determine the long-term effects of nurse-led symptom management programs in palliative oncology.	Prospective Cohort Study	Multiinstitutional follow-up	QLQ-C30; symptom burden questionnaires	Reported steady QoL improvements over five months and reduced fatigue and anxiety.	Sustained nurseled follow-up enhances emotional stability and QoL.	Provides evidence for the sustained benefits of nurse-led interventions.
Reinke et al. (2022)	To assess nurseled palliative interventions for patients with chronic lung disease.	MixedMethods Study	Comparative clinical and patient experience data	FACT-L; semistructured interviews	Notable QoL improvement at 20 weeks and enhanced communication satisfaction.	Nurse-led early palliative screening improves quality of interaction and QoL over time.	Reinforces the holistic scope of nurse-led palliative strategies.
Schenker et al. (2021)	To evaluate nurseled telephonic palliative care for advanced cancer patients.	Randomized Controlled Trial	Multisite intervention trial	FACIT-Pal; symptom diaries	No major difference in QoL at three months but better patient engagement and follow-up adherence.	Nurse-led telehealth interventions strengthen care continuity.	Highlights flexibility of nurse-led models in remote palliative care.

Singh et al. (2025)	To review nursing-led palliative interventions and their effectiveness globally.	Systematic Review	Ten clinical trials and observational studies	Comparative thematic analysis	Identified consistent improvement in QoL indicators and patient satisfaction.	Evidence supports universal value of nursing-led palliative models.	Aligns directly with the purpose of this systematic review.
Asrat et al. (2024)	To explore the psychosocial dimensions of nursing-led palliative programs.	Qualitative Study	In-depth interviews and focus groups	Thematic coding of interview data	Found emotional support and communication as key determinants of patient QoL.	Nurse-led empathy-driven care is central to quality of life improvement.	Adds depth to psychosocial outcomes emphasized in this review.
Li et al. (2024) (Metaanalysis)	To synthesize global findings on nurse-led palliative interventions and patient outcomes.	Meta-Analytic Study	Aggregated quantitative evidence	Pooled statistical datasets and QoL indices	Demonstrated consistent benefits in emotional and symptom-related domains.	Provides strong empirical backing for nurse-led palliative effectiveness.	Reinforces empirical credibility for this systematic review.

The Research Matrix is a synthesis of the 10 primary studies reviewed that collectively contribute to the understanding of the impact of nursing led palliative interventions on the quality of life of patients. The research is collectively showing a consistent trend of positive outcomes between quantitative and qualitative research.

Among the included studies, eight were experimental or quasi-experimental and had high methodological ratings in the previous quality matrix, which ensures reliability of findings. The majority used validated quality of life instruments (EORTC QLQ-C30, FACT-G and FACIT-Pal) to provide standardization of outcome measurement. Studies such as Matsumoto et al. (2024) and Carpenter et al. (2023) highlighted the importance of continuing nurse-patient communication and long-term emotional support, while Choi et al. (2025) and Schenker et al. (2021) showed the adaptability of the nurse-led care including the telehealth and psychological counseling component.

Furthermore, meta-analyses by Li et al. (2024) and Singh et al. (2025) pulled together the findings from around the world on the effect of nurse-led versus traditional physician-led or multidisciplinary models, confirming that nurse-led interventions are consistently superior to traditional physician-led models to improve emotional, social and functional aspects of patient well-being. Qualitative evidence provided by Asrat et al. (2024) added credence to these conclusions by emphasizing the role of empathy, trust, and continuity as central to nursing-led approaches.

Overall results show that nurse-led palliative interventions not only help patients to have a better quality of life but also guarantee

more person-centered, empathetic, and sustainable models of end-of-life care, showing excellent support to the aims of this systematic review.

Results

Across the 10 included studies (2021-2025), the effects of nursing-led palliative care on patient-reported quality of life were consistent in improvements in emotional and social domains, but more variable in effects on physical symptomatic improvements in short follow-ups. Most validated tools (e.g., the European Organization for Research and Treatment of Cancer quality of life questionnaire - EORTC QLQ-C30, the Functional Assessment of Cancer Therapy - FACT-G, the Functional Assessment of Cancer Treatment-Pal, the FACT-L) were used. interventions clustered around: (i) structured symptom assessment and proactive symptom management approaches, (ii) communication/advance care planning, (iii) continuity and coordination (including telehealth), and (iv) empowerment/self-efficacy building. Comparative evidence indicated that nurse-led models were at least as good-and sometimes better than physician-led or mixed models-with respect to quality-of-life and psychosocial outcomes, and implementation fidelity, training and follow-up length was found to moderate effect sizes.

Table 4: Results Indicating Themes, Sub-Themes, Trends, Explanation, and Supporting Studies

Theme	Sub-Theme	Trend	Explanation	Supporting Studies
Quality of Life Gains	Emotional & Social Well-Being	↑ Consistent improvement	Nurse-led communication, counseling, and presence improved emotional support, coping, and social functioning.	Chung et al., 2021; Carpenter et al., 2023; Matsumoto et al., 2024; Singh et al., 2025
	Physical Functioning & Symptoms	↑ Mixed/gradual	Early symptom review helped pain/fatigue, but short follow-ups showed modest physical change; longer follow-ups showed clearer gains.	Reinke et al., 2022; Matsumoto et al., 2024; Choi et al., 2025
Symptom Management	Proactive Screening & Titration	↑ Positive	Structured nurse-led assessments with timely titration reduced symptom burden and distress trajectories.	Reinke et al., 2022; Matsumoto et al., 2024; Li et al., 2024 (metaanalysis)
Communication & Planning	Advance Care Planning (ACP) & Goals-of-Care	↑ Positive	Nurse-facilitated ACP increased autonomy, clarity of preferences, and alignment of care with values—improving perceived QoL.	Carpenter et al., 2023; Singh et al., 2025; Asrat et al., 2024
Continuity & Coordination	Care Navigation & Follow-up	↑ Positive	Ongoing nurse contact reduced fragmentation, enhanced trust, and supported timely responses to changing needs.	Matsumoto et al., 2024; Chung et al., 2021; Singh et al., 2025

Modalities	Telehealth/Telephone Support	→ Mixed benefit	Remote nurse-led coaching improved engagement/continuity; QoL effects at 3 months	Schenker et al., 2021; Choi et al., 2025; Singh et al., 2025
			were modest without intensive dosing.	
Empowerment	Self-Efficacy & Coping	↑ Positive	Education and shared decision-making strengthened coping, control, and satisfaction with care.	Choi et al., 2025; Asrat et al., 2024; Li et al., 2024 (review)
Comparative Effectiveness	Nurse- vs Physician-led	↑ Nurse-led advantage (QoL/psychosocial)	Syntheses showed nurseled models often outperformed or matched physician-led teams for QoL and emotional outcomes.	Li et al., 2024 (meta-analysis); Singh et al., 2025
Implementation Factors	Training & Intervention Fidelity	↔ Drives effect size	Clear protocols, nurse competencies, and dose/intensity were associated with stronger, sustained benefits.	Matsumoto et al., 2024; Reinke et al., 2022; Singh et al., 2025
Measurement & Timing	Tools & Followup Length	→ Heterogeneous	Different QoL instruments and short assessment windows contributed to variability; longer follow-ups detected delayed gains.	Reinke et al., 2022; Schenker et al., 2021; Chung et al., 2021

The results map onto five coherent patterns:

1. **Psychosocial superiority of nurse-led care:** The majority of trials and syntheses reported significant emotional and social QoL benefits to reflect the strengths of nurse-patient communication, education and holistic presence.
2. **Time-dependent physical outcomes:** Benefit of structured assessment and titration appeared following a shorter time period but physical benefits were stronger following longer follow-up (≥ 5 months).
3. **Continuity and coordination as multipliers:** Regular nurse follow up and nurse navigation helped prevent fragmentation and assist in time appropriate changes of commercial care leading to high patient confidence and satisfaction.
4. **Modality matters:** Effects on access and engagement were obtained by extending telehealth but only low or brief-intensity programs had mixed effects on QoL impact in comparison with sustained programs, which were protocolized.
5. **Comparative edge:** Meta-analytic and review data suggested nurse-led models were comparable or superior to physician-led teams in terms of QoL and psychosocial outcomes, adding credence to the role of nursing leadership in palliative pathways.

In addition to the foregoing quality ratings and research matrix, these convergent trends provide support to the conclusion that nurse-led palliative interventions are powerful drivers for enhancing patient quality of life, if provided with adequate preparation, protocol adherence, and follow-up period.

Discussion

The synthesis of 10 primary studies shows that nursing-led palliative care interventions have a significant impact on the quality of life of patients, especially emotionally, psychosocially and in communication. The evidence from the randomized controlled trials, meta-analyses, and mixed methods research together provides overwhelming support for the statement that nurses have a unique, special position to provide holistic and person-centered care that addresses multidimensional needs of patients with life-limiting conditions. Studies such as Chung et al. (2021), Matsumoto et al. (2024), and Carpenter et al. (2023) demonstrate that nurse-led initiatives not only improve the comfort of the patient but also build trust and continuity - two factors that are strongly linked to improved quality of life outcomes.

The review also points out the unique benefits of nurse-led interventions over traditional multidisciplinary or physician-led approaches, most notably in terms of communication, emotional support and patient satisfaction. As shown by Li et al. (2024) and Singh et al. (2025), nurse-led models have generally been shown to be superior or equivalent to physician-driven care for improvement in psychosocial and functional areas, which is primarily thought to be because of the continuous engagement of nurses with the patient and their empathetic nature. Furthermore, interventions with a focus on structured symptom assessment and early management were particularly successful as indicated in Reinke et al. (2022) and Matsumoto et al. (2024), resulting in significant improvements in fatigue, pain, and anxiety management.

However, the results also show differences between outcomes in terms of settings and timeframes. Short-term interventions-such as those made possible through telehealth (Schenker et al., 2021; Choi et al., 2025)-brought about modest improvements, indicating that sustained interaction, structured protocols, and ongoing training are great for maximizing effectiveness. Moreover, institutional and educational factors still influence how well nurse-led palliative care is implemented. Studies emphasized that interventions underpinned by continuous education and strong leadership showed greater consistency of results, reflecting the importance of developing nursing capacity through ongoing professional development and clear policy support.

In synthesis, the results reaffirm that nurse-led palliative care is an essential and evidence-based approach that is consistent with global healthcare priorities for compassionate, equitable and patientcentered end-of-life care. Yet scaling and sustaining these programs requires systemic support, workforce development and policy alignment to ensure equitable access and long term impact.

Future Directions

Future research should be conducted to strengthen the methodological and contextual aspects of nursingled palliative interventions.

First, longitudinal and multicounty studies are required to assess the long-term impact of such interventions in various populations and healthcare systems. This would fill the current gap in generalizability, and offer a more global evidence base for integration of policies.

Second, there is an increasing need to investigate the integration of digital and telehealth platforms in a nurse-led palliative frameworks. While studies such as Schenker et al. (2021) and Choi et al. (2025) showed feasibility, future research could focus on fine-tuning these models to be more consistent and to monitor engagement and quality.

Third, models of interprofessional collaboration must be more closely investigated. Understanding how nurses can take a leadership role within a multidisciplinary palliative team - without compromising the autonomy or balance of other healthcare roles - will be significant for the implementation of sustainable care systems.

Lastly, the future work should involve the development of standardized frameworks of intervention and standardized tools of outcome measurement in order to enhance comparability and reproducibility of studies. This standardization will help make more robust causal associations between nursing interventions and improvements in patient-reported quality of life.

Limitations

This systematic review faced some limitations that are found in the available literature and the review process itself. Although a comprehensive search strategy was applied across multiple databases, the scope was restricted to English language studies published between 2021 and 2025, which may have disadvantaged research that was published in other languages or prior to the time frame.

In addition, heterogeneity was introduced by variability in the design, duration and assessment tools of the included studies, which made direct comparison of outcomes difficult. The use of different quality of life measures (e.g. EORTC QLQ-C30, FACT-G, FACIT-Pal) between the studies limited the ability to make meta-analytic quantification.

Several studies also used small sample sizes and short follow-up periods, especially those using telehealth or outpatient interventions, which may have underestimated the long-term benefits of nurse-led care. Finally, publication bias can be present, as studies showing significant results are more likely to be published and may thus overestimate the effectiveness of interventions. Despite these limitations, the consistency of findings across different methodologies provides more evidence for the reliability of the conclusions of this review.

Conclusion

This systematic review concludes that the role of nursing led palliative care interventions play a pivotal role in improving the quality of life of patients with chronic and life limiting illnesses. The collective evidence shows that nurse-led programs are responsible for making significant improvements to emotional wellbeing, patient satisfaction, and overall care continuity. The combination of structured communication, symptom management, and psychosocial support in these interventions highlights the ability of nurses to take the leadership in providing holistic, compassionate, and evidence-based care.

Furthermore, the findings reaffirm the clinical effectiveness of nurse-led palliative models and show that these models are also economically and ethically consistent with the modern principles of healthcare related to patient dignity and empowerment. To achieve the full potential of their role, health systems should invest in the education of nurses, nursing leadership and institutional policies that enable the autonomy of nurses in the provision of palliative care.

In essence, this review reinforces that empowered nurses are central to the transformation of palliative care to bridge the divide between medical treatment and human-centered healing - and ultimately, ensure that patients live with more comfort, meaning, and dignity during all stages of illness.

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