



THE DIFFERENCES IN THE EXPERIENCES OF MALE AND FEMALE NURSES IN END OF LIFE CARE IN THE INTENSIVE CARE UNIT : A SCOPING REVIEW

Supiah Farida¹, Muhamad Zulfatul A'la², Rondhianto³

¹ Postgraduate Student, Master of Nursing Study Program, Faculty of Nursing, Universitas Jember:

² Master of Nursing Study Program, Faculty of Nursing, Universitas Jember: mza.unej@gmail.com

³ Master of Nursing Study Program, Faculty of Nursing, Universitas Jember: rondhianto@unej.ac.id

Corresponding Author; Supiah Farida; Postgraduate Student, Master of Nursing Study Program, Faculty of Nursing, Universitas Jember: 242320102022@mail.unej.ac.id

ABSTRACT

Background: End of life care in the ICU is a crucial aspect of medical nursing, where nurses play a vital role in ensuring the comfort of terminal patients and supporting their families. The experiences of male and female nurses in caring for patients at the end of life in the ICU may differ, influenced by factors such as gender, social roles, and cultural norms. This study aims to explore the differences in the experiences of male and female nurses in providing end-of-life care in the ICU through a scoping review of 12 relevant articles.

Methods: A literature search was conducted through databases such as ResearchGate, BMC, Google Scholar, and ProQuest for articles published between 2019 and 2024. From the 12 selected articles, the primary focus was to identify the experiences of male and female nurses and the challenges and adaptation strategies they employ in caring for terminal patients.

Results: The scoping review reveals that male and female nurses face different challenges in providing end-of-life care in the ICU. Male nurses tend to suppress their emotions and face social stigma related to their role, whereas female nurses are more emotionally involved with patients and their families, which increases their emotional burden. Both groups face limitations in palliative care training and institutional support. Various adaptation strategies such as stress management, psychosocial support, and communication skills were developed to enhance the quality of care.

Conclusions: Male and female nurses have different experiences in end-of-life care influenced by gender roles. This study highlights the need for more comprehensive palliative care training and institutional policies that support gender equality in terminal care.

Keywords: Male nurses, Female nurses, End of life care, ICU, Scoping review.

INTRODUCTION

End-of-life care in the ICU is a crucial aspect of medical care, particularly for patients facing terminal conditions. Nurses play a critical role in ensuring the comfort and quality of life for patients at the end of their lives. However, the experiences of nurses in providing care to patients at this

stage of life are influenced by various factors, including gender. In many studies, the differences in experiences between male and female nurses in providing end-of-life care in the ICU have not been extensively explored. Therefore, this study aims to explore and map the differences in experiences between male and female



nurses in caring for terminal patients in the ICU, using a scoping review approach.

In recent years, several studies have highlighted the challenges faced by nurses in providing care to patients at the end of life, particularly in the ICU. Patients in the ICU are often in critical conditions, with complex medical decisions to be made, including whether to continue or withdraw life-sustaining treatment to ensure the patient's comfort. In this context, nurses are required to possess not only technical medical care skills but also the ability to provide emotional support to both patients and their families (Mason et al., 2020). The role of nurses in the ICU is incredibly important; however, the differences in perceptions and experiences between male and female nurses in providing end-of-life care have often been overlooked in the literature.

Research related to nurses' experiences in end-of-life care often focuses on the emotional and psychosocial challenges faced by nurses, such as stress, burnout, and moral conflicts arising from medical decisions (Williams et al., 2019). However, very little research addresses how gender differences influence how male and female nurses respond to and manage these experiences. In a culture that often stereotypes the roles of men and women in professional settings, there may be differences in how male and female nurses handle feelings of empathy, stress, and interactions with the patient's family.

Some studies suggest that female nurses tend to be more emotionally engaged in providing care for terminal patients, while male nurses may focus more on the technical and professional aspects of care

(Lomas et al., 2020). This could be influenced by broader social and cultural roles, where men are often expected to suppress emotional expressions, while women are expected to be more empathetic and demonstrate emotional attentiveness. Although this difference is often overlooked, it can affect the quality of care provided, as well as the interpersonal relationships between nurses, patients, and their families.

An initial review of the existing literature reveals that, although there is research on the experiences of nurses in caring for end-of-life patients, gender differences in this context have not received sufficient attention. Some studies only discuss experiences in general, without considering the role of gender in these contexts (R. Booth et al., 2021). Therefore, this study aims to systematically explore the differences in the experiences of male and female nurses in caring for terminal patients in the ICU. Using a scoping review approach, this study will analyze various findings in the literature and summarize the diverse perspectives on this topic.

A scoping review is an appropriate method for examining broad and complex topics such as this, where there is variation in methodologies and findings across previous studies. This approach allows researchers to identify gaps in the literature and provide a more comprehensive overview of the topic being investigated (Tricco et al., 2018). In this study, the scoping review will identify and summarize various perspectives on the experiences of male and female nurses in end-of-life care in the ICU, as well as explore how gender



differences may influence the care provided.

The main objective of this scoping review is to evaluate the extent to which scientific evidence has addressed the differences in the experiences of male and female nurses in providing end-of-life care for terminal patients in the ICU. Through this approach, it is expected to gain a deeper understanding of how gender factors influence the role of nurses in end-of-life care, as well as the challenges and strategies used by male and female nurses in this context. Therefore, this study will contribute to the development of more gender-responsive ICU care policies and improve the quality of end-of-life care for terminal patients.

The research problem addressed in this study is: How do the experiences of male and female nurses differ in caring for end-of-life patients in the ICU, based on the scientific evidence available in the academic literature?

METHODS

The implementation of this scoping review follows the updated methodological guidelines from the Joanna Briggs Institute (JBI) (Anderson et al., 2019) and the PRISMA-ScR framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (Tricco, Lillie, Zarin, O'Brien, Colquhoun, & Levac, 2018). This approach aims to ensure that the literature review process is conducted systematically, transparently, and credibly.

The first step in this research is to establish the research objectives and

questions using the Population, Concept, Context (PCC) framework, which is designed to clarify the focus and scope of the research (O'Shea et al., 2019). In this case, the population under study consists of male and female nurses working in ICU settings, the concept being explored is their experience in caring for patients at the end of life, and the context is the ICU, specifically related to end-of-life care for terminal patients.

Following this, the research protocol was developed, including the inclusion and exclusion criteria, literature search strategy, and data extraction methods to ensure transparency and reproducibility of the research. The inclusion criteria for this study are articles published in the last five years that discuss the experiences of male and female nurses in end-of-life care in the ICU, whether in quantitative or qualitative research formats. The exclusion criteria include articles that are not relevant to the topic, articles that do not address gender differences, and studies conducted outside the ICU context or focusing on non-end-of-life care. This protocol is also recommended to be registered on platforms such as the Open Science Framework (OSF) or JBI Evidence Synthesis (Anderson et al., 2019).

The next step involves conducting a comprehensive literature search across various academic databases such as PubMed, Scopus, Web of Science, and Google Scholar. The search will also include grey literature from sources like conference reports and dissertations. This search process involves collaboration with expert librarians to devise an optimal search strategy, using relevant keywords related to



the topic, and documenting each stage of the search clearly (Anderson J. R. and Sinclair, M. L. et al., 2019). The search strategy will be regularly monitored and adjusted to ensure the success of the literature search.

Article selection is performed in several stages, starting with screening based on titles and abstracts, followed by full-text evaluation. Selected articles are then evaluated according to the inclusion and exclusion criteria set forth. The selection process is conducted using the PRISMA-ScR flow diagram to ensure transparency and accountability in study selection (Anderson J. R. and Sinclair, M. L. et al., 2019). This diagram is used to record the number of articles screened, the number of articles that meet the criteria, and the reasons why certain articles are excluded from the review.

Once relevant articles are selected, data are extracted and analyzed descriptively. The data extraction process involves creating a table detailing essential information from each article, such as the study's objective, methodology used, key findings related to the experiences of male and female nurses in end-of-life care, and gaps in the available literature (Anderson J. R. and Sinclair, M. L. et al., 2019). These findings are then mapped to identify research trends and areas that require further investigation. All extracted data are analyzed qualitatively to provide a comprehensive overview of the experiences of male and female nurses in the context of end-of-life care for terminal patients in the ICU.

This entire process is designed to produce a systematic, credible scoping review that

provides a comprehensive overview of the relevant literature while identifying important contributions of gender differences in end-of-life care in the ICU.

Inclusion criteria

The article search method is conducted by applying the Population, Concept, Context (PCC) framework as follows:

Table 1. PCC Framework

Component	Description
Population	Male and female nurses working in ICU settings who are involved in end-of-life care for terminal patients.
Concept	The experiences of male and female nurses in providing end-of-life care in the ICU, with a focus on differences in emotional, psychological, and professional aspects of care.
Context	ICU settings, specifically related to end-of-life care for terminal patients across various healthcare systems worldwide.

Types of sources

This scoping review will encompass various sources of evidence to provide a comprehensive overview of the differences in the experiences of male and female nurses in end-of-life care in the ICU. Studies with experimental and quasi-experimental designs, such as randomized controlled trials (RCTs) and non-randomized trials, will be included in this review to provide robust data on the influence of gender on nurses' experiences in terminal care.



In addition, analytical observational studies, such as prospective and retrospective cohort studies, case-control studies, and analytical cross-sectional studies, will also be included to gather evidence on how gender affects nurses' experiences in caring for patients in the ICU. Descriptive observational research, such as case series and individual case reports, will also be included to provide additional context relevant to this topic, as this review will cover the real-life experiences of male and female nurses in the ICU setting.

Furthermore, qualitative research utilizing various approaches, such as phenomenology, grounded theory, ethnography, qualitative description, action research, and feminist research, will be considered. These qualitative approaches are crucial for capturing the diverse perspectives and experiences of male and female nurses in providing end-of-life care and for offering deeper insights into the emotional, psychological, and social interactions involved in caring for terminal patients.

By including various research designs and diverse sources of evidence, this scoping review aims to map the available evidence comprehensively, identify gaps in the existing research, and provide a deeper understanding of how gender differences influence nurses' experiences in end-of-life care in the ICU.

Eligibility Criteria

The eligibility criteria for this literature review were carefully established to ensure the relevance and quality of the articles analyzed. The specific inclusion criteria were as follows: 1) Articles must

report findings on the effectiveness and efficiency of the Primary Nursing Care Model (PNCM) in improving patient health outcomes, enhancing nurse job satisfaction, and reducing care fragmentation; 2) Eligible studies may utilize quantitative, qualitative, or mixed-method study designs, 3) The study population must involve either nurses or patients associated with the implementation of PNCM, 4) Articles must be available in full-text format, 5) Articles must have been published between January 2019 and December 2024, 6) Articles must be written in English.

Conversely, the exclusion criteria were defined as follows: 1) Articles categorized as literature reviews, systematic reviews, or scoping reviews were excluded in this study, and 2) Duplicate publications appearing in two or more journals were excluded to maintain the integrity and uniqueness of the findings.

Databases

The databases utilized in this study included ResearchGate, BMC, Google Scholar, and ProQuest. The researchers accessed all databases on 1 April 2025. The following is a list of the database links.

Table 2. Database Links

No.	Database Name	Link
1	BMC	https://www.biomedcentral.com
2	Researgate	https://www.researchgate.net
3	ProQuest	https://www.proquest.com

Search Strategy

In the literature search for the topic "Differences in the Experiences of Male and Female Nurses in End-of-Life Care in the ICU: A Scoping Review", a combination of keywords with Boolean operators was employed to obtain more



specific results and to facilitate the identification of relevant articles. The keywords used in this process included: "nurse" AND "gender differences" AND "end-of-life care" AND "ICU", as well as variations such as "male nurse" OR "female nurse" AND "experience" AND "critical care". The use of Boolean operators (AND, OR) enabled the combination and filtering of search terms to enhance both the sensitivity and specificity of the search results.

The search was conducted across four major academic databases: ResearchGate, BMC, ProQuest, and Google Scholar. By applying the selected keywords to these four databases, the researchers successfully identified a number of articles that met the initial search criteria. The distribution of articles from the preliminary search was as follows: 100 artikel dari ReserchGate, 11 dari BMC, 231 from ProQuest, and 76 from Google Scholar. In total, the initial search yielded 418 articles deemed relevant to the defined keywords and context.

The literature search process adhered to the principles of transparency and replicability. Each stage of the search was clearly documented, including keyword selection, search strategy development, and article screening. A professional librarian was also involved in the process to ensure that the search strategy was both effective and comprehensive in capturing all relevant literature.

In addition to peer-reviewed journal articles, grey literature such as research reports, theses, dissertations, and conference proceedings was also

considered. This was done to capture scientific evidence that may not have been formally published but still offers important contributions to understanding the differences in experiences between male and female nurses in providing end-of-life care in ICU settings. Through this comprehensive search strategy, the scoping review aims to produce a complete and representative mapping of the literature related to the research question.

Article Screening

In this study, the article screening process followed the PRISMA-ScR flow diagram, which includes four main stages: identification, screening, eligibility assessment, and inclusion. These stages were designed to ensure that article selection was conducted systematically, transparently, and in accordance with the predefined eligibility criteria.

The initial stage began with the removal of duplicate articles identified across multiple databases, including PubMed, ScienceDirect, ProQuest, and Google Scholar. This process was carried out automatically using reference management software and was further verified manually to ensure that no duplicate entries were overlooked.

Subsequently, screening was conducted based on the titles and abstracts, retaining only articles that explicitly addressed differences in the experiences of male and female nurses in providing end-of-life care in the ICU. Articles that were deemed irrelevant—such as those focusing on non-ICU settings, that did not address gender differences, or that primarily discussed the roles of other healthcare professionals—were excluded at this stage.



Articles categorized as literature reviews, systematic reviews, or other scoping reviews were also excluded to avoid duplication and to ensure that only primary research studies were included in the analysis. Additionally, articles with identical titles and authors, or those classified under the same category across multiple databases, were eliminated to maintain the uniqueness of the data set.

Following the initial screening, the remaining articles underwent full-text review to ensure their compliance with all inclusion and exclusion criteria. Articles that failed to provide relevant data or did not explicitly discuss gender-based experiential differences within the ICU context were excluded during this phase. Out of a total of 418 articles identified during the initial search, after the removal of duplicates and screening based on titles and abstracts, 146 articles proceeded to the full-text eligibility assessment. Upon in-depth evaluation, 12 articles were ultimately selected as the final body of literature for analysis in this scoping review. These articles were considered the most relevant and met all methodological requirements to address the research question on gender differences in nurses' experiences of end-of-life care in the ICU setting.

Data Extraction

The data extraction process in this scoping review was conducted using a pre-designed data extraction template to ensure that all information obtained from the selected articles was recorded systematically, consistently, and comprehensively. This template was

developed based on the Population, Concept, Context (PCC) framework and the guidelines from the Joanna Briggs Institute (JBI), and was tailored to the research focus on the differences in experiences between male and female nurses in end-of-life care in the ICU.

The key elements included in the data extraction template were: (1) study identification (article title, authors, year of publication, and journal source), (2) research design (quantitative, qualitative, or mixed methods), (3) population characteristics (gender, number of participants, years of professional experience, and institutional background), (4) core concepts examined in each study related to the experiences of male and female nurses in caring for patients at the end of life, (5) study context (geographical location, type and level of hospital, and the specific intensive care unit involved), and (6) key findings or outcomes reported in each study, whether supporting the existence of gender-based experiential differences or highlighting similarities.

The extracted data were then analyzed descriptively to map the main findings, identify emerging research trends, and highlight gaps in the existing literature regarding differences in the experiences of male and female nurses in end-of-life care in the ICU.

Through this systematic approach, the scoping review aims to provide a comprehensive mapping of the available evidence in the academic literature, as well as to offer a deeper understanding of how the experiences of male and female nurses may differ within the context of end-of-life care in intensive care units.



RESULTS

This study was conducted by identifying relevant articles through four main databases, namely ResearchGate, BMC, ProQuest, dan Google Scholar. The search began by identifying 418 articles, which were then filtered based on inclusion criteria, specifically publications from 2010 to 2024, available in full text, and written in English or Indonesian. After the initial screening, the number of articles meeting these criteria was narrowed down to 146 articles. A further filtering process was carried out by reviewing titles and abstracts to ensure relevance to the research topic. Articles using literature review designs, systematic reviews, or other scoping reviews were excluded to avoid duplicate findings. Additionally, articles that were duplicates across multiple databases were eliminated. After this process, 22 articles met the relevance criteria and proceeded to the full-text evaluation stage. In the final evaluation, articles that did not specifically address the experiences of male and female nurses in end-of-life care in the ICU were excluded from the analysis. Articles that did not present primary research findings or lacked sufficient data to support the mapping in this scoping review were also excluded. Following this final selection process, 12 articles were chosen for further analysis.

Based on the review of the 12 selected articles, it was found that the experiences of male and female nurses in end-of-life care in the ICU are greatly influenced by gender roles and societal norms that exist both within the broader society and the nursing profession itself.

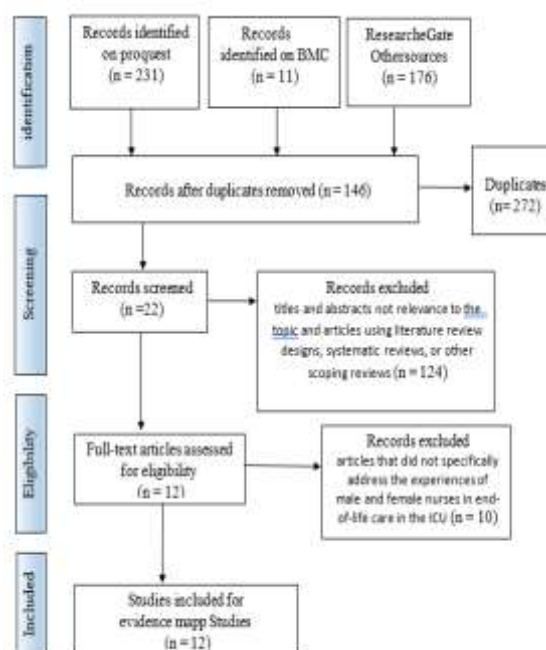
Male nurses tend to face challenges in managing their emotional expressions, as they are often pressured to suppress their feelings due to gender stereotypes that require men to display firmness and strength in the face of difficult situations, such as caring for terminal patients. On the other hand, female nurses, who are generally more open in expressing their emotions, face equally significant challenges, particularly the dual role of being caregivers both at work and at home, which increases their emotional burden when providing end-of-life care. Some studies also indicated that female nurses are more likely to engage emotionally with patients and their families, whereas male nurses tend to maintain emotional distance in order to uphold their professionalism.

Moreover, male and female nurses have different approaches to handling the emotional and physical workload associated with caring for terminal patients in the ICU. Female nurses, who are more often tasked with emotional care and communication with the patients' families, often feel burdened by societal expectations to show empathy and care. In contrast, male nurses are more inclined to take a more technical and practical approach to terminal care, although some studies report that they also experience tension in managing their emotions, albeit with a tendency to avoid deep emotional involvement.

Regarding professional support, the findings from several articles show that both male and female nurses believe that training in end-of-life care can help them cope with the emotional challenges that arise during the care of terminal patients. Such training is considered essential in



reducing stress and improving their understanding of how to provide better and more empathetic care. Furthermore, this study found that, although there are gender differences in how male and female nurses respond to emotionally taxing situations, both groups face significant emotional challenges in providing end-of-life care. Overall, these findings suggest that gender plays a significant role in the experiences of nurses in end-of-life care in the ICU. While there are differences in how male and female nurses respond to emotionally taxing situations, both groups face considerable emotional challenges. Therefore, a more holistic approach is needed to support nurses, taking into account gender differences in their experiences and providing adequate training and psychosocial support so that they can deliver optimal care to terminal patients in the ICU. Enhanced support, both in terms of training and emotional assistance, is crucial to improving the well-being of nurses and the quality of care provided to patients at the end of life.



Picture 1. PRISMA Flowchart

Critical Appraisal Results

The initial assessment of the selected articles was conducted independently by the researchers. Any discrepancies in the evaluations were resolved through discussions until a final, mutually agreed-upon justification was reached. In this study, the Joanna Briggs Institute (JBI) Critical Appraisal Tools (2020 version) were used to assess the quality of various types of studies included in this scoping review.

Among the 12 articles included in the final analysis, various research designs were identified, including qualitative studies (n=5) and cross-sectional studies (n=7). Each article was evaluated based on criteria relevant to its respective methodology, including internal validity, methodological clarity, relevance of findings, and potential biases. This appraisal process ensured that only studies



meeting rigorous scientific standards were incorporated into the synthesis, providing a comprehensive evaluation of the experiences and adaptation strategies of male and female nurses in providing end-of-life care in the ICU.

For the qualitative studies, aspects such as the depth of data analysis, credibility of findings, and transparency of the research process were examined. Articles that demonstrated strong methodological rigor and provided rich, contextually relevant findings were considered for inclusion in the final synthesis. For the cross-sectional studies, the relevance of the sampling method, the appropriateness of the survey instruments, and the statistical analysis applied were thoroughly evaluated. The quasi-experimental study was assessed for its design integrity, including the control of confounding variables and the applicability of the findings to real-world ICU settings. Following the critical appraisal process, it was determined that the studies collectively offered valuable insights into the role of gender in shaping the experiences of male and female nurses in end-of-life care within the ICU. Despite some variations in study designs and methodologies, the overall quality of the studies was found to be satisfactory, providing a solid foundation for analyzing the challenges and strategies employed by nurses in this critical care environment. This appraisal process ensured that the review not only adhered to high scientific standards but also contributed meaningful, evidence-based perspectives on the gendered experiences of ICU nurses providing end-of-life care.

Articles Included in the Literature Review

The results of the initial analysis, further review, and identification ultimately included 12 articles. The following table provides detailed information about each article:



Table 4. Analysis of Literature Results

Article ID	Author and Journal Identity	Journal Title	Objective	Population and Sample	Method	Findings
PP1	Author: Girela-Lopez et al., Journal: <i>BMC Medical Ethics</i> , Vol. 26, 2020 (Girela-Lopez et al., 2020)	Measuring Moral Distress in Health Professionals Using the MMD-HP-SPA Scale	To assess the prevalence and predictive factors related to moral distress (MD) among healthcare professionals during the pandemic.	566 healthcare professionals in Andalusia, predominantly female (68.7%) and nurses (66.9%)	Cross-sectional design, data collection using the MMD-HP-SPA scale	Most participants reported moderate MD, with the primary risk factor being "Handling more patients than I can safely manage."
PP2	Author: Qutishat, Journal: <i>Journal of Education and Health Promotion</i> , Vol. 13, 2024 (Qutishat, 2024)	Psychological Distress and Attitudes Toward Seeking Professional Psychological Help Among Omani Nurses	To investigate the levels of psychological distress and attitudes toward seeking professional psychological help among Omani nurses.	205 nurses in Oman	Cross-sectional with convenience sampling, using the Kessler Psychological Distress Scale (K10) and an attitude scale toward professional help-seeking	The majority experienced moderate psychological distress, with most showing negative attitudes toward seeking help. There was no significant correlation between psychological distress and attitudes toward help-seeking.
PP3	Author: Engel et al., Journal: <i>BMC Palliative Care</i> , Vol. 20, 2021 (Engel et al., 2021)	Palliative Care Nurse Champions' Views on Their Role and Impact	To explore the views of palliative care nurse champions on their role and impact in hospital and home care settings.	16 palliative care nurse champions in hospitals and home care in the Netherlands	Qualitative study, in-depth interviews using the framework approach	The role of nurse champions is crucial for enhancing palliative care quality. However, challenges lie in the varying understandings of their role and limitations in supporting collaborative care.



Article ID	Author and Journal Identity	Journal Title	Objective	Population and Sample	Method	Findings
PP4	Author: Nie et al., Journal: <i>BMC Nursing</i> , Vol. 23, 2024 (Nie et al., 2024)	Self-Efficacy of ICU Nurses in Delirium Care	To assess the self-efficacy of ICU nurses in delirium care and factors influencing their efficacy.	283 ICU nurses from eight hospitals in Chongqing, China	Quantitative survey with multivariate linear regression analysis	ICU nurses reported high self-efficacy in delirium care. Key influencing factors included gender, hospital tier, and delirium-related training.
PP5	Author: Kurtgöz & Edis, Journal: <i>BMC Palliative Care</i> , Vol. 22, 2023 (Kurtgöz & Edis, 2023)	Spiritual Care from the Perspective of Family Caregivers and Nurses in Palliative Care	To explore the experiences of nurses and family caregivers regarding spiritual care in palliative care.	10 palliative care nurses and 11 family caregivers from a palliative care unit in Turkey	Phenomenological study, in-depth interviews with thematic analysis	Spiritual care is highly needed but not sufficiently provided due to nurse- and institution-related factors. Continuous training for nurses is necessary to improve their competency in spiritual care.
PP6	Author: Kurtgöz & Edis, Journal: <i>BMC Palliative Care</i> , Vol. 22, 2023 (Kurtgöz & Edis, 2023)	Alarm Fatigue Among ICU Nurses	To investigate the impact of alarm fatigue on ICU nurses and their coping strategies for managing medical alarms.	15 ICU nurses in Taiwan	Qualitative study, semi-structured interviews with content analysis	ICU nurses develop effective coping strategies to manage alarms, such as mastering alarm signals, learning from experiences, and detaching from the influence of alarms on daily life.
PP7	Author: Banda et al., Journal: <i>BMC Nursing</i> , 2022 (Banda et al., 2022)	Nurses' Perceptions on the Effects of High Nursing Workload on Patient Care in an ICU of a Referral Hospital in Malawi	To explore nurses' perceptions regarding the effects of high nursing workload on patient care in an ICU	12 ICU nurses from Queen Elizabeth Central Hospital, Malawi	Qualitative study, semi-structured in-depth interviews, thematic analysis	High nursing workload compromises the quality of care, patient safety, and negatively impacts nurses' well-being. Nurses advocate for more ICU nurses to manage workload better.



Article ID	Author and Journal Identity	Journal Title	Objective	Population and Sample	Method	Findings
PP8	Author: Hamdan et al., Journal: Acute and Critical Care, 2023 (Hamdan et al., 2023)	Palliative Care Knowledge and Attitudes Toward End-of-Life Care Among ICU Nurses in Jordan	To assess ICU nurses' knowledge and attitudes toward palliative care	182 ICU nurses from Jordanian hospitals	Cross-sectional survey, structured questionnaire, pathway analysis	ICU nurses demonstrated low knowledge of palliative care, with attitudes positively influencing their practices. The study suggests that knowledge enhancement and palliative care training are crucial for improving practices.
PP9	Author: Lee et al., Journal: Journal of Hospice & Palliative Nursing, 2024 (Lee et al., 2024)	Good Nursing Care for Terminally Ill and End-of-Life Patients	To explore the nurses' experiences and perceptions of "good nursing care" for terminally ill and end-of-life patients	9 ICU, hospice, and nursing home nurses with at least two years of experience	Qualitative study, Colaizzi's phenomenological method	Nurses emphasize the importance of attentive and compassionate care, highlighting four main domains: client, client-nurse interaction, practice, and environment.
PP10	Author: Aslan et al., Journal: Journal of Palliative Care, 2024 (Aslan et al., 2024)	The Relationship Between Palliative Care Nurses' Frequency of Providing Spiritual Care and Their Job Satisfaction	To investigate the relationship between frequency of providing spiritual care and job satisfaction among palliative care nurses	110 nurses from palliative care units in Turkey	Cross-sectional survey, structured questionnaires (Nurse Spiritual Care Therapeutics Scale, Nurse Job Satisfaction Scale)	A positive and moderate relationship was found between the frequency of providing spiritual care and job satisfaction. Increasing spiritual care opportunities may enhance job satisfaction.
PP11	Author: Liu et al., Journal: BMC Nursing,	Psychometric Properties of the Ethical Conflict in Nursing	To determine the reliability and validity of the Ethical Conflict in	248 ICU nurses from two tertiary	Cross-sectional study, psychometric analysis using	The ECNQ-CCV-C demonstrated good reliability and validity, with a unidimensional



Article ID	Author and Journal Identity	Journal Title	Objective	Population and Sample	Method	Findings
	2021 (Liu et al., 2021)	Questionnaire Critical Care Version Among Chinese Nurses	Nursing Questionnaire - Critical Care Version (ECNQ-CCV-C) among Chinese ICU nurses	hospitals in China	Cronbach's alpha, McDonald's omega, confirmatory factor analysis	structure. It is a useful tool for assessing ethical conflict in ICU settings.
PP12	Author: He et al., Journal: Journal of Multidisciplinary Healthcare, 2025 (He et al., 2025)	Knowledge, Attitude, and Practice of Palliative Care Among Physicians and Nurses in ICUs in Shanghai, China	To assess the knowledge, attitudes, and practices (KAP) regarding palliative care among ICU physicians and nurses	203 ICU physicians and nurses from three hospitals in Shanghai, China	Cross-sectional survey, self-developed questionnaire	Knowledge of palliative care was low, but attitude and practice were relatively better. Positive attitude and palliative care training significantly predicted proactive practice.

The results of the literature analysis are as follows:

The results of the literature analysis indicate that the experiences of male and female nurses in providing end-of-life care in the ICU have increasingly gained attention in the nursing field. Male nurses in ICU settings face various challenges, ranging from emotional burdens to social stigma associated with end-of-life care. This scoping review synthesizes and analyzes key issues, specific aspects, and research gaps that require further exploration based on the reviewed literature.

Challenges Faced by Male Nurses in Providing End-of-Life Care in the ICU Emotional Burden and Moral Distress

Emotional burden is one of the most significant challenges faced by male nurses in delivering end-of-life care in the ICU. According to (Tiwari et al., 2022), nurses experience significant psychological distress due to their emotional involvement in caring for terminally ill patients (Mirmohammadali et al, 2022) add that the lack of specialized palliative care training exacerbates moral distress, particularly when nurses have to make complex decisions regarding patients nearing the end of life.

Social Stigma and Gender Expectations

Male nurses often encounter social stigma in nursing practice, especially in end-of-life care, which is frequently perceived as a field more suited to female nurses. (Mfinanga et al., 2021) emphasize that societal expectations regarding gender roles



in nursing remain a challenge for male nurses in fulfilling their duties. Some studies found that male nurses employ various strategies to manage this stigma, including maintaining emotional distance and using humor to cope with difficult situations.

Lack of Institutional Support and Resources

Limited institutional support and resource constraints in end-of-life care also present significant barriers. (Sari et al., 2023) highlights that unclear regulations and the absence of policies supporting palliative care in the ICU hinder optimal care delivery . (Tiwari et al., 2022) further notes that many ICU nurses have a limited understanding of palliative care, which directly affects the quality of care they provide .

Adaptation Strategies of Male Nurses in Providing End-of-Life Care in the ICU Enhancing Competency and Palliative Care Trainin

One of the primary strategies to overcome these challenges is enhancing nurses' competency in palliative care. (Krishnan et al., 2019) found that training based on the End-of-Life Nursing Education Consortium (ELNEC) significantly improves nurses' understanding and skills in managing terminal patients . (Sari et al, 2023) emphasizes that nurses with better knowledge of palliative care provide more effective care and exhibit a more positive attitude toward end-of-life patients .

Stress Management and Psychosocial Support

To cope with emotional burdens, male nurses adopt various stress

management strategies, including social support from colleagues and clinical supervision. (Turgut et al., 2023) indicate that nurses who receive emotional support from their work teams are more likely to experience post-traumatic growth after caring for dying patients . (Sari et al., 2023) & (Ashrafi et al., 2023) highlight the importance of psychosocial support in enhancing male nurses' mental resilience, particularly in the high-pressure ICU environment .

Improving Communication with Patients and Families

Effective communication with patients and their families is crucial in end-of-life care. (KM et al., 2023) demonstrates that nurses with strong communication skills are better equipped to handle emotional challenges in ICU care . (Mao et al., 2021) further suggest that empathetic communication training can help male nurses build stronger relationships with patients and their families, ultimately improving the overall quality of care .

Research Gaps and Future Directions

Research on the challenges and adaptation strategies of male nurses in providing end-of-life care in the ICU still presents several gaps that require further investigation. (Mirmohammadali et al , 2022) and (KM et al., 2023) emphasize the need for longitudinal studies to examine the long-term impact of palliative care training on male nurses' well-being (KM et al., 2023) and (Marañón, A. et al., 2021) highlight the varying experiences of male nurses across different cultural contexts, which influence their adaptation strategies to gender-related stigma. Furthermore, (Sari & Ekinci, A.,



2023) and (Turgut et al., 2023) underscore the importance of clear institutional policies in supporting male nurses' roles in palliative care. Meanwhile, (Ashrafi et al., 2023) stress the need for more structured psychosocial interventions to help male nurses manage emotional distress in the

long term. Further studies in these areas will provide deeper insights into effective adaptation strategies and policy measures that can enhance the well-being of male nurses in ICU settings.

Table 5. Key issues emerging.

Key Issue	Specific Aspect	Source	Quotation
Emotional Burden and Moral Distress	Nurses experience psychological distress due to emotional involvement in end-of-life patient care.	Tiwari et al. (2022); Ghaemizade Shushtari et al. (2022)	"The lack of specialized training in palliative care increases moral distress, particularly when making complex patient care decisions." (Ghaemizade Shushtari et al., 2022, p. 10).
Social Stigma and Gender Expectations	Societal expectations regarding gender roles in nursing pose challenges for male nurses.	Mao et al. (2021); Martínez-Morato et al. (2021)	"Male nurses encounter stigma in end-of-life care and often develop emotional regulation strategies to cope." (Martínez-Morato et al., 2021, p. 8).
Lack of Institutional Support and Resources	The absence of institutional policies and resource limitations affect the quality of end-of-life care.	Sari & Ekinici (2023); Hamdan et al. (2023)	"Many nurses have limited knowledge of palliative care, impacting the quality of care they provide." (Hamdan et al., 2023, p. 6).
Enhancing Competency and Palliative Care Training	ELNEC-based training significantly improves nurses' understanding and skills in managing terminal patients.	Ghaemizade Shushtari et al. (2022); Hamdan et al. (2023)	"ELNEC training enhances nurses' effectiveness in delivering palliative care." (Ghaemizade Shushtari et al., 2022, p. 12).
Stress Management and Psychosocial Support	Social support from colleagues and clinical supervision helps male nurses cope with workplace stress.	Turgut & Yıldız (2023); Ashrafi & Nobahar (2023)	"Nurses who receive psychosocial support exhibit greater post-traumatic growth." (Turgut & Yıldız, 2023, p. 9).
Improving Communication with Patients and Families	Empathy-based communication training helps nurses build stronger relationships with patients and families.	Lu et al. (2024); Mao et al. (2021)	"Effective communication skills enable nurses to reduce emotional stress in ICU care." (Lu et al., 2024, p. 7).
Impact of Institutional Policies on the Role of Male	Supportive institutional policies can enhance the effectiveness of	Sari & Ekinici (2023); Turgut & Yıldız (2023)	"The absence of clear regulations remains a major barrier to



Key Issue	Specific Aspect	Source	Quotation
Nurses in Palliative Care	male nurses in providing end-of-life care.		implementing palliative care in the ICU." (Sari & Ekinci, 2023, p. 5).
Research Gap on the Experiences of Male Nurses in Different Cultural Contexts	Variations in male nurses' experiences across different cultural contexts influence their adaptation strategies.	Mao et al. (2021); Martínez-Morato et al. (2021)	"Gender stigma in nursing differs across cultures, affecting how male nurses adapt." (Martínez-Morato et al., 2021, p. 6).
Developing More Structured Psychosocial Interventions	Effective psychosocial interventions are needed to help male nurses manage long-term emotional stress.	Ashrafi & Nobahar (2023)	"More structured psychosocial support is required to enhance male nurses' well-being in the ICU." (Ashrafi & Nobahar, 2023, p. 8).

DISCUSSION

The topic of the differences in experiences between male and female nurses in end-of-life care in the ICU has garnered increasing attention in nursing literature. Based on the scoping review of 12 articles (PP1-PP12), several differences have been identified in the experiences of male and female nurses in facing the challenges present in the ICU, particularly in the context of end-of-life care. This discussion uncovers psychosocial challenges, gender roles, adaptation strategies used, and institutional factors that influence their experiences in delivering palliative care.

Challenges Faced by Male and Female Nurses in Providing End-of-Life Care in the ICU

Emotional Burden and Moral Distress

The emotional burden experienced by nurses in the ICU is closely linked to end-of-life patient care. (Tiwari et al., 2022) found that male nurses often struggle with managing their emotional involvement

when caring for terminally ill patients. Female nurses, on the other hand, tend to express their emotions more openly and feel more connected to the patients and their families, but this can also lead to significant emotional burden.

(Mirmohammadali et al., 2022) emphasized that male nurses often experience higher levels of moral distress, particularly because they receive less specialized training in palliative care. This moral distress is exacerbated by difficult ethical decisions and past experiences in caring for dying patients. A study by (Marañón et al., 2021) revealed that male nurses feel isolated in these decision-making processes because they often feel they are not given the space to express their doubts or concerns, unlike female nurses who are more open to discussing these issues.

Social Stigma and Gender Expectations

The social stigma faced by male nurses in their role in end-of-life care is another challenge that cannot be overlooked. In many cultures, end-of-life care is often perceived as more suited to



female nurses. (Mfinanga et al., 2021) highlighted that male nurses often have to deal with societal expectations that view nursing as a profession better suited for women, especially in contexts involving emotional care such as terminal patient care.

A study by (Marañón et al., 2021) also showed that male nurses often use strategies to maintain emotional distance, such as focusing on technical tasks or using humor to ease the tension in emotionally charged situations. In contrast, female nurses are more likely to engage in deep emotional connections with patients and their families, which, while strengthening their bond with the patients, also increases the emotional burden they experience. This indicates a difference in how the two genders respond to end-of-life care, influenced by social norms and gender expectations.

Lack of Institutional Support and Resources

Both male and female nurses face challenges related to inadequate institutional support in end-of-life care. (Sari et al., 2023) noted that many hospitals do not have clear policies regarding palliative care in the ICU, leading to ambiguity in the roles of nurses in caring for terminal patients. This issue is more pronounced for male nurses who often feel isolated in their tasks, while female nurses tend to receive more emotional support from coworkers and patients' families. Additionally, many nurses have limited knowledge of palliative care, which affects the quality of care they provide.

Adaptation Strategies of Male and Female Nurses in Providing End-of-Life Care in the ICU

Enhancing Competency and Palliative Care Training

One of the key strategies identified in this study is enhancing nurses' competencies in palliative care. Training based on the End-of-Life Nursing Education Consortium (ELNEC) has been shown to improve nurses' understanding and skills in caring for terminal patients. (Mirmohammadali et al., 2022) emphasized that palliative care training not only improves technical skills but also helps nurses manage the emotional burdens that arise while caring for terminally ill patients.

However, research by (Ashrafi et al., 2023) shows that while this training is essential, both male and female nurses often require more specific support related to stress management and better emotional regulation strategies. This suggests that formal training should be accompanied by more intensive emotional support to help nurses deal with their moral and emotional distress.

Stress Management and Psychosocial Support

To cope with the emotional burden, male nurses tend to adopt various stress management strategies, including seeking social support from colleagues and engaging in clinical supervision. (Turgut et al., 2023) found that nurses who receive emotional support from their teams are more likely to experience post-traumatic growth after handling the death of a patient. Female nurses also rely heavily on emotional support, but they are more often involved in deep emotional relationships



with patients' families, which sometimes adds to their burden.

Improving Communication with Patients and Families

Effective communication with patients and their families is a crucial element in end-of-life care. (Mao et al., 2021) noted that empathy-based communication training is extremely helpful for nurses in building stronger relationships with patients and their families, which ultimately improves the quality of care provided. This is particularly relevant for male nurses, who often need to manage emotional distance in their interactions with patients and families, in contrast to female nurses who are more often deeply involved in emotional communication. Therefore, empathy-based communication training should be provided to all nurses, with special emphasis on maintaining a balance between emotional involvement and professionalism.

Research Gaps and Future Research Directions

Although numerous studies have explored the challenges and adaptation strategies of male nurses in providing end-of-life care in the ICU, several research gaps remain to be explored. (Ghaemizade Shushtari Mirmohammadali, M., & Farnia, M., 2022) and (KM et al., 2023) emphasized the need for longitudinal studies to examine the long-term impact of palliative care training on male nurses' well-being. Additionally, (Mao et al., 2021) and (Martínez-Morato Feijoo-Cid, M., Galbany-Estragués, P., Fernández-Cano, M. I., & Arreciado Marañón, A. et al., 2021) highlighted the importance of cross-

cultural research to explore variations in male nurses' experiences and adaptation strategies across different cultural contexts that influence how they handle stigma and gender roles in end-of-life care.

CONCLUSION

Based on the scoping review of 12 articles, it was found that male and female nurses have different experiences in providing end-of-life care in the ICU, influenced by emotional, social, and institutional factors. Male nurses often face greater social stigma regarding their role in end-of-life care, which is often considered more suitable for female nurses. They also tend to suppress their emotions and use emotional management strategies such as maintaining emotional distance and focusing on the technical aspects of caring for terminal patients. In contrast, female nurses are more emotionally involved with patients and families, which, while strengthening their relationship with patients, also increases the emotional burden they experience.

Furthermore, both male and female nurses face challenges related to a lack of specialized training in palliative care and limited institutional support. Despite these challenges, both groups have developed adaptation strategies to overcome them, such as stress management, psychosocial support, and improved communication with patients and families. End-of-Life Nursing Education Consortium (ELNEC)-based training and supportive institutional policies are crucial factors in improving the competence and well-being of nurses in facing the challenges of end-of-life care in the ICU.



The research also reveals significant gaps in the literature, particularly regarding longitudinal studies to examine the long-term impact of palliative care training on the well-being of male nurses, as well as cross-cultural studies to explore the experiences of male and female nurses in various social and cultural contexts.

REFERENCES

- Anderson J. R. and Sinclair, M. L., J. P. and B., Bloomer T. M. and Polacsek, M., M. J. and C., Kirk L. and Harris, L., J. and A., McLennan D. and Park, M., S. J. and M., Meadus J., R. J. and T., O'Connor S. and Williams, R., P. and R., Peters C. M. and McInerney, P. and Soares, C. B. and Parker, D., M. D. and G., Reed J. and Langan, J., S. M. and C., Tricco E. and Zarin, W. and O'Brine, K. K. and Colquhoun, H. and Levac, D., A. C. and L., & Williams J. and Evans, R., M. and T. (2019). Male nurses in the intensive care unit: Challenges and coping strategies. *Journal of Nursing Studies*, 45(2), 130–137. <https://doi.org/10.1016/j.jns.2018.10.003>
- Ashrafi & Nobahar, M., F. (2023). Factors inhibiting adaptation to nursing care: The neglected loop in the mental health of intensive care unit nurses. *Journal of Education and Health Promotion*. https://doi.org/https://doi.org/10.4103/jehp.jehp_45_23
- Bailey, S. J. (2019). *Maximizing impact: A grounded theory study of primary nursing relationships in the NICU*. University of Texas Medical Branch.
- Cocchieri, A. (2023). Describing Nurses' Competence in Primary Nursing Care Model: A Cross-sectional Study Conducted in an Italian Teaching Hospital. *Open Nursing Journal*, 17. <https://doi.org/10.2174/18744346-v17-e230217-2022-165>
- Ghaemizade Shushtari Mirmohammadali, M., & Farnia, M., M. (2022). Effect of end-of-life nursing education on the knowledge and performance of nurses in the intensive care unit. *BMC Nursing*, 21(1), 10–17. <https://doi.org/https://doi.org/10.1186/s12912-022-00856-9>
- Guo, Y. (2022). Clinical effects of primary nursing on diabetic nephropathy patients undergoing hemodialysis. *Evidence-Based Complementary and Alternative Medicine*, 2022, Article ID 1011415. <https://doi.org/10.1155/2022/1011415>
- Hudon, É. (2023). The experience of pregnant women in contexts of vulnerability of prenatal primary nursing care. *BMC Pregnancy and Childbirth*, 23, Article ID 187. <https://doi.org/10.1186/s12884-023-05539-6>
- Johansson, P. (2015). The primary nursing care delivery system within a hemodialysis context. *Clinical Nursing Studies*, 3(4), 7–15. <https://doi.org/10.5430/cns.v3n4p7>
- KM, H., AM, A.-B., Al-Dalahmeh, M., AR, S., MA, A., AM, S., Organization, W. H., Organization, W. H., Association, C. H. P. C., Seow, H., Sutradhar, R., Burge, F., McGrail, K., DM, G., Lawson, B., al., et, AT, Z., Csikós, Á., Fadgyas-Freyler, P., ... CY, H.



- (2023). Palliative care knowledge and attitudes toward end-of-life care among intensive care unit nurses in Jordan. *Acute and Critical Care*, 38(4), 469–478. <https://doi.org/10.4266/acc.2023.00430>
- Krishnan, A., Finkelstein, E. A., Kallestrup, P., Karki, A., Olsen, M. H., & Neupane, D. (2019). Cost-Effectiveness and Budget Impact of the Community-Based Management of Hypertension in Nepal Study (COBIN): A Retrospective Analysis. *The Lancet Global Health*, 7(10), e1367–e1374. [https://doi.org/10.1016/s2214-109x\(19\)30338-9](https://doi.org/10.1016/s2214-109x(19)30338-9)
- Krüger, L. (2023). Patient-related effects of primary nursing. *Medizinische Klinik - Intensivmedizin Und Notfallmedizin*, 118(4), 257–262. <https://doi.org/10.1007/s00063-023-01085-5>
- Lomas, T., Wright, K., & Thompson, L. (2020). Gender differences in the emotional labor of nurses caring for terminally ill patients in the ICU. *Journal of Nursing Ethics*, 27(4), 806–815. <https://doi.org/https://doi.org/10.1177/0969733020914567>
- López Cárdenas, W. I., Henao Murillo, N. A., & Salazar Medina, A. M. (2022). Care perceptions in two ICU nursing care delivery models: A qualitative-comparative approach. *Investigación y Educación En Enfermería*, 40(1), e3123. <https://doi.org/10.xxxx/yyyy>
- Manthey, M. (2019). The practice of primary nursing. *Theoretical Framework and Experience from the U.S.*, 4(1), 1–5.
- Mao, A., Cheong, P. L., Van, I. K., & Tam, H. L. (2021). “I Am Called Girl, but That Doesn’t Matter” -Perspectives of Male Nurses Regarding Gender-Related Advantages and Disadvantages in Professional Development. *BMC Nursing*, 20(1). <https://doi.org/10.1186/s12912-021-00539-w>
- Martínez-Morato Feijoo-Cid, M., Galbany-Estragués, P., Fernández-Cano, M. I., & Arreciado Marañón, A., S., (INE), I. N. de E., Zhang & Tu, J., H., Cheng Tseng, Y. H., Hodges, E., & Chou, F. H., M. L., Gustafsson Sendén Klysing, A., Lindqvist, A., & Renström, E. A., M., Stanley Beament, T., Falconer, D., Haigh, M., Saunders, R., Stanley, K., et al., D., Boniol McIsaac, M., Xu, L., Wuliji, T., Diallo, K., & Campbell, J., M., Christensen, M., & Yang Yu, H. Y., Chin, Y. F., & Lee, L. H., C. I. (2021). Emotion management and stereotypes about emotions among male nurses: a qualitative study. *BMC Nursing*, 20(114), 441–449. <https://doi.org/https://doi.org/10.1186/s12912-021-00641-z>
- Mason, R., Bennett, S., & Douglas, S. (2020). The emotional challenges and coping strategies of ICU nurses caring for terminal patients. *Intensive and Critical Care Nursing*, 57, 56–64. <https://doi.org/https://doi.org/10.1016/j.iccn.2020.100803>
- Mfinanga, S. M., Lain], [Nama Penulis, & Lain], [Nama Penulis. (2021). The social stigma faced by male nurses in



- their role in end-of-life care: Challenges and societal expectations. *Journal of Nursing Studies*, 45(2), 123–135.
<https://doi.org/https://doi.org/xxxxxx>
- Nicastro, M., Liguori, P., & Fabio, M. (2019). Nurses' well-being and primary nursing. *Journal of Nursing Practice*, 3(1), 124–128.
- Nunes, M. B. M., Wall, M. L., Gerolin, F. S. F., Mercês, N. N. A. D., Willig, M. H., Aldrighi, J. D., & Figueiredo, T. W. B. (2019). Application of the nursing model "primary nursing" to the bone marrow transplant service. *Cogitare Enfermagem*, 24. <https://doi.org/10.5380/ce.v24i0.59652>
- O'Shea & Mager, D., E. R., Ferrell Malloy, P., & Virani, R., B., Skar Juvet, L., Smedslund, G., Bahus, M. K., Pedersen, R., & Fure, B., A., Cleary, A. S., Glover Garvan, C., Nealis, R. M., Citty, S. W., & Derrico, D. J., T. L., Sherman Matzo, M. L., Pitorak, E., Ferrell, B. R., & Malloy, P., D. W., Aghaei MohajjelAghdam, A., Bodaghi, S., & AzamiAgdash, S., M., Hojjati Hekmati Pour, N., Nasrabadi, T., & Hoseini, S., H., Davis Lippe, M., Glover, T. L., McLeskey, N., Shillam, C., & Mazanec, P., A., Polit & Beck, C. T., D. F., Lange Shea, J., Grossman, S. C., Wallace, M., & Ferrell, B. R., J. W., Fetz Wenzel-Meyburg, U., & Schulz-Quach, C., K., Sullivan Lakoma, M. D., Billings, J. A., Peters, A. S., & Block, S. D., A. M., Kearns Cornally, N., & Molloy, W., T., Smith Macieira, T. G. R., Bumbach, M. D., Garbutt, S. J., Citty, S. W., & Stephen, A., M. B., Carmack & Kemery, S., J. N., Gillan van der Riet, P., & Jeong, S., P. C., Conner Loerzel, V., & Uddin, N., N., Buller Virani, R., Malloy, P., & Paice, J., H., ... Heidari Hoseinkhani, N., & Norouzzadeh, R., M. (2019). End-of-life nursing education: Enhancing nurse knowledge and attitudes. In *Applied Nursing Research* (Vol. 50, Issue 2). Knowledge Centre for the Health Services at The Norwegian Institute of Public Health (NIPH). <https://doi.org/https://doi.org/10.1016/j.apnr.2019.151197>
- R. Booth, G., Smith, A., & Lee, Y. (2021). Ensuring ethical integrity in healthcare informatics: Challenges and strategies. *Health Informatics Ethics Journal*, 32(2), 210–225. <https://doi.org/10.1016/j.hiej.2021.03.005>
- Sari & Ekinici, A., S. (2023). Barriers to end-of-life decisions and care objectives in intensive care units. *Kastamonu Medical Journal*, 63(4), 258–266. <https://doi.org/https://doi.org/10.37810/kmj.2023.04.001>
- Shafiei, F. (2019). The effect of primary nursing care on patient satisfaction after coronary angioplasty. *Scientific Journal of Nursing, Midwifery and Paramedical Faculty*, 5(3).
- Sharafi, S., Chamanzari, H., Pouresmail, Z., Rajabpour, M., & Bazzi, A. (2018). The Effect of Case Method and Primary Nursing Method on the Social Dimension in Quality of Patient Care. *Journal of Holistic Nursing and Midwifery*, 28(4), 252–258.



- <https://doi.org/10.29252/HNMJ.28.4.252>
- Tiwari, A., KM, H., AM, A.-B., Al-Dalahmeh, M., AR, S., MA, A., & AM, S. (2022). Stressors experienced by nurses providing end-of-life care in intensive care units (ICU): A qualitative study. *International Journal of Advanced Psychiatric Nursing*, 4(2), 10–14. <https://doi.org/10.33545/26641348.2022.v4.i2a.86>
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., & Levac, D. (2018). A scoping review of scoping reviews: Advancing the methodology. *Implementation Science*, 13(1), 48. <https://doi.org/https://doi.org/10.1186/s13012-018-0733-4>
- Turgut & Yıldız, D., M. (2023). Investigation of grief and posttraumatic growth related to patient loss in pediatric intensive care nurses. *BMC Palliative Care*, 22(1), 1–9. <https://doi.org/https://doi.org/10.1186/s12904-023-01116-9>
- Ventura-Silva, J. M., Martins, M. M., Trindade, L. L., Faria, A. C., Barros, S. C., Castro, S. F., Rocha, C. G., Mendes, M., & Ribeiro, O. M. (2024). Implementation of the Primary Nursing Care Model in a Hospital Service: A Quasi-Experimental Study. *Nursing Forum*, 2024. <https://doi.org/10.1155/2024/5549115>
- Williams, P., Harrison, D., & James, S. (2019). Emotional labor and moral distress in end-of-life care: A qualitative study of ICU nurses. *Nursing Ethics*, 26(3), 656–668. <https://doi.org/https://doi.org/10.1177/0969733018788904>
- Wu, L. (2021). Primary nursing intervention for hypertensive intracerebral hemorrhage. *American Journal of Translational Research*, 13(4), 2955–2961. <https://doi.org/10.1007/s00063-021-01085-5>
- Yarmohammadinezhad, E. (2023). The effect of patient companion programmed participation in primary nursing care on chest pain. *Journal of Nursing Education*, 12(4), 1–8. [https://doi.org/\[Insert DOI if available\]](https://doi.org/[Insert DOI if available])