




# A Scoping Review of Palliative Care Education for Preregistration Student Nurses in the Asia Pacific Region

Hana Rizmadewi Agustina<sup>1</sup>, Chandra Isabella Hostanida Purba<sup>2</sup>, Theresia Eriyani<sup>1</sup>,  
Hartiah Haroen<sup>3</sup>, Siti Ulfah Rifa'atul Fitri<sup>2</sup>, Muna A Alshammari<sup>4</sup>, Aliffa Azwadina<sup>5</sup>,  
Muhammad Zaky Ramdhani<sup>6</sup>

<sup>1</sup>Department of Fundamental Nursing, Faculty of Nursing, Universitas Padjadjaran, Sumedang, Indonesia; <sup>2</sup>Department of Medical-Surgical Nursing, Faculty of Nursing, Universitas Padjadjaran, Sumedang, Indonesia; <sup>3</sup>Department of Community Health Nursing, Faculty of Nursing, Universitas Padjadjaran, Sumedang, Indonesia; <sup>4</sup>College of Nursing, Public Authority for Applied Education and Training, Adailiyah, Kuwait; <sup>5</sup>Adult Inpatient Unit, Universitas Padjadjaran Hospital, Sumedang, Indonesia; <sup>6</sup>Nursing Profession Study Program, Faculty of Nursing, Universitas Padjadjaran, Sumedang, Indonesia

Correspondence: Hana Rizmadewi Agustina, Department of Fundamental Nursing, Faculty of Nursing, Universitas Padjadjaran, Ir. Soekarno Km 21 street, Jatinangor, Sumedang, West Java, 45363, Indonesia, Tel +6281214148757, Email hana.rizmadewi@unpad.ac.id

**Abstract:** Palliative care is essential for improving the quality of life for patients with life-threatening illnesses and their families. However, access remains limited, especially in lower-middle-income countries. Education plays a vital role in developing quality palliative care services and is crucial for cultivating competencies that enhance the delivery of care. Meanwhile, its integration into nursing curricula is inconsistent, particularly in the Asia-Pacific region. This scoping review explores core palliative care competencies for undergraduate nursing students in the Asia-Pacific region, aiming to identify, develop, and integrate these competencies into nursing education and practice. The review followed Arksey and O'Malley's five-stage framework, including a comprehensive search of databases and search engines such as PubMed/MEDLINE, CINAHL, PsycINFO, Scopus, Google Scholar, ProQuest, ResearchGate, and Academic-Edu. The study included 23 articles published from 2012 to 2023, focusing on empirical data and theoretical models related to palliative care education in the Asia-Pacific region. The review identified key palliative care competencies, including holistic care, conceptual knowledge, communication, collaboration, and emotional preparedness for death. Barriers to integration include limited resources, insufficient trained educators, and inadequate clinical placements. Facilitators include positive clinical experiences and exposure to palliative care environments, which enhance students' competencies and attitudes. There is a significant need to standardize and strengthen the integration of palliative care competencies in nursing curricula across the Asia-Pacific region. By adopting innovative teaching methods and ensuring comprehensive education, nursing students can be better prepared to deliver high-quality, patient-centered palliative care, ultimately improving patient outcomes and addressing the growing need for these services.

**Keywords:** competencies, curriculum, nursing education, nursing student, palliative care

## Introduction

Palliative Care (PC) is an essential aspect of healthcare that takes a holistic approach for individuals of all ages dealing with serious illnesses related to suffering, particularly for individuals near the end of life.<sup>1</sup> In contrast, End-of-Life Care combines palliative and compassionate care with a holistic and team-based strategy addressing all dimensions of the patients and their families. While palliative care focuses primarily on alleviating symptoms and improving the quality of remaining life, end-of-life care emphasizes providing extensive support for the individual's physical, emotional, social, and spiritual or existential issues as they approach death.<sup>2</sup>

According to the WHO, a significant number of people each year face life-limiting illnesses, highlighting the urgent need for widespread access to palliative care to improve their quality of life.<sup>3</sup> Palliative care plays a crucial role in alleviating the suffering experienced by patients and families facing life-threatening diseases. Beyond

physical suffering, other highlighted needs that palliative care should address include supporting complex decision-making and providing support during the grieving phase. Globally, more than 56.8 million people are estimated to require palliative care each year. This need is projected to increase with the growth of the elderly population and the rise of non-communicable diseases.<sup>4</sup> By 2060, the need for palliative care is estimated to nearly double. However, despite the numerous benefits of palliative care and its impact on improving quality of life, accessibility to these services remains inadequate for many individuals in need, particularly in lower-middle-income countries (LMICs).<sup>5</sup>

The gap between the need for and availability of palliative care is closely related to the fulfilment of human rights, specifically the right to health. Therefore, the WHO, through the Astana Declaration of 2018, outlined its commitment to strengthening health promotion and disease prevention by addressing comprehensive health needs across the life course, including efforts in promotion, prevention, treatment, rehabilitation, and palliative care. All member states are expected to take this commitment seriously by referring to the public health model framework.<sup>6</sup> Besides the efforts made, barriers to developing palliative care are actively being addressed. Several studies have identified emerging barriers and facilitators influencing the development of palliative care, including education.<sup>7</sup>

Education is a critical factor in developing high-quality palliative care services. As professional healthcare members, nurses who spend significant time with patients must have adequate knowledge and skills in palliative care. In the context of palliative care, education provides nurses with essential competencies, including how to deliver sensitive news with appropriate communication, care for deceased bodies, offer support during the grief and bereavement phase, address ethical dilemmas, and manage psychological stress and negative emotions experienced by families.<sup>8</sup>

Efforts are being directed towards optimizing palliative care education, including integrating palliative care competencies into curricula. Palliative care competency involves in-depth knowledge, attitudes, and skills that align with providing excellent End-of-Life Care (EoLC).<sup>9</sup> Numerous palliative care organizations have developed palliative competencies, particularly for practitioners, including those in Europe (EAPC, 2010; NICE, 2011), America (ELNEC, 2015), Canada (CAHPC, 2011), Asia-Pacific (PCC4U, 2010; WHO Trivandrum, 2013), and Sub-Saharan Africa (APCA, 2014). Meanwhile, efforts to integrate palliative care into nursing curricula for undergraduate nursing students globally have been made, but significant variability and gaps persist, especially in the Asia-Pacific region. This scoping review aims to explore the literature on core palliative care competencies, explicitly focusing on their identification, development, and integration into the education and practice of healthcare students and practitioners. The objectives of this review are to categorize the range of competencies recognized as essential, assess the current state of palliative care education, and highlight areas where further competency development is needed.

## Materials and Methods

A scoping review was chosen to map the literature and assess the available evidence on palliative care core competencies for undergraduate nursing students. This allowed for a comprehensive exploration of key concepts and knowledge gaps. Following Arksey and O'Malley's methodology, a five-stage framework was employed: 1) identifying research questions, 2) Identifying relevant studies, 3) selecting relevant studies, 4) data charting, and 5) collating and summarizing results.<sup>10</sup> The scoping review identifies and maps evidence regarding core competencies, barriers, and facilitators in palliative care education using Arksey and O'Malley's framework.<sup>11</sup> The findings revealed critical gaps in nursing programs, such as limited clinical placements and insufficient training on end-of-life care. Thus, this approach can identify and analyze the gaps between existing information and real-life practices. Results like this suggest future research initiatives, such as providing strategies to enhance nursing education and ensuring students are better prepared to deliver high-quality, patient-centered palliative care.

## Identifying Research Question

The research question guiding the review was: "How are palliative care core competencies defined and integrated into pre-registration nursing programs in the Asia-Pacific region"

## Selecting Relevant Studies

The literature search was conducted using the electronic databases PubMed, EBSCO-CINAHL, Science Direct, Oxford Academics, Scopus, and Google Scholar. The included articles were research articles and grey literature that present empirical data, theoretical frameworks, or conceptual models related to palliative care education and palliative care core competencies for undergraduate nursing students in the Asia-Pacific regions. Grey literature was searched through only palliative care organization websites. Articles and grey literature published from 2012 to 2023 were included in the search strategy. These inclusion criteria were chosen for their relevance to current issues of palliative care education and to find the gaps between the established knowledge of palliative care and its novelty. Exclusion criteria encompassed studies unrelated to practice, education, or training in dying, death, and bereavement, papers not in English or lacking available translation and those with unretrievable full text. The research team chose the articles included based on their comprehensive analysis and relevance to the topic in this study. The search terms used are shown in [Supplementary Table 1](#).

## Data Charting

Whilst a scoping review does not explicitly aim to assess the quality of studies,<sup>12</sup> quality assessment tools from the Joanna Briggs Institute of Evidence-Based Health Care (JBI) were used to evaluate the included studies.<sup>13</sup> Information from the selected articles was recorded, including the setting, study design, results, and recommendations. A data extraction form was developed to include descriptive information and thematic categories ([Supplementary Table 2](#)).

Furthermore, data were thematically analyzed by coding the similarities and differences in content across articles on core competencies to illustrate the themes and categories that emerged from the literature. This process involved identifying patterns and categorizing them into themes and sub-themes to provide a structured understanding of the key competencies discussed.<sup>13</sup>

## Collating and Summarizing Results

The search results, as depicted in the PRISMA flow diagram ([Supplementary Figure 1](#)), reveal that 21 articles were gathered from databases, and two articles were obtained through other manual search methods via Google Scholar. In total, 23 articles were analyzed in this study, with publication years ranging from 2012 to 2023. The search across various databases yielded seven articles from PubMed, 10 from Scopus, four from MEDLINE, and two from Google Scholar. These articles originated from multiple countries, including China with nine publications, Japan with two articles, and South Korea with 1 article. Thailand, Singapore, and Indonesia contributed 1, 1, and 3 articles, respectively.

Additionally, articles from Australia and New Zealand were found in quantities of 2 and 1, respectively. In contrast, the Philippines and Malaysia published no articles in this area. The research articles included in the analysis spanned multiple countries in 4 instances. All articles were published in English. The types of articles analyzed include cross-sectional (11 articles), qualitative (8 articles), review (3 articles), and mixed methods (1 article).

Summary of reviewed studies are shown in [Supplementary Table 3](#).

## Palliative Care Core Competencies for Preregistration Student Nurses

Several studies highlight key core competencies that preregistration student nurses must achieve to provide high-quality palliative care. These competencies are categorized into four main areas, as illustrated in [Supplementary Figure 2](#). Core competencies were identified through a combination of content analysis and expert consultation. The content analysis systematically examined relevant literature and materials to extract key competencies critical to the field. This process ensured an evidence-based approach to understanding what is essential for effective performance. Simultaneously, expert consultation was conducted with professionals. This dual-method approach enhanced the reliability and relevance of the core competencies framework.

As shown in [Table 1](#), several studies highlight and discuss similar core competencies. Each article emphasizes the importance of specific competencies that nursing students must achieve to provide palliative care effectively.

**Table 1** Identified Core Competencies

Core Competencies	n =	Author
<b>Holistic Palliative Care Competencies</b>	n = 6	[3,14–20]
Clinical Competencies	n = 3	[14,15,17,20]
Psychosocial and spiritual competencies	n = 4	[3,14,16,18,19]
<b>Conceptual Foundations</b>	n = 10	[14–24]
Theory and Philosophy of end-of-life and hospice care	n = 7	[14–17,19–21,23]
Ethical and legal considerations	n = 5	[3,18,19,22–24]
<b>Collaboration and communication</b>	n = 8	[3,15,17,19–21,24–27]
Interprofessional collaboration	n = 3	[17,25,27]
Involving family as part of core care	n = 6	[17,19–21,24–26]
Communication skills	n = 8	[3,15,17,19–21,24–27]
<b>Emotional preparedness to face death and dying</b>	n = 9	[3,18,20,21,23,25,26,28–32]
Coping mechanism	n = 8	[18,20,21,23,25,26,28,30–32]
Peer support	n = 3	[26,29,31]

**Notes:** Bolded text represents core competencies, while square brackets [] indicate reference numbers corresponding to the cited articles.

## Teaching and Learning Methods in Palliative Care

Previous studies have emphasized the need for innovative teaching strategies that focus not only on theoretical aspects but also on enhancing practical experiences and exposure to palliative and end-of-life cases in the field.<sup>14,20,22,24,29,32,33</sup> Recommended teaching methods include simulations, case studies, service-based learning, and clinical practice. Additionally, there is a need for better integration of cultural and religious contexts into the PC curriculum, as these factors significantly influence perceptions and practices in providing care and strengthen a multidisciplinary approach.<sup>16,23,32</sup> Furthermore, assessing students' competencies in PC must be improved. Research shows that the evaluation of Palliative and End-of-Life Care (PEOLC) education is still inadequate, primarily due to the lack of mandatory PEOLC content in nursing curricula. Although this topic is included in the national licensing exams in New Zealand, direct evaluation of PEOLC within courses remains insufficient. This can lead students to perceive PEOLC as less important. Therefore, it is crucial to include integrated objective assessments in the curriculum to measure students' understanding of key concepts in PEOLC.<sup>23</sup>

## Palliative Care Integration into Nursing Curriculum

Integrating palliative care into undergraduate curricula involves employing effective learning methods to enhance students' competencies in caring for terminal patients.<sup>15</sup> However, few universities offer formal education on end-of-life care, while others only incorporate related topics into their curricula.<sup>21</sup> The National Teaching Quality Standards for Nursing Students from the Chinese Ministry of Education propose that nursing students become familiar with hospice care to provide high-quality end-of-life care.<sup>32</sup> Nursing educators in China agree that end-of-life care topics should be included independently within nursing education curricula to address students' needs.<sup>34</sup> However, some Chinese universities face challenges in delivering end-of-life care education, such as a lack of scientific standards and adequate educational content.<sup>35</sup> In Japan, some schools utilise methods such as Guided Death Experience (GDE) and simulation-based learning.<sup>22,36</sup> Nevertheless, the extent of end-of-life care integration into undergraduate curricula remains unclear. In New Zealand, nursing bachelor programs (BN) span three years, with a fast-track two-year option for those with a previous bachelor's degree. However, there are no clear requirements regarding end-of-life care (PEOLC) within the

curriculum needed to become a registered nurse (RN). The curriculum standards are set by the Nursing Council of New Zealand (NCNZ) based on national health priorities and contemporary health practice trends, reflecting a lack of consistency across programs, as no specific PEOLC competencies are mandated.<sup>23</sup> Meanwhile, in the Philippines, education on palliative care appears inconsistent across nursing programs. Many students report a lack of specific content on end-of-life care within their curricula.<sup>37</sup> In Indonesia, end-of-life care has not been widely integrated into undergraduate nursing curricula. Many nursing programs in Indonesia do not include specific content on palliative and hospice care, resulting in suboptimal training for students. Studies indicate that most students report insufficient exposure to this topic within their curricula.<sup>38</sup>

## Barriers and Facilitators of Palliative Care Education

The development of palliative care competencies for nursing students faces several challenges. Firstly, many educational institutions encounter limited resources, including a shortage of expert and skilled teaching staff in palliative care, especially concerning communication about death, and limited availability of simulation support to deliver relevant scenarios.<sup>15,25</sup> Secondly, there is limited exposure in clinical settings for palliative care and varying educational resources and staff expertise across regions, compounded by overcrowded curricula, a lack of clinical placements with palliative care providers, insufficient assessment and teaching staff, and inadequate teaching tools.<sup>23</sup> Conversely, crucial supportive factors can enhance palliative care education. Whether personal or clinical, positive experiences with palliative care significantly influence students' attitudes and competencies in receiving and delivering palliative care.<sup>20,34,36</sup>

## Discussion

### Palliative Core Competencies of Preregistration Student Nurses

The scoping review results reveal that undergraduate nursing students have inadequate knowledge and skills in palliative care.<sup>14,16,22,34,36,37</sup> This deficiency is likely due to insufficient palliative care education within nursing programs.<sup>16,22,34</sup> Education in palliative care is a crucial factor influencing students' competence. Research indicates that students who receive theoretical and practical training in palliative care tend to have better knowledge than those who do not.<sup>20,36,39</sup> Our findings suggest that the current training for nursing students is inadequate, as many reported that their programs lack specific palliative care content.<sup>38</sup> Innovative teaching strategies are thus recommended to address this gap.<sup>14,22,24,29,33</sup> Didactic lectures can provide essential knowledge, while mini simulations allow students to apply this knowledge practically. Simulation scenarios offer a comprehensive view of end-of-life situations, and debriefing supports self-care and peer support.<sup>15</sup> These factors significantly impact students' perceptions and practices in care, emphasizing the need for a multidisciplinary approach.<sup>16,23</sup>

The core competencies required for undergraduate nursing students can be categorized into four areas: 1) Holistic palliative care competencies, 2) Basic conceptual knowledge, 3) Collaboration and communication, and 4) Emotional preparedness for death and dying. Holistic palliative care competencies should include clinical skills such as symptom management—pain, respiratory symptoms, and gastrointestinal symptoms.<sup>14,15,17</sup> Effective symptom assessment and management are essential for providing holistic, patient-centered care that leads to positive patient and family outcomes.<sup>40</sup> Additionally, students need psychosocial and spiritual competencies to offer comprehensive palliative care.<sup>14,16,18,19</sup> Evidence from well-conducted studies supports the effectiveness of psychosocial interventions in reducing depression, anxiety, and distress in patients with advanced diseases and in enhancing their sense of meaning and preparation for end-of-life. Spiritual care, as a relational process, provides patients with love, meaning, and value while addressing their spiritual needs. However, nurses report deficiencies in their initial education and stress the need for further training, understanding, and professional guidance to better address patients' spiritual and psychological needs.<sup>41,42</sup> A key objective highlighted by our findings is the delivery of culturally congruent palliative care competency. This approach involves aligning professional practices with the specific needs of patients and their families, considering relevant cultural factors. Achieving this outcome requires more than just cultural competency; it also involves cultural humility and safety. Cultural humility entails a deep awareness of one's cultural identity and an openness to learning from



others, acknowledging individual limitations in understanding. On the other hand, cultural safety involves adopting social justice principles to ensure that individuals from diverse backgrounds are not marginalized or disempowered.<sup>43</sup>

The second competency area involves basic conceptual knowledge, including the theory and philosophy of end-of-life and hospice care.<sup>3,14–17,19,21,23</sup> Nurses who frequently care for critically ill patients with chronic conditions must possess adequate knowledge to deliver high-quality care. Insufficient palliative care knowledge impedes nurses' ability to assess patient needs, communicate effectively, and address their physical, mental, social, and spiritual issues.<sup>44</sup> Furthermore, understanding ethical and legal considerations is crucial to this conceptual knowledge.<sup>3,18,19,22–24</sup> Understanding the principles of biomedical ethics is vital for nursing students. These principles help healthcare providers navigate the complex ethical issues that arise in end-of-life care, ensuring that patients' and healthcare professionals' rights, dignity, and well-being are respected throughout the decision-making process.<sup>45</sup>

Collaboration and communication are other competencies that nursing students must have.<sup>3,15,17,19,21,23–25,27</sup> Nursing students' ability to engage effectively in multidisciplinary decision-making at end-of-life care relies heavily on their competency in interprofessional collaboration, which is a core skill for providing quality hospice care. Without strong interprofessional skills, there may be inconsistencies in hospice competencies. To address this, it is crucial to integrate strategies for managing death-related events across various professions, thereby enhancing nursing students' abilities in interprofessional teamwork and ensuring they are well-prepared for hospice services.<sup>22</sup> Training and strengthening communication skills are vital in improving nurses' participation in the end-of-life care of patients, and this critical issue should be included in educational programs.<sup>46</sup> Effective collaboration and communication in nursing also involve engaging with family members as an integral part of the care team. Nursing students need to learn to work closely with family caregivers, recognizing their crucial role in patient care and respecting their perspectives. Students need to consider family members as part of the care team and as essential contributors to the overall care process, including addressing their well-being, which is often connected to the patient's condition.<sup>47</sup>

The fourth competency area focuses on emotional preparedness for dealing with death and dying.<sup>3,18,20,21,23,25,26,28–32</sup> Students recognize the need for better preparation to handle patient deaths. Their personal experiences significantly impact their educational needs. Understanding these experiences is essential for selecting appropriate teaching methods and integrating students' insights into patient care. Nursing students' perspectives on death and the meaning of life play a critical role in shaping their attitudes toward end-of-life patient care.<sup>32</sup> Furthermore, implementing a humanistic approach for nursing students will foster their capacity for humanistic thinking and eventually lead to a positive attitude toward death due to the cumulative effect of these repeated humanistic expressions.<sup>7</sup> Effective mentorship and a positive attitude from mentors are also crucial for this preparation.<sup>48</sup> The palliative simulation program significantly enhanced nursing students' emotional intelligence.<sup>20</sup> Improving self-care skills and supporting colleagues are essential components in developing effective hospice care competencies. Focusing on these areas helps healthcare professionals maintain their well-being and foster a collaborative work environment, ultimately enhancing the quality of care provided to patients in hospice settings.<sup>15</sup> Research indicates that students' belief systems significantly influence their preparedness for dealing with death and dying. Students who have a belief system in place, regardless of its nature, often report feeling more secure and less fearful about the inevitability of their own death and the deaths of others. Conversely, some studies highlight that students perceive a lack of adequate preparation among families to support the dying person according to religious guidance.<sup>18,29</sup> Additionally, cultural differences contribute to these issues. In certain cultures, discussing death is considered taboo, which can increase stress for students who are tasked with caring for dying patients. Confucian culture in China encourages the avoidance of death, leading to a limited understanding of terminal patients' expectations and contributing to nurses' reluctance toward palliative care.<sup>32</sup> This cultural reluctance may result in greater anxiety and reluctance among students when providing end-of-life care.<sup>29,31</sup> To address these challenges, it is crucial for nursing education programs to incorporate strategies that prepare students to manage death and dying effectively. This includes enhancing cultural and spiritual competence, improving communication skills about end-of-life issues, and providing spiritual care and psychosocial support to help students navigate their beliefs and emotional responses.

## Palliative Care Integration into Nursing Curriculum

In nursing education, it is essential to emphasize core components such as the fundamental nursing curriculum, a thorough understanding of death theory and practice, and the principles of hospice care.<sup>35</sup> However, the scoping review indicates that not all universities in the Asia-Pacific region have integrated palliative care into their curricula.<sup>7,15,16,18,19,21–23,31–38</sup> In China, there are neither elective courses nor mandatory education in palliative care within most nursing programs, and only a few universities offer comprehensive palliative care courses. Instead, content related to end-of-life care is often included as a chapter in other courses.<sup>15,16,21,22,33,34</sup> Some students have reported that their curricula do not adequately cover many vital aspects of palliative care.<sup>17</sup> This issue may arise because such courses are not routinely incorporated into the educational programs of health professions students at most universities in China, thereby limiting students' awareness of these practices.<sup>21,33</sup> China also lags behind in formal hospice training, with nursing students' knowledge ranking lower than their counterparts in Sweden, the United States, the United Kingdom, and Switzerland but higher than Pakistan, India, and Ethiopia.<sup>32</sup> Therefore, it is crucial to offer relevant training at the undergraduate level for all healthcare professional students. This training should encompass recognizing signs of imminent death and effectively communicating with patients and their families about death and the dying process.<sup>49</sup>

The findings highlight a critical need for increased emphasis on end-of-life care in undergraduate nursing programs.<sup>18,26</sup> Similarly, in New Zealand, palliative and end-of-life care are not mandatory components of the undergraduate curriculum for registered nurses, and there is no direct mention of these topics in the education program standards. Instead, terms like “lifespan approach” and “continuum of care” are employed, and there are no specific competencies in palliative and end-of-life care that students must master.<sup>23</sup> This is consistent with the study by Condry & Aucoin (2024), which demonstrated that many programs do not provide adequate instruction in palliative and end-of-life care, which is necessary for comprehensive nursing practice. However, in South Korea, palliative and end-of-life care is offered as a semester-long course for students. The curriculum is designed to help students develop their understanding of death and dying, enhancing their appreciation for life. This course encourages them to establish clear priorities and goals related to end-of-life care.<sup>3</sup> In Indonesia, end-of-life care has not been broadly integrated into undergraduate nursing curricula, with many programs lacking specific content on palliative and hospice care.<sup>38</sup> In contrast, several institutions in Japan offer the Guided Death Experience (GDE), a critical component of end-of-life care education. The GDE is an experiential program designed to simulate the dying process and emphasize the experience of loss.<sup>30</sup> The Japan Association of Nursing Programs in Universities has highlighted the development of skills to support terminal patients and their families as a key objective of nursing education. It is now incorporating palliative care training into their programs.<sup>27</sup> According to other findings,<sup>37</sup> unlike programs in the Philippines and India, most nursing students in Oman reported that their curricula include palliative and hospice care content. This approach aligns with the need for students to acquire the knowledge, skills, and understanding necessary to develop emotional intelligence, empathy, and compassion while protecting themselves from moral injury. Given the vulnerability of dying patients and their families, undergraduate programs need to provide students with evidence-based knowledge and skills to deliver not only pain and symptom management but also personalized, timely, and patient-centered holistic care.<sup>50</sup>

Research findings reveal that didactic instruction effectively teaches theoretical knowledge, while clinical practice provides students with authentic, hands-on experience. The limited availability of hospice clinical practice opportunities has underscored the growing importance of simulation-based methods. Simulation, as an experiential learning technique, is increasingly recognized as a valuable preparation tool, substitute, or supplement for actual hospice clinical practice.<sup>15</sup> Lectures and tutorials are the most frequently reported methods, followed by case studies and supervised clinical practice.<sup>23</sup> Additionally, the GDE (Grief and Death Experience) simulation program has been introduced in Japan. This program offers an experiential learning opportunity that simulates the dying process from a first-person perspective, focusing on experiencing loss.<sup>30</sup> Both theoretical learning and simulation practice offer distinct advantages and cannot fully replace each other. Theoretical knowledge provides the essential foundation for learning, while experiential simulation effectively bridges the gap between theory and practice.<sup>51</sup>

## Barriers and Facilitators of Palliative Care Education

Based on our findings, one of the major barriers to advancing palliative and end-of-life care services is the insufficient knowledge of these areas among the nursing workforce.<sup>14</sup> In China, death education is transitioning from theoretical research to practical application but faces challenges due to the absence of standardized practices and educational content.<sup>35</sup> Contributing factors include limited curriculum time, a shortage of clinical practice opportunities, overly cautious clinical instructors, high stress in real hospice situations, and students' difficulties in applying theoretical knowledge in clinical settings.<sup>15</sup> The shortage of trained healthcare providers impedes the development of palliative care in China, compounded by inadequate educational resources and funding, despite international improvements in attitudes toward palliative care.<sup>16</sup>

Current research and knowledge indicate that teaching and assessing palliative care (PC) competencies for nursing students in the Asia-Pacific region face several significant barriers and challenges. Barriers to expanding learning opportunities in palliative and end-of-life care include insufficient teaching time and a lack of clinical placements with palliative care providers.<sup>23</sup> Overcrowded curricula and limited clinical placements are reported as major obstacles to curriculum development. The lack of training and awareness among healthcare professionals is a significant barrier to accessing palliative care, with knowledge deficits and misconceptions among patients and the public further impeding access.<sup>37</sup> Additional challenges in palliative care education involve the need for specific support for students struggling with interactions with dying patients and ethical dilemmas and the development of effective coping strategies for internal conflicts and ethical issues related to terminal care.<sup>27</sup>

Despite progress, many educational institutions have not yet established palliative care as an independent subject, and students are often taught by instructors who are not specialized in this field.<sup>27</sup> Similar inadequacies in nursing education to meet the needs of terminal patients are observed internationally, indicating that palliative care education in nursing is still underdeveloped. This finding aligns with Davis et al (2021), who identified three primary barriers to integrating palliative care content into curricula, which are difficulties in convincing administrative and curriculum committees of its importance, associated costs, and the challenge of persuading decision-makers of the significance of primary palliative care education for nursing practice.

## Conclusion

The findings from this review highlight a critical need for integrating palliative care competencies into undergraduate nursing curricula across the Asia-Pacific region. The core competencies required for undergraduate nursing students can be categorized into four areas: holistic palliative care competencies, basic conceptual knowledge, collaboration and communication, and emotional preparedness for death and dying. The review reveals that despite recognizing the importance of palliative care, many nursing programs do not adequately prepare students for the complexities of end-of-life care. This inadequacy stems from several barriers, including limited resources, a lack of skilled educators, insufficient clinical placements, and the absence of standardized curricula. The review emphasizes that nursing education must adopt innovative teaching approaches beyond traditional didactic methods to overcome these challenges. Simulation-based learning, interdisciplinary collaboration, and experiential learning opportunities are recommended to enhance students' competencies in palliative care.

Additionally, the review highlights the importance of addressing palliative care's cultural and ethical dimensions, as these factors significantly influence care provision and the competencies required by nursing students. A comprehensive and standardized approach to palliative care education is essential to ensure that all nursing students have the necessary skills and knowledge to deliver high-quality end-of-life care. By integrating palliative care more thoroughly into nursing curricula, educational institutions can help close the gap between the growing need for palliative care and the current availability of trained professionals, ultimately improving patient outcomes and supporting the rights to health and quality of life for patients and families facing terminal illnesses.



## Acknowledgments

This study is a part of a larger multicenter study funded by Universitas Padjadjaran. We sincerely thank the university for its generous financial support, which was instrumental in completing this study. We are also thankful to all the parties involved who contributed to the realization of this project.

## Disclosure

The authors report no conflicts of interest in this work.

## References

1. Radbruch L, De Lima L, Care P, et al. Redefining palliative care—a new consensus-based definition. *J Pain Symptom Manage*. 2020;60(4):754–764. doi:10.1016/j.jpainsymman.2020.04.027. Redefining
2. Abbaspour H, Heydari A. Concept analysis of end-of-life care. *J Caring Sci*. 2022;11(3):172–177. doi:10.34172/jcs.2022.037
3. Jo KH, An GJ. Effect of end-of-life care education using humanistic approach in Korea. *Collegian*. 2015;22(1):91–97. doi:10.1016/j.collegian.2013.11.008
4. World Health Organization WHO. Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 global survey. Vol 4; 2020. Available from: <https://www.who.int/publications/i/item/ncd-ccs-2019>. Accessed April 16, 2025.
5. Sleeman KE, de Brito M, Etkind S, et al. The escalating global burden of serious health-related suffering: projections to 2060 by world regions, age groups, and health conditions. *Lancet Glob Heal*. 2019;7(7):e883–e892. doi:10.1016/S2214-109X(19)30172-X
6. World Health Organization WHO. Declaration of Astana. *Declar Astana Glob Conf Primary Healthc*. 2018:1–12.
7. Aldridge MD, Hasselaar J, Garralda E, et al. Education, implementation, and policy barriers to greater integration of palliative care: a literature review. *Palliat Med*. 2016;30(3):224–239. doi:10.1177/0269216315606645
8. Rosa WE, Ferrell BR, Mazanec P. Global integration of palliative nursing education to improve health crisis preparedness. *J Contin Educ Nurs*. 2021;52(3):130–135. doi:10.3928/00220124-20210216-07
9. Gamondi C, Larkin P, Payne S. Core competencies in palliative care: an EAPC white paper on palliative care education - Part 2. *Eur J Palliat Care*. 2013;20(3):140–145.
10. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol*. 2005;8(1):19–32. doi:10.1080/1364557032000119616
11. Munn Z, Peters MDJ, Stren C, Catalin T, McArthur A, Aromataris E. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Med Res Methodol*. 2018;18:147–160. doi:10.4324/9781315159416
12. Porritt K, Gomersall J, Lockwood C. JBI's systematic reviews: study selection and critical appraisal. *AJN Am J Nurs*. 2014;114(6):47–52. doi:10.1097/01.NAJ.0000450430.97383.64
13. Büchter RB, Weise A, Pieper D. Development, testing and use of data extraction forms in systematic reviews: a review of methodological guidance. *BMC Med Res Methodol*. 2020;20(1):259. doi:10.1186/s12874-020-01143-3
14. Wang W, Wu C, Bai D, et al. A meta-analysis of nursing students' knowledge and attitudes about end-of-life care. *Nurse Educ Today*. 2022;119:105570. doi:10.1016/j.nedt.2022.105570
15. Wang Y, Yuan H. Nursing undergraduates' experiences of a simulation-centred educational program in hospice care in Macao: a qualitative research. *Int J Nurs Sci*. 2022;9(4):504–511. doi:10.1016/j.ijnss.2022.09.005
16. Zhou Y, Li Q, Zhang W. Undergraduate nursing students' knowledge, attitudes and self-efficacy regarding palliative care in China: a descriptive correlational study. *Nurs Open*. 2020;8(1):343–353. doi:10.1002/nop2.635
17. Ziwei K, Mengjiao C, Yongjie Z, Mengqi Z, Yeqin Y. Optimizing palliative care education through undergraduate nursing students' perceptions: application of importance-performance analysis and Borich needs assessment model. *Nurse Educ Today*. 2023;122:105719. doi:10.1016/j.nedt.2023.105719
18. Adesina O, DeBellis A, Zannettino L. Third-year Australian nursing students' attitudes, experiences, knowledge, and education concerning end-of-life care. *Int J Palliat Nurs*. 2014;20(8):395–401. doi:10.12968/ijpn.2014.20.8.395
19. Taheri-Ezbarami Z, Jafaraghaee F, Sighlani AK, Mousavi SK. Core components of end-of-life care in nursing education programs: a scoping review. *BMC Palliat Care*. 2024;23(1):1–11. doi:10.1186/s12904-024-01398-3
20. Yoong SQ, Schmidt LT, Devi KM, Zhang H. Using palliative and end-of-life simulation to enhance pre-licensure nursing students' emotional intelligence, palliative care knowledge and reflective abilities: a single group, pretest-posttest study. *Nurse Educ Today*. 2023;130:105923. doi:10.1016/j.nedt.2023.105923
21. Song L, Cai T, Wu F, Cui J, Zhou L, Yuan C. Attitudes toward and perceptions of educational needs for end-of-life care among health professions students: a cross-sectional study in China. *J Pain Symptom Manage*. 2021;62(6):1229–1238. doi:10.1016/j.jpainsymman.2021.05.008
22. He X, Li B, Liu X, Jiao P, Zhao Y, Zhao Y. Correlation between hospice competence and death coping ability among nursing students in China: a cross-sectional survey. *Nurse Educ Today*. 2024;134:106080. doi:10.1016/j.nedt.2023.106080
23. Heath L, Egan R, Ross J, Iosua E, Walker R, MacLeod R. Preparing nurses for palliative and end of life care: a survey of New Zealand nursing schools. *Nurse Educ Today*. 2021;100:104822. doi:10.1016/j.nedt.2021.104822
24. Sukcharoen P, Polruk J, Lukthitikul S, Eamchunprathip S, Petchsuk R. Undergraduate nursing students' experiences of palliative care in the intensive care unit. *BMC Nurs*. 2023;22(1):1–7. doi:10.1186/s12912-023-01406-6
25. Yoong SQ, Schmidt LT, Chao FFT, Devi KM, Wang W, Zhang H. Nursing students' perspectives and learning experiences of participating in a palliative and end-of-life care simulation programme: a qualitative study. *Nurse Educ Today*. 2024;134:106103. doi:10.1016/j.nedt.2024.106103
26. Gillan PC, Jeong S, van der Riet P. Undergraduate nursing students' transformative learning through disorientating dilemmas associated with end-of-life care simulation: a narrative inquiry study. *Nurse Educ Pract*. 2021;55:103174. doi:10.1016/j.nepr.2021.103174

27. Kikunaga J, Sakai S, Seki N, Miyasaka M. Palliative care of terminal patients: students' learning process at a nursing university in Japan. *Eubios J Asian Int Bioeth.* 2021;31(3).
28. Purimahua DI, Manik M, Manurung EI. Fear of death between nursing students in the academic and professional programs. *Open Access Maced J Med Sci.* 2021;9(T5):1–5. doi:10.3889/OAMJMS.2021.7825
29. Haroen H, Mirwanti R, Agustina HR, et al. A qualitative study of perception and experience toward end-of-life Care among nursing students who witnessed dying people in their family. *J Multidiscip Healthc.* 2023;16:2861–2862. doi:10.2147/JMDH.S435722
30. Oba K, Tanimura C, Noguchi Y, Chujo M, Yoshioka SI. Perspectives of nursing students on end-of-life nurse education: a qualitative study of the guided death experience. *Nurse Educ Today.* 2023;126:105834. doi:10.1016/j.nedt.2023.105834
31. Yoong SQ, Wang W, Seah ACW, et al. Nursing students' experiences with patient death and palliative and end-of-life care: a systematic review and meta-synthesis. *Nurse Educ Pract.* 2023;69:103625. doi:10.1016/j.nepr.2023.103625
32. Yu H, Sun C, Xie L, et al. Using a mediating model of death attitude and meaning in life to understand nursing students attitude about hospice care. *Nurse Educ Today.* 2022;116:105448. doi:10.1016/j.nedt.2022.105448
33. Wang Y, Huang Y, Zheng R, Yue X, Dong F. Intern nursing students' perceived barriers to providing end-of-life care for dying cancer patients in a death taboo cultural context: a qualitative study. *Asia-Pacific J Oncol Nurs.* 2023;10(4):100210. doi:10.1016/j.apjon.2023.100210
34. Jiang Q, Lu Y, Ying Y, Zhao H. Attitudes and knowledge of undergraduate nursing students about palliative care: an analysis of influencing factors. *Nurse Educ Today.* 2019;80:15–21. doi:10.1016/j.nedt.2019.05.040
35. Su FJ, Zhao HY, Wang TL, Zhang LJ, Shi GF, Li Y. Death education for undergraduate nursing students in the China Midwest region: an exploratory analysis. *Nurs Open.* 2023;10(12):7780–7787. doi:10.1002/nop2.2025
36. Xue B, Cheng Q, Yue SW, et al. Attitudes and knowledge of palliative care of Chinese undergraduate nursing students: a multicenter cross-sectional study. *Nurse Educ Today.* 2023;122(115):105720. doi:10.1016/j.nedt.2023.105720
37. Mulira JK, Lazarus ER, Mirafuentes EC. A multi-country comparative study on palliative care knowledge and attitudes toward end-of-life care among undergraduate nursing students. *J Cancer Educ.* 2023;38(3):837–844. doi:10.1007/s13187-022-02193-5
38. A'la MZ, Setioputro B, Kurniawan DE. Nursing students' attitudes towards caring for dying patients. *Nurse Media J Nurs.* 2018;8(1):25. doi:10.14710/nmjn.v8i1.17270
39. Henoch I, Melin-Johansson C, Bergh I, et al. Undergraduate nursing students' attitudes and preparedness toward caring for dying persons – a longitudinal study. *Nurse Educ Pract.* 2017;26:12–20. doi:10.1016/j.nepr.2017.06.007
40. Henson LA, Maddocks M, Evans C, Davidson M, Hicks S, Higginson IJ. Palliative care and the management of common distressing symptoms in advanced cancer: pain, breathlessness, nausea and vomiting, and fatigue. *J Clin Oncol.* 2020;38(9):905–914. doi:10.1200/JCO.19.00470
41. Rodin G, An E, Shnall J, Malfitano C. Psychological interventions for patients with advanced disease: implications for oncology and palliative care. *J Clin Oncol.* 2020;38(9):885–904. doi:10.1200/JCO.19.00058
42. Batstone E, Bailey C, Hallett N. Spiritual care provision to end-of-life patients: a systematic literature review. *J Clin Nurs.* 2020;29(19–20):3609–3624. doi:10.1111/jocn.15411
43. Schuster-Wallace CJ, Nouvet E, Rigby I, et al. Culturally sensitive palliative care in humanitarian action: lessons from a critical interpretive synthesis of culture in palliative care literature. *Palliat Support Care.* 2022;20(4):582–592. doi:10.1017/S1478951521000894
44. Paknejadi F, Hasavari F, Mohammadi TK, Leili EK. Nurses' knowledge of palliative care and its related factors. *J Holist Nurs Midwifery.* 2019;29(4):236–242. doi:10.32598/JHNM.29.4.236
45. Akdeniz M, Yardımcı B, Kavukcu E. Ethical considerations at the end-of-life care. *SAGE Open Med.* 2021;9. doi:10.1177/20503121211000918
46. Ekberg S, Parry R, Land V, et al. Communicating with patients and families about illness progression and end of life: a review of studies using direct observation of clinical practice. *BMC Palliat Care.* 2021;20(1):1–12. doi:10.1186/s12904-021-00876-2
47. Alam S, Hannon B, Zimmermann C. Palliative care for family caregivers. *J Clin Oncol.* 2020;38(9):926–936. doi:10.1200/JCO.19.00018
48. Szczupakowska M, Stolarek P, Roszak M, Głodowska K, Baum E. Patient's death from the perspective of nursing students. *Front Public Health.* 2021;9:803–805. doi:10.3389/fpubh.2021.636582
49. White N, Oostendorp LJM, Minton O, Yardley S, Stone P. Palliative care training in undergraduate medical, nursing and allied health: a survey. *BMJ Support Palliat Care.* 2022;12(e4):e489–e492. doi:10.1136/bmjspcare-2019-002025
50. Nilsson S, Gibson J, Paterson C, Crookes P. Evidence informed generalist palliative care content for undergraduate nursing curriculum: an integrative review. *Nurse Educ Pract.* 2022;64:103447. doi:10.1016/j.nepr.2022.103447
51. Kirkpatrick AJ, Cantrell MA, Smeltzer SC. Palliative care simulations in undergraduate nursing education: an integrative review. *Clin Simul Nurs.* 2017;13(9):414–431. doi:10.1016/j.ecns.2017.04.009