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Bridging the Gap in Palliative Care Education: Analysing Knowledge and Attitudes among Undergraduate Nursing Students at IIUM Kuantan, Pahang, Malaysia

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ABSTRACT

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The growing global demand for palliative care is driven by an ageing population and the increasing prevalence of both infectious and non-communicable diseases. Previous research has highlighted inadequate knowledge and uncertain attitudes towards palliative care among nursing students worldwide. This study aimed to assess the knowledge and attitudes of nursing students at the International Islamic University Malaysia (IIUM), Kuantan, towards palliative care. A cross-sectional study was conducted involving 227 nursing students selected through simple random sampling. The findings indicated that the participants demonstrated good to moderate knowledge of palliative care, with a neutral overall attitude. Significant associations were identified between knowledge of palliative care and sociodemographic factors, including age, gender, year of study, clinical attachment experience and experience in caring for dying patients. Similarly, attitudes towards palliative care were significantly associated with the year of study and clinical attachment experience. This study underscores the importance of identifying knowledge gaps and enhancing attitudes toward palliative care among nursing students. It is recommended that further research be conducted in Malaysia to explore these aspects comprehensively.

1. Introduction

Palliative care, as defined by the World Health Organization (WHO), is an approach that aims to improve the quality of life for patients and their families who are facing issues related to life-threatening illnesses. It achieves this by preventing and alleviating suffering through early identification, assessment and treatment of pain, as well as addressing other physical, psychological and spiritual needs [1]. Globally, an estimated 56.8 million people require palliative care annually, with 25.7 million of these individuals in their final year of life. Alarmingly, only 14% of those in need receive palliative care and most of these individuals reside in low- and middle-income countries [1].

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Palliative care is a fundamental component of nursing practice, particularly in addressing the holistic needs of patients with life-limiting illnesses. However, despite its growing recognition, a significant gap exists in the knowledge and attitudes of nursing students regarding palliative care, especially within the Malaysian context. Existing literature has highlighted inadequate knowledge and varying attitudes, ranging from uncertain to favourable, among nursing students globally [2]. This issue points to a potential shortfall in educational curricula and clinical training, which could negatively affect the quality of palliative care provided by nursing students during their clinical placements.

The limited education on palliative care is reflected in the quality of care delivered by student nurses in clinical practice [3]. Despite the increasing recognition of palliative care as an essential aspect of healthcare, there is limited research on the knowledge and attitudes of nursing students toward palliative care within the Malaysian context. Most studies on this topic are conducted in Western countries, where cultural, educational and healthcare system differences may influence the findings. In Malaysia, particularly at the International Islamic University Malaysia (IIUM), there is a lack of comprehensive data on how nursing students perceive palliative care, their level of preparedness and their attitudes toward delivering such care during clinical practice. This gap is significant as nursing students represent the future frontline workforce in providing holistic, patient-centred care, especially to those with life-limiting illnesses. Addressing this gap can inform educational and clinical training improvements, ensuring that nursing students are well-equipped to meet the demands of palliative care.

The significance of this study lies in its potential to enhance the preparedness of nursing students at the International Islamic University Malaysia (IIUM) in delivering high-quality palliative care. By examining their knowledge and attitudes, this research can uncover gaps in understanding and identify areas for improvement within the nursing curriculum. The findings can inform the development of more comprehensive educational strategies, including targeted training modules and practical workshops, to better equip nursing students for the complexities of palliative care in clinical settings. Furthermore, this study contributes to the broader effort of addressing disparities in palliative care education in Malaysia, ensuring that future nurses are competent and compassionate caregivers. Ultimately, improving the knowledge and attitudes of nursing students toward palliative care has the potential to enhance patient outcomes, particularly for those facing life-limiting illnesses and align IIUM's nursing program with global standards in holistic, patient-centred care.

2. Methodology

2.1 Study Design, Setting, and Sample Size

This cross-sectional study was conducted at the Kulliyah of Nursing, International Islamic University Malaysia (IIUM), Kuantan Campus, targeting a total population of 553 nursing students. The sample size was determined using the Raosoft Sample Size Calculator, which recommended a minimum of 227 participants to achieve a 95% confidence level [4]. Participants were selected through simple random sampling and data were collected via an online survey.

2.2 Ethical Considerations

Ethical approval was obtained from the Kulliyah of Nursing Postgraduate Research Committee (KNPGRC) and the IIUM Research Ethics Committee (IREC) (Approval number: IREC-2024-137) through an online application process. Informed consent was secured from all participants before the study commenced.

2.3 Measurement and Instruments

A validated questionnaire comprising three sections was utilised for data collection:

- i. Part A: Sociodemographic data, including age, gender, year of study, clinical attachment experience, and experience in caring for dying patients.
- ii. Part B: Knowledge assessment using the Palliative Care Quiz for Nursing (PCQN), a 20-item quiz developed by Ross *et al.*, [5]. Each correct response was awarded 1 point, with a maximum possible score of 20.
- iii. Part C: Attitudes towards palliative care were measured using the Frommelt Attitude Toward Care of the Dying (FATCOD) scale, which consists of 30 items scored on a 5-point Likert scale [6].

2.4 Validity and Reliability

The instruments demonstrated excellent reliability in a previous pilot study, with Cronbach's alpha values of 0.969 for the PCQN and 0.983 for the FATCOD [7]. Additionally, the content validity indices (I-CVI and S-CVI/UA) were both 1.0, indicating high validity for measuring palliative care knowledge and attitudes among Malaysian nursing students [7].

2.5 Data Collection

Following ethical approval, an information sheet and questionnaire were distributed via email to eligible participants. Data were collected from February 2024 to April 2024, from respondents who provided informed consent and submitted completed questionnaires.

2.6 Data Analysis

Data were analysed using IBM SPSS Statistics version 27. Descriptive statistics, including measures of central tendency (mean), variability (standard deviation), percentages and frequencies, were used to describe sociodemographic variables and assess palliative care knowledge and attitudes. Chi-square tests were employed to evaluate associations between sociodemographic factors and palliative care knowledge and attitudes, with a significance level set at $p < 0.05$.

3. Results

3.1 Sociodemographic Data

A total of 227 online questionnaires were completed and returned, yielding a 100% response rate. The majority of participants were aged between 22 and 23 years, with 76.7% identifying as female. All respondents reported having clinical attachment experience, and only 12.3% indicated that they had no prior experience in caring for dying patients.

Table 1
 Sociodemographic data (n=227)

Variables	Frequency (n)	Percentage (%)
Age (years)		
20-21	88	38.8
22-23	114	50.2
24-26	25	11.1
Gender		
Male	53	23.3
Female	174	76.7
Year of study		
Year 1	73	32.2
Year 2	48	21.1
Year 3	43	18.9
Year 4	63	27.8
Clinical attachment experience		
Yes	227	100.0
No	0	0
Experience in caring for dying patients		
Yes	199	87.7
No	28	12.3

3.2 Knowledge and Attitude towards Palliative Care among Nursing Students at IIUM Kuantan

The scores indicated that most of the nursing students had good (n=105, 46.3%) to moderate (n=111, 48.9%) knowledge. From Table 2, it can be concluded that the highest level of attitude towards palliative care belongs to neutral attitude with (n=122, 53.7%). However, 3 undergraduate nursing students have a negative attitude on palliative care (n=4, 1.8%).

Table 2
 Descriptive findings for level of knowledge and attitude of palliative care among nursing students (n=227)

Variables	Frequency (n)	Percentage (%)
Knowledge of palliative care		
Poor	11	4.8
Moderate	111	48.9
Good	105	46.3
Attitude of palliative care		
Neutral	122	53.7
Positive	101	44.5
Negative	4	1.8

3.3 Association between Sociodemographic Factors and Knowledge of Palliative Care among Nursing Students

The analysis revealed a statistically significant association between several sociodemographic factors and the level of knowledge regarding palliative care among nursing students at IIUM Kuantan. Specifically, age, gender, year of study, clinical attachment experience, and experience in caring for dying patients were all significantly associated with knowledge levels, as indicated by p-values below 0.05 (refer to Table 3). Consequently, the null hypothesis was rejected, confirming that sociodemographic variables play a crucial role in influencing nursing students' knowledge of palliative care.

Table 3

The relationship between sociodemographic background and knowledge of palliative care among nursing students in IIUM Kuantan (n=227)

Variable	Positive (%)	Neutral (%)	Negative (%)	Total (%)	p-value
Age					
20-21	11 (12.5)	74 (84.1)	3 (3.4)	88 (100.0)	0.121
22-23	84 (73.7)	29 (25.4)	1 (0.9)	114 (100.0)	
24-26	6 (24.0)	19 (76.0)	0 (0.0)	25 (100.0)	
Gender					
Male	36 (67.9)	15 (28.3)	2 (3.8)	53 (100.0)	0.438
Female	65 (37.4)	107 (61.5)	2 (1.1)	174 (100.0)	
Year of Study					
Year 1	9 (12.3)	60 (82.2)	4 (5.5)	73 (100.0)	0.034*
Year 2	11 (22.9)	37 (77.1)	0 (0.0)	48 (100.0)	
Year 3	18 (41.9)	25 (58.1)	0 (0.0)	43 (100.0)	
Year 4	63 (100.0)	0 (0.0)	0 (0.0)	63 (100.0)	
Clinical Attachment Experience					
Yes	101 (44.5)	122 (53.7)	4 (1.8)	227 (100.0)	0.001*
No	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
Experience Caring for Dying Patients					
Yes	92 (46.2)	104 (52.3)	3 (1.5)	199 (100.0)	0.167
No	9 (32.1)	18 (64.3)	1 (3.6)	28 (100.0)	

A significant association was observed between nursing students' attitudes toward palliative care and their year of study ($p = 0.034$) as well as their clinical attachment experience ($p = 0.001$), with both p-values indicating statistical significance ($p < 0.05$) (Table 4).

Table 4

The relationship between sociodemographic background and level of attitude of palliative care among nursing students in IIUM Kuantan (n=227)

Variable	Positive (%)	Neutral (%)	Negative (%)	Total (%)	p-value
Age					
20-21	11 (12.5)	74 (84.1)	3 (3.4)	88 (100.0)	0.121
22-23	84 (73.7)	29 (25.4)	1 (0.9)	114 (100.0)	
24-26	6 (24.0)	19 (76.0)	0 (0.0)	25 (100.0)	
Gender					
Male	36 (67.9)	15 (28.3)	2 (3.8)	53 (100.0)	0.438
Female	65 (37.4)	107 (61.5)	2 (1.1)	174 (100.0)	
Year of Study					
Year 1	9 (12.3)	60 (82.2)	4 (5.5)	73 (100.0)	0.034*
Year 2	11 (22.9)	37 (77.1)	0 (0.0)	48 (100.0)	
Year 3	18 (41.9)	25 (58.1)	0 (0.0)	43 (100.0)	
Year 4	63 (100.0)	0 (0.0)	0 (0.0)	63 (100.0)	
Clinical Attachment Experience					
Yes	101 (44.5)	122 (53.7)	4 (1.8)	227 (100.0)	0.001*
No	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	
Experience Caring for Dying Patients					
Yes	92 (46.2)	104 (52.3)	3 (1.5)	199 (100.0)	0.167
No	9 (32.1)	18 (64.3)	1 (3.6)	28 (100.0)	

4. Discussion

The majority of participants in this study were between the ages of 20 and 23, a finding consistent with studies conducted in Penang, Malaysia [8] and Greece [9], where younger nursing students,

aged 20 to 23, predominated compared to older students aged 24 to 26. This age distribution is typical in nursing education, reflecting the demographic profile of many nursing programs worldwide.

All 227 participants in this study had clinical attachment experience, with only 28 students lacking direct experience in caring for dying patients during their clinical rotation. This aligns with findings from studies in Palestine [10] and China [11], where more than half of the participants reported having experience in providing care for dying patients and had received prior education in palliative care. Such clinical exposure is crucial, as it contributes significantly to students' understanding and application of palliative care principles, forming an integral part of their professional training and competence. It is essential that nursing curricula incorporate palliative care as a foundational element, ensuring students develop a comprehensive understanding of end-of-life care and its ethical, emotional and practical aspects.

Additionally, a notable proportion of participants in this study were female, reflecting trends observed in nursing education worldwide. This finding is consistent with the study by Mastroianni *et al.*, [12] in Italy, where female students comprised the majority of the nursing cohort. Gender disparity in nursing remains a common feature across many countries, influencing the dynamics of nursing education and practice.

4.1 Level of Knowledge of Palliative Care among Nursing Students in IIUM Kuantan

The findings of this study indicated that the majority of nursing students at the Kulliyah of Nursing, IIUM Kuantan, possessed good (n=105, 46.3%) to moderate (n=111, 48.9%) knowledge of palliative care. This is a relatively positive outcome compared to studies in other countries, such as China and Mongolia, where nursing students exhibited poor knowledge of palliative care despite having received additional training on the topic [13-15]. The disparity in knowledge levels across different regions could be attributed to several factors, including variations in educational curricula, clinical exposure, and institutional support for palliative care education. For example, in some countries, palliative care may not be integrated into the core curriculum as effectively, resulting in students having limited opportunities to gain in-depth knowledge or practical experience in this area. In contrast, IIUM's inclusion of palliative care as part of the nursing program may have contributed to the relatively higher levels of knowledge observed among students in this study.

Furthermore, this study revealed that female students exhibited higher levels of knowledge compared to their male counterparts. This finding is consistent with previous studies that have highlighted gender differences in academic performance across various disciplines, including nursing [16]. The reasons behind this gender-based disparity in knowledge may be linked to differences in learning styles, study habits or attitudes toward education. Research suggests that female students are more likely to engage in thorough studying, attend classes regularly and seek out additional resources, which could contribute to better academic performance [17]. Additionally, female nursing students may be more empathetic and inclined to engage in the emotional and interpersonal aspects of palliative care, which could influence their understanding of its principles and practices.

Moreover, it is essential to note that the moderate levels of knowledge observed in the majority of participants highlight a need for continued efforts to enhance palliative care education within nursing programs. While many students demonstrated adequate knowledge, there is room for improvement in ensuring that all students achieve a comprehensive understanding of palliative care principles, including the management of pain, emotional support for families and the ethical considerations involved in end-of-life care. Previous research has identified gaps in palliative care education, particularly in areas such as communication with dying patients, symptom management and cultural competence in delivering care [18]. Addressing these gaps through curriculum

enhancements, specialised training and increased clinical exposure could help improve the overall competence of nursing students in providing high-quality palliative care.

4.2 Level of Attitude of Palliative Care among Nursing Students in IIUM Kuantan

This study found that 101 nursing students displayed a positive attitude towards palliative care, while 122 nursing students exhibited a neutral attitude. The results showed that Year 4 nursing students had a more positive outlook compared to their junior counterparts, which could be attributed to their increased exposure to clinical practice, particularly in dealing with terminally ill patients and experiencing the death of patients. Research consistently supports the notion that greater clinical experience, especially exposure to end-of-life care, significantly influences nursing students' attitudes towards palliative care [19]. Year 4 students, having spent more time in clinical settings, are likely to have encountered a greater number of terminally ill patients, allowing them to develop a more nuanced understanding of palliative care's importance. Moreover, such experiences may foster empathy, compassion and professionalism in managing the complexities of end-of-life care, thereby promoting a more positive attitude.

Additionally, the study indicated that 90% of the participants had some form of experience in caring for dying patients. This exposure is likely a major determinant of students' attitudes towards palliative care, as their experiences, whether positive or negative, which directly shape their perceptions and beliefs about this type of care. Previous research has shown that clinical exposure to dying patients can be emotionally challenging and students who experience negative emotions, such as fear or discomfort, may develop less favourable attitudes towards palliative care [20]. Conversely, those who perceive the experience as fulfilling or meaningful may cultivate a deeper understanding and respect for palliative care principles, which in turn enhances their attitudes. This supports the idea that direct patient care experiences play a crucial role in shaping nursing students' approach to palliative care.

The mandatory clinical attachments incorporated into the nursing curriculum in Malaysia may also influence the students' attitudes. These compulsory placements provide nursing students with opportunities to engage directly with patients and experience first-hand the complexities involved in caring for terminally ill individuals. This structured exposure is crucial in fostering both knowledge and empathy, contributing to more favourable attitudes. Research in other countries has also highlighted the importance of such clinical placements in enhancing nursing students' understanding of palliative care. For example, a study conducted in Turkey found that nursing students who participated in clinical placements involving palliative care were more likely to develop positive attitudes towards the field [21]. Similarly, research from China demonstrated that exposure to palliative care settings led to increased confidence and a more positive disposition towards end-of-life care [22].

It is also important to consider the role of life experiences in shaping nursing students' attitudes towards palliative care. In this study, students' age and academic year were found to correlate with their attitudes, with older and more experienced students demonstrating more favourable views. This finding is consistent with previous research, which suggests that older students, due to their greater life experiences, may approach the topic of palliative care with more maturity and understanding [23]. Furthermore, students in their final years of study often have greater insight into the realities of healthcare practice, which may make them more receptive to the importance of palliative care as part of their professional role.

In contrast, the study conducted in Jordan by Altarawneh *et al.*, [22], reported that nursing students lacked positive attitudes towards caring for dying patients, which could be due to several

factors, such as cultural differences or the lack of focused education and training on palliative care within the nursing curriculum. Cultural perceptions of death and dying, as well as regional differences in healthcare practices, may contribute to the varying attitudes observed across different countries. For example, in some cultures, the discussion of death and end-of-life care is considered taboo, which may result in nursing students feeling unprepared or uncomfortable with such topics. These differences highlight the need for culturally sensitive educational approaches to palliative care that can be adapted to the specific needs and beliefs of students in different regions.

This study's findings suggest that there is a critical need to enhance palliative care education within nursing curricula. Exposure to real-world clinical situations, along with adequate training on the emotional, psychological and ethical aspects of palliative care, is essential to improving both knowledge and attitudes among nursing students. Furthermore, implementing reflective practices and providing opportunities for students to engage in conversations about death and dying in a supportive environment may also foster more positive attitudes.

4.3 Association between Sociodemographic Background with Knowledge and Attitude of Palliative Care among Nursing Students in IIUM Kuantan

The results of this study indicate that there is a significant relationship between several demographic factors, namely age, gender, year of study, clinical attachment experience and experience in caring for dying patients, with nursing students' knowledge of palliative care. Additionally, the study revealed that only the year of study and clinical attachment experience were significantly associated with students' attitudes toward palliative care. These findings underscore the importance of both academic and experiential factors in shaping nursing students' understanding and attitudes towards palliative care.

Senior nursing students, particularly those in their final year, demonstrated a higher level of knowledge and a more positive attitude towards palliative care compared to their junior counterparts. This can be attributed to the increased clinical exposure and experience that final-year students have had, which often includes caring for terminally ill patients and dealing with end-of-life situations. Previous studies have similarly found that nursing students with more advanced clinical exposure report higher levels of knowledge and more favourable attitudes towards palliative care [24]. Clinical attachments, which are a compulsory aspect of the nursing curriculum in Malaysia, are instrumental in providing students with practical experience in managing palliative care cases. The exposure to real-life scenarios during clinical placements is likely to deepen students' understanding of the holistic nature of palliative care, which encompasses not only physical but also psychological, emotional and spiritual dimensions of care. The findings of this study suggest that increasing the duration and depth of clinical exposure in palliative care could further enhance students' preparedness for real-world nursing challenges.

In contrast to the findings in this study, a study conducted in Saudi Arabia found that junior nursing students demonstrated more positive attitudes toward palliative care than senior students [25]. This counterintuitive result may be due to cultural factors that influence students' emotional responses to death and dying. For example, junior students might bring a more idealistic or less emotionally burdened perspective to palliative care, whereas senior students may develop a more pragmatic, albeit potentially more detached, approach to end-of-life care after repeated exposure to death during clinical rotations. Cultural differences in the perception of death, along with variations in the types of clinical experiences offered, may also explain this divergence in results. It is important to recognise that the attitude toward palliative care is not solely shaped by clinical experience but is

also influenced by broader cultural and societal norms surrounding death and dying, which vary greatly across regions.

Gender differences also emerged in this study, with female nursing students outperforming their male counterparts in both knowledge and attitudes towards palliative care. This finding aligns with previous studies suggesting that female students often exhibit higher levels of empathy, emotional sensitivity and interpersonal skills, which are crucial in the provision of palliative care. Female students may be more inclined to engage emotionally with their patients, particularly when dealing with end-of-life situations, which can contribute to a more positive attitude toward the holistic care model of palliative care [26]. The heightened emotional awareness and empathy exhibited by female students could explain their higher scores in both knowledge and attitudes. Additionally, females are often socialised to be more nurturing, which may further influence their approach to caring for dying patients. These gender differences in empathy and emotional responsiveness have been well documented in nursing literature and should be considered when designing curricula and training programmes aimed at enhancing palliative care education.

The findings from this study emphasise the critical importance of early and continuous exposure to palliative care concepts throughout nursing education. Given that clinical experience was one of the strongest factors influencing both knowledge and attitudes, it is evident that nursing students would benefit from increased opportunities to engage with palliative care in clinical settings. However, it is also essential that nursing curricula incorporate not only hands-on experience but also dedicated palliative care education that includes ethical considerations, communication skills and psychological preparation for dealing with the complexities of death and dying. Such training could help students develop a more balanced and compassionate approach to palliative care, addressing both the technical and emotional demands of the field.

In addition to clinical attachments, the role of age and year of study should not be underestimated. Senior students, who tend to have more mature perspectives, often combine academic knowledge with practical experience. The progression through the nursing programme allows them to assimilate both cognitive and affective learning, which enhances their understanding of the importance of palliative care in providing holistic care to patients. However, it is essential to ensure that junior students are also adequately prepared and supported in their learning of palliative care principles. Early exposure to palliative care education, even if it is theoretical at first, may help foster a more comprehensive understanding and better attitudes in the early years of study.

The study's findings further reinforce the need for a strong, integrated approach to palliative care education in nursing programmes. While clinical exposure plays a key role, the inclusion of palliative care as a core subject in the curriculum, along with specialised training, could ensure that all nursing students, regardless of gender or academic standing, develop the necessary skills, attitudes and knowledge to provide high-quality palliative care in their future practice.

5. Limitations

Although this study provides valuable insights into the knowledge and attitudes of nursing students towards palliative care, several limitations should be considered when interpreting the findings.

Firstly, the sample size and scope were limited to students from the Kulliyah of Nursing at the International Islamic University Malaysia (IIUM), Kuantan campus. While this allowed for a focused examination of the nursing student population at a single institution, the findings may not be generalisable to other universities or nursing disciplines in Malaysia or internationally. Future research should consider expanding the sample size to include nursing students from multiple

universities and institutions, with diverse academic backgrounds and clinical experiences. Such an approach would help improve the external validity of the study and provide a more comprehensive understanding of the factors that shape nursing students' knowledge and attitudes toward palliative care.

Secondly, this study utilised a cross-sectional design, which limits the ability to infer causal relationships between variables. To gain a deeper understanding of how different factors influence students' knowledge and attitudes over time, future research could employ a longitudinal design, tracking students' development in palliative care knowledge and attitude throughout their academic journey.

Another limitation pertains to the exclusive use of quantitative methods. While this study provided useful statistical insights into the knowledge and attitudes of nursing students, qualitative methods such as interviews or focus groups could provide a richer, more nuanced understanding of the students' perspectives. Qualitative approaches would allow researchers to explore the underlying reasons for students' attitudes towards palliative care, uncovering more detailed personal experiences and emotional responses that may not be captured through structured questionnaires alone.

Furthermore, the reliance on self-reported data presents a potential source of bias. Participants may have overestimated or underestimated their knowledge or attitudes due to social desirability bias or a lack of self-awareness. To mitigate this, future studies could triangulate self-reported data with other sources, such as observational data or feedback from clinical supervisors, to provide a more accurate and reliable assessment of nursing students' competencies and attitudes towards palliative care.

Lastly, this study did not explore the potential influence of other factors, such as personal experiences with death or cultural differences in perceptions of palliative care. It would be beneficial for future research to consider a wider range of variables that could affect students' views, such as family experiences, cultural backgrounds and personal values regarding death and dying.

Thus, while this study provides valuable preliminary data on nursing students' knowledge and attitudes towards palliative care, there is a need for further research that addresses these limitations. By expanding the sample size, incorporating qualitative methods and addressing potential biases, future studies could offer a more robust and comprehensive understanding of how to best prepare nursing students for the complex and emotionally demanding field of palliative care.

6. Conclusions

This study demonstrated that most nursing students possessed a good to moderate level of knowledge regarding palliative care, while their attitudes towards palliative care were generally neutral. The findings also indicated that nursing students' attitudes towards palliative care were significantly influenced by their year of study and clinical attachment experience. Specifically, students in higher academic years exhibited more positive attitudes, likely due to increased exposure to clinical settings and experience in caring for terminally ill patients. These results highlight the importance of clinical experience and education in shaping nursing students' perspectives on palliative care. Therefore, further efforts should be made to integrate more comprehensive palliative care training and clinical experiences throughout nursing education to enhance both knowledge and attitudes towards this crucial aspect of patient care.

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