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ASSESSMENT OF KNOWLEDGE, ATTITUDE, AND PRACTICE TOWARDS PALLIATIVE CARE AMONG FINAL-YEAR NURSING STUDENTS IN KARACHI, PAKISTAN

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Abstract

Background: *Palliative care aims to improve the quality of life of individuals living with life-threatening illnesses and their families. Nurses play a crucial role in delivering physical, psychosocial, and spiritual support; thus, undergraduate nursing students require adequate educational preparation in this discipline.*

Objective: *To assess knowledge, attitude, and practice (KAP) regarding palliative care among final-year undergraduate nursing students in Karachi, Pakistan.*

Methods: *A descriptive cross-sectional study was conducted over six months, from November 2025 to April 2026, across public and private nursing institutions in Karachi. A total sample of 188 final-year undergraduate nursing students was recruited using non-probability convenience sampling (sample size calculated via OpenEpi). Data were gathered using a structured questionnaire comprising demographic items, 10 knowledge questions, 10 attitude questions, and 5 practice questions. Data were analyzed using IBM SPSS Statistics version 26 using frequencies and percentages.*

Results: *Of the 188 participants, 32 (17.0%) were male and 156 (83.0%) were female; 147 (78.2%) were enrolled in government institutions and 41 (21.8%) in private institutions. The overall mean knowledge score was 50.3%; 38 (20.2%) participants were classified as having good knowledge, 56 (29.8%) moderate knowledge, and 94 (50.0%) poor knowledge. The overall attitude distribution was 79 (42.0%) positive and 109 (58.0%) negative. The practice classification was 74 (39.4%) good and 114 (60.6%) poor.*

Conclusion: *Final-year nursing students in Karachi exhibit notable gaps in palliative care knowledge, attitudes, and self-reported practices. Structured palliative care curricula, interactive reflective learning, and supervised clinical rotations are strongly recommended to strengthen undergraduate nursing education.*

Introduction

Palliative care is an essential medical approach intended to improve the quality of life of patients and families facing problems associated with life-threatening illnesses. It addresses suffering through early identification, comprehensive assessment, and management of physical, psychosocial, and spiritual concerns. Palliative care can be integrated alongside disease-directed therapies and is not restricted to end-of-life care.

The demand for palliative care is escalating globally due to the increasing burden of progressive non-communicable and life-limiting chronic conditions. Nurses are central to delivering palliative care because they provide direct, continuous support to patients and families across diverse clinical environments, including medical, surgical, pediatric, and emergency departments. Professional competence in this setting requires foundational factual knowledge alongside positive attitudes, effective communication, rigorous symptom assessment, family engagement, and respect for patient autonomy.

Undergraduate nursing programs play a critical role in preparing future healthcare professionals to manage end-of-life and palliative care needs. However, in low- and middle-income countries such as Pakistan, palliative care education remains minimally integrated into nursing curricula, resulting in limited service availability. Assessing students' current knowledge, attitudes, and practices (KAP) is a necessary step toward identifying educational deficits and informing targeted curriculum enhancements.

This study aimed to assess knowledge, attitude, and practice regarding palliative care among final-year undergraduate nursing students in Karachi, Pakistan.

Methods

Study Design and Setting

A descriptive cross-sectional study was conducted across public and private nursing institutions in Karachi, Pakistan, over a six-month period from November 2025 to April 2026.

Population and Sampling

The target population comprised final-year male and female undergraduate nursing (BSN) students. A sample size of 188 participants was calculated using the OpenEpi calculator based on standard parameters for cross-sectional studies. Participants were recruited using non-probability convenience sampling. Final-year undergraduate nursing students who voluntarily provided informed consent were included, while those unwilling to participate were excluded.

Data Collection Instrument

Data were collected using an adopted, structured, two-part questionnaire established from relevant literature. Part one gathered demographic details (age, gender, institution type, clinical placement area). Part two evaluated palliative care knowledge (10 items), attitude (10 items), and practice (5 items). The questionnaire demonstrated high content validity, with a content validity index (CVI) of 0.98 for relevance and 0.91 for clarity, and an internal consistency Cronbach's alpha of 0.83.

Procedure and Ethics

Potential participants were contacted, screened against eligibility criteria, and informed about the study's purpose, response confidentiality, and their right to withdraw at any point without penalty. Written informed consent was obtained prior to questionnaire administration. Ethical approval was obtained from the Institutional Review Committee (IRC) of Allied Institute of Nursing & Health Sciences, Karachi (Approval Ref: AINHS/IRC/2025/11-04).

Statistical Analysis

Data were coded and analyzed using IBM SPSS Statistics version 26. Descriptive statistics, including absolute frequencies (n) and percentages (%), were calculated to summarize demographic characteristics and item responses across knowledge, attitude, and practice domains.

Results

Participant Demographics

A total sample of 188 final-year undergraduate nursing students participated in the study. The age distribution was 28 (14.9%) aged 18–20 years, 54 (28.7%) aged 21–23 years, 74 (39.4%) aged 24–26 years, and 32 (17.0%) aged >26 years. The sample comprised 32 (17.0%) males and 156 (83.0%) females. The majority of participants (n = 147, 78.2%) were enrolled in government institutions, while 41 (21.8%) were from private institutions.

Table 1. Demographic Characteristics of Participants (N = 188)

Characteristic	Category	n	%
Age	18–20 years	28	14.9%
	21–23 years	54	28.7%
	24–26 years	74	39.4%
	>26 years	32	17.0%
Gender	Male	32	17.0%
	Female	156	83.0%
Institution Type	Government	147	78.2%
	Private	41	21.8%
Clinical Placement	Medical Ward	73	38.8%
	Surgical Ward	44	23.4%
	Pediatric Ward	36	19.1%
	Emergency Ward	27	14.4%
	Intensive Care Unit (ICU)	5	2.7%
	Outpatient Department (OPD)	3	1.6%

Knowledge regarding Palliative Care

While 129 (68.6%) participants correctly identified the definition of palliative care, lower affirmative scores were observed for specific clinical items. Overall, 38 (20.2%) participants demonstrated good knowledge, 56 (29.8%) moderate knowledge, and 94 (50.0%) poor knowledge.

Table 2. Knowledge Item Responses (N = 188)

Knowledge Item	Correct/Yes n (%)	Incorrect/No n (%)
Knows the formal definition of palliative care	129 (68.6%)	59 (31.4%)
Accumulation of losses renders burnout inevitable	86 (45.7%)	102 (54.3%)
Chronic pain manifestations differ from acute pain	98 (52.1%)	90 (47.9%)
Terminally ill patients have the right to choose DNR	97 (51.6%)	91 (48.4%)
Terminally ill patients should be encouraged to have hope	94 (50.0%)	94 (50.0%)
Palliative-care philosophy is compatible with aggressive treatment	96 (51.1%)	92 (48.9%)

Palliative care requires emotional detachment	93 (49.5%)	95 (50.5%)
Primary aim is relief of physical, emotional, social, or spiritual suffering	87 (46.3%)	101 (53.7%)
Drug addiction is a major problem with long-term morphine use	79 (42.0%)	109 (58.0%)
Placebos are appropriate for some types of pain	87 (46.3%)	101 (53.7%)
Overall Mean KAP Knowledge Score	**95 (50.3%)**	**93 (49.7%)**

Attitudes towards Palliative Care

Categorization of attitude responses revealed that 79 (42.0%) participants held a overall positive attitude, whereas 109 (58.0%) held a negative attitude toward palliative care.

Table 3. Attitude Item Responses (N = 188)

Attitude Item	Agree/Yes n (%)	Disagree/No n (%)	Uncertain n (%)
Palliative care is given only to dying patients	119 (63.3%)	25 (13.3%)	44 (23.4%)
Nurse should withdraw as patient nears death	78 (41.5%)	81 (43.1%)	29 (15.4%)
Care of chronically sick patients is worthwhile learning	62 (33.0%)	70 (37.2%)	56 (29.8%)
Time required to care for dying person would frustrate me	68 (36.2%)	76 (40.4%)	44 (23.4%)
Families should help dying member make best of remaining life	64 (34.0%)	53 (28.2%)	71 (37.8%)
Nurse should not talk about death with dying person	76 (40.4%)	56 (29.8%)	56 (29.8%)
Family nursing care should continue during grief/bereavement	90 (47.9%)	52 (27.7%)	46 (24.5%)
Would feel like running away when a person dies	67 (35.6%)	46 (24.5%)	75 (39.9%)
Confident to face family of terminally ill/dying patient	81 (43.1%)	45 (23.9%)	62 (33.0%)
Afraid to become friends with chronically sick/dying patients	84 (44.7%)	49 (26.1%)	55 (29.3%)

Practices related to Palliative Care

Assessment of clinical practice items resulted in 74 (39.4%) participants demonstrating good practices and 114 (60.6%) demonstrating poor self-reported practices.

Table 4. Practice Item Responses (N = 188)

Practice Item	Yes n (%)	No n (%)	Uncertain n (%)
Families need emotional support to accept behavior changes	104 (55.3%)	53 (28.2%)	31 (16.5%)
Nurse should impose personal views when addressing spiritual issues	49 (26.1%)	85 (45.2%)	54 (28.7%)
Terminally ill patients should not know their condition	83 (44.1%)	50 (26.6%)	55 (29.3%)
Terminally ill patients should not make decisions about physical care	66 (35.1%)	57 (30.3%)	65 (34.6%)
Family should be involved in care of dying patient as much as possible	73 (38.8%)	60 (31.9%)	55 (29.3%)

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Discussion

This study evaluated palliative care knowledge, attitudes, and practices among final-year undergraduate nursing students in Karachi. The findings indicate that half (50.0%) of the participants possessed poor knowledge, 58.0% demonstrated a negative attitude, and 60.6% exhibited poor clinical practices. These outcomes underscore a substantial gap between theoretical nursing training and effective palliative care preparation in Pakistan.

Although 68.6% of participants recognized the formal definition of palliative care, affirmative scores dropped significantly on specific clinical knowledge items, such as pain differentiation, opioid addiction misconceptions, and placebo administration. This disparity indicates that basic familiarity with term definitions does not translate into clinical competence.

Furthermore, the high proportion of negative attitudes (58.0%) reflects a lack of confidence and discomfort in managing end-of-life scenarios. Anxiety surrounding death, reluctance to discuss terminal prognoses, and emotional burden among nursing students highlight the need for structured psychosocial and communication training within the BSN curriculum. Incorporating clinical simulations, case-based discussions, reflective sessions, and clinical rotations in oncology and hospice units can bridge these gaps and promote positive attitudes and practices.

Limitations

This study relied on a cross-sectional design and non-probability convenience sampling, which limits generalizability across all nursing institutions in Pakistan. Self-reported questionnaires may also introduce social desirability bias. Future research should utilize stratified random sampling and longitudinal evaluations to monitor KAP progression across training years.

Conclusion

Final-year undergraduate nursing students in Karachi demonstrate inadequate knowledge, predominantly negative attitudes, and low practice scores regarding palliative care. Comprehensive curriculum revisions that integrate dedicated palliative care modules, communication skills training, and supervised clinical exposure are essential to equip future nurses with the competencies required for compassionate end-of-life care.

Declarations

Ethics Approval: Ethical approval was granted by the Institutional Review Committee (IRC) of Allied Institute of Nursing & Health Sciences, Karachi (Approval Ref: AINHS/IRC/2025/11-04). Written informed consent was obtained from all participants.

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Conflicts of Interest: The authors declare no conflicts of interest.

Author Contributions: SA, IA, and TH conceptualized and designed the study. MI, SK, SM, NDS, UM, MU, MTR, and AQ performed data collection and entry. SA analyzed the data and drafted the manuscript. All authors read and approved the final manuscript.

Data Availability: De-identified datasets used in this study are available from the corresponding author upon reasonable request.

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