

## EVALUATION FOR NURSES IN KAP ANALYSIS FOR PALLIATIVE CARE PATIENTS WITH HEART FAILURE FACTOR

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**Abstract:** Heart failure is a prevalent and debilitating condition, requiring effective palliative care to manage symptoms and improve quality of life in terminal stages. Nurses play a critical role in delivering this care, but their knowledge, attitudes, and practices can influence outcomes significantly. **Objective:** To evaluate the knowledge, attitudes, and practices of nurses working with palliative care patients with heart failure. **Methods:** A cross-sectional study was conducted in the Nursing Department of Nishtar Hospital, Multan from April 2023 to April 2024. A total of 100 nurses working in the ICU and Cardiology department with heart failure patients admitted for palliative care were included in the study. Data was collected through questionnaires. Knowledge was assessed by the 30-item Palliative Care Quiz for Nursing, attitude regarding death was evaluated by a 32-item Death Attitude Profile and practice was assessed by 6-item perceptions of preparedness and ability to care for the dying (PPACD) R-I scale. **Results:** The mean knowledge score was  $13.8 \pm 2.55$  with a satisfactory score in only 46% of participants. Only 29% were aware of symptom management in terminally ill patients. The mean attitude score was  $133.6 \pm 108.4$  and the mean practice score was  $16.2 \pm 5.1$ . No significant association between knowledge scores and previous palliative care training was noted ( $r=0.1$ ) but attitude scores were positively related to age and experience. The approach acceptance ( $r=0.292$ ) and neutral acceptance ( $r=0.339$ ) were significantly associated with practice. **Conclusion:** Nurses working in the palliative care unit possessed unsatisfactory knowledge, attitudes, and practices to manage patients with heart failure. Intervention programs and the inclusion of palliative care subjects in the curriculum can improve these results and avert the healthcare hazard.

**Keywords:** Knowledge, KAP, Nurses, Nursing, Palliative Care

### Introduction

Cardiovascular diseases are one of the leading causes of morbidity and mortality that significantly contribute to health expenditures (1, 2). Elderly patients with cardiovascular diseases often require palliative care to relieve additional pain and suffering by identifying and assessing it timely (3, 4). A majority of elderly patients admitted to palliative care for heart diseases are diagnosed with advanced heart failure as it has a high incidence in the old population (5).

Heart failure is a chronic condition with often poor prognosis, hence requires palliative care. However, palliative care is not mostly practiced for cardiac disorders so nurses working in palliative units possess limited knowledge and are unaware of most practices with such patients (6). This can be improved by frequent exposure to chronically ill patients to increase preparedness and promote healthy practices toward dying patients.

This study was conducted to evaluate the knowledge, attitudes, and practices of nurses working with palliative care patients with heart failure.

### Methodology

A cross-sectional study was conducted in the Nursing Department of Nishtar Hospital, Multan from April 2023 to April 2024. A total of 100 nurses working in the ICU and Cardiology department with heart failure patients admitted for palliative care were included in the study. All nurses provided their informed consent to become a part of the

study. Non-consenting participants were excluded. The ethical committee of the hospital approved the study.

Data was collected through four questionnaires. The first questionnaire inquired about sociodemographic data and job details. Secondly, knowledge was assessed by the 30-item Palliative Care Quiz for nursing which is commonly used to measure knowledge of nurses working with terminally ill patients in the palliative care unit. The reliability of the questionnaire was confirmed by a Cronbach's alpha of 0.7. Thirdly, attitude regarding death was evaluated by a 32-item Death Attitude Profile which was divided into five sections; fear of death, death avoidance, neutral, approach and escape acceptance. The reliability of the questionnaire was confirmed by a Cronbach's alpha of 0.88. Lastly, the practice was assessed by 6-item perceptions of preparedness and ability to care for the dying (PPACD) R-I scale which determined the communication skills, ability to manage symptoms, and competence. The reliability of the questionnaire was confirmed by a Cronbach's alpha of 0.9.

All data was analyzed by SPSS version 23. Descriptive analysis, ANOVA, t-test, and multi-regression analysis were done to evaluate data. A p-value of 0.05 was taken significantly.

### Results

A total of 100 nurses were included with a response rate of 100%. The majority of the nurses (90%) were female with a mean age of  $31.48 \pm 7.32$  years. 64 nurses (64%) had a

bachelor’s degree and 20 (20%) had a nursing diploma. The average duration of employment was 11.1 years. Only 10% of nurses studied or trained in palliative care. The sociodemographic details of participants are shown in Table I. The knowledge, attitude, and practice scores of participants are shown in Table II.

The mean knowledge score was  $13.8 \pm 2.55$  with a satisfactory score in only 46% of participants. Only 29% were aware of symptom management in terminally ill patients. However, nurses with master's or doctorate had a higher score than nurses with a diploma or bachelor's. The mean attitude score was  $133.6 \pm 108.4$  and the mean practice score was  $16.2 \pm 5.1$ .

No significant association between knowledge scores and previous palliative care training was noted ( $r=0.1$ ) but attitude scores were positively related to age and experience. The approach acceptance ( $r=0.292$ ) and neutral acceptance ( $r=0.339$ ) were significantly associated with practice. Table III shows the correlations between study variables. Multi-regression model showed 45% of total variance in practice variables ( $R^2= 0.51$ ,  $F=5.8$ ,  $p<0.001$ ). Approach acceptance ( $\beta=0.219$ ,  $p<0.028$ ) and neutral acceptance ( $\beta= -0.242$ ,  $p<0.021$ ).

**Table 1: Sociodemographic and employment characteristics**

Variables	N (%)
Mean age	31.48 ± 7.32
<b>Gender</b>	
Male	10 (10%)
Female	90 (90%)
<b>Qualification</b>	
Diploma	20 (20%)
Bachelors	64 (64%)
Masters or above	16 (16%)
<b>Department</b>	
Cardiac inpatient	55 (55%)
Cardiac ICU	45 (45%)
<b>Position</b>	
Staff Nurse	95 (95%)
Head nurse	5 (5%)
Mean experience	11.10 ± 15.09
Received palliative education or training	10 (10%)

**Table 2: KAP scores of participants**

Scores	Mean ± SD
Knowledge	13.8 ± 2.55
Attitude	133.6 ± 108.4
Practice	16.2 ± 5.1

**Table 3: Correlation between study variables**

	Knowledge	Fear of death	Death avoidance	Approach acceptance	Neutral acceptance	Escape acceptance	Practice
Knowledge							
Attitudes							
Fear of death	-0.271						
Death avoidance	0.133	0.170					
Approach acceptance	0.182	0.174	0.069				
Neutral acceptance	0.158	-0.263	-0.1	-0.018			
Escape acceptance	0.171	0.122	0.137	0.489	0.080		
Practice	0.1	0.062	0.133	0.292	0.339	0.053	0.581

**Discussion**

This study was conducted to assess the knowledge, attitudes, and practices of nurses working with palliative care patients with heart failure. The results show unsatisfactory KAP scores indicating an alarming situation for the palliative healthcare system (7, 8). However, studies have shown that KAP scores can be improved by training or attending educational workshops and courses. A study showed that introducing a mandatory pilot course on palliative care for terminally ill cancer patients significantly improved the knowledge and attitudes of the nurses which was retained at a later follow-up. The scores further improved by increasing the clinical experience to apply the theoretical knowledge (9).

In the present study, nurses had poor knowledge about palliative care as only 46% of participants showed satisfactory scores with a mean score of  $13.8 \pm 2.55$ . Less than half of nurses were aware of pain management, symptom management, and placebo treatments. Nurses with diploma or bachelor’s degrees only had lower scores than those with graduate degrees as courses about palliative care

are not elaborately taught in undergraduate studies. These results are similar to other studies (10, 11).

The attitudes of nurses were not favorable with a mean score of  $133.6 \pm 108.4$ . This result is contrary to other studies (12, 13). Attitudes were highly influenced by variables like fear of death, death avoidance, and difficulty in accepting death. Age and experience positively affected the attitude scores. Older nurses with more experience have clinically witnessed more deaths than young professionals so they are more deemed to act appropriately around a dying patient.

As indicated in the literature, practices were influenced by attitudes toward death and knowledge about the management of dying patients (14, 15). A positive attitude promoted nurses to prepare to cope with the death of the patients and comfort them in their suffering. Hospitals should promote a positive attitude towards death and help them cope with the loss of patients through emotional support and therapeutic measures. Approach acceptance and neutral acceptance were significantly associated with practice and the ability to cope with death.

Our findings call for the need to introduce a mandatory intervention program for palliative care nurses, especially in

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the cardiac unit. In addition, the courses about palliative care must be included in the undergraduate and diploma studies. A care program on a national level and additional protocols to standardize the interventions for chronically ill patients are desperately needed. Since, the prognosis of patients in the ICU, oncology, and cardiology departments is often poor and the mortality rate is high, nurses working in these departments should be taught palliative knowledge. Our study has some limitations. The sample size of our study was limited due to a single-centered study. Large multi-center studies are required to generate diverse results. In addition, we could not establish a direct association between knowledge and practice as a conceptual framework of the KAP model was used.

## Conclusion

Nurses working in the palliative care unit possessed unsatisfactory knowledge, attitudes, and practices to manage patients with heart failure. Intervention programs and the inclusion of palliative care subjects in the curriculum can improve these results and avert the healthcare hazard.

## Declarations

### Data Availability statement

All data generated or analyzed during the study are included in the manuscript.

### Ethics approval and consent to participate

Approved by the department Concerned. (IRBEC-TCHMM-0238/23)

### Consent for publication

Approved

### Funding

Not applicable

## Conflict of interest

The authors declared absence of conflict of interest.

## Author Contribution

### HAFSA SATTAR (Final Year Student)

Coordination of collaborative efforts.

Study Design, Review of Literature.

### MADIHA ZARIF (Final Year Student)

Conception of Study, Development of Research Methodology Design, Study Design, Review of manuscript, final approval of manuscript.

Conception of Study, Final approval of manuscript.

### NUZHAT SHER (Principal of Nursing)

Manuscript revisions, critical input.

Coordination of collaborative efforts.

Data acquisition, analysis.

Manuscript drafting.

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