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Nurses Knowledge, and Attitude of Palliative Care for Non-Cancer Patient at Public Hospitals in Sana'a City, Yemen.

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Abstract:

Background: A palliative nurse is required to have the right knowledge and attitudes as one of the important factors that influence the success of palliative care so that the patient is ready to accept the unwell physical condition even in at its worst. **Aims:** The study aimed to assess nurse's knowledge, and attitude of palliative care for non-cancer patient at Public Hospitals in Sana'a City, Yemen. **Patients and Methods:** The study aimed to assess nurse's knowledge, and attitude of palliative care for non-cancer patient at Public Hospitals in Sana'a City, Yemen. **Results:** The result showed that, 65.8% among ICU nurses had fair knowledge, and 60.6% were had negative attitude toward palliative care. There was a statistically significant differences between knowledge of nurses toward PC and experience with palliative care ($p=0.018$). There was a statistically significant differences between attitude of nurses toward PC and socio-demographic characteristics regarding to years' experience as nurse and experience with palliative care ($p= 0.018, 0.013$) receptively. **Conclusion:** The study highlighted that nurses' knowledge about palliative care is fair and showed a negative attitude toward palliative care.

Keywords: Knowledge, Attitude, Nurses, Palliative care, Sana'a, Yemen.

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Introduction

Palliative care is defined as care that provides relief from pain and other symptoms and supports quality of life for patients with serious advanced illness and their families ⁽¹⁾. Palliative care is a specialty that provides care for the relief of suffering throughout the course of a patient's serious, chronic illness. There is an increased need for palliative care due to the increasing number of people with chronic illness. There are 47.6 million people aged 65 years and older, and this number is predicted to increase to 72.8 million by 2030 ⁽²⁾. Palliative care for patients with NCDs is not widely available globally, with only 35% of countries reporting general availability in 50% or more of health-care facilities of palliative care in primary health care and 37% in community- or home-based care. The availability of palliative care in both settings is far more common in high-income countries (75%) than low-(10%) income countries. Similarly, the regions where countries fund palliative care have a corresponding higher likelihood of providing these services than those where funding is less likely to be available ⁽³⁾. The nurse is a key member of health team who typically has the greatest contact with the patient. This prolonged contact gives the nurse a unique opportunity to know the patient and the caregivers ⁽⁴⁾. More recently, palliative care has seen its goal expanded from a view of its intense care of patient who is close to death to patients who may live for many years with end-stage organ failure or cancer and aimed to relieve the pain, suffering. Access to palliative care has been recognized as the basic human right that should be provided for all human beings regardless of their disease type, income, and age. The rising of chronic non-communicable disease and increasing population aging are contributing for the global need of palliative care. However, in most of countries there is still a large unmet need for palliative care service ⁽⁵⁾.

The need for palliative care to provide effective and high-quality palliative care, it is necessary to integrate knowledge, skills, and favorable attitudes toward palliative care. Nurses who are knowledgeable, skillful and comfortable providing care could improve the quality of life and satisfaction of patients and their families in hospital settings. For this reason, in the United States, 'train-the-trainer' education programs, such as Education

on Palliative and of Life Care and End of Life Nursing Education Consortium, have provided essential care information to doctors and nurses working in clinical settings ⁽⁶⁾.

Aim of the study

The aim of the study is to assess nurses' knowledge, and attitude, of palliative care for non-cancer patients at public hospitals in Sana'a City-Yemen.

Patients and Methods

Study Design:

Descriptive cross-sectional study was conducted to assess nurses' knowledge, and attitude of palliative care for non-cancer patients at public hospital in Sana'a City-Yemen.

Setting of the Study:

The study was conducted in three public hospitals in Sana'a city (Al-Thawra Modern General Hospital, Republican Teaching Hospital Authority and Al-Kuwait University Hospital). All hospital provides primary, secondary, and tertiary health care and referral hospital to all Yemeni peoples.

Population of the Study:

Study population was made up of (260) of intensive care unit nurses in the general hospital in Sana'a city. It was performed to assess the palliative care among nurses for non-cancer patients in the intensive care unit.

Sample size calculation:

The required size was calculated using Epi info version 7.2.3.1 based on: Expected frequency 50%, Marge of error in 5%, Population size 260, Power 80 %. Therefore, the calculated final sample size was 155 of intensive care unit nurses.

Ethical Considerations:

Prior approval for this study was obtained carrying out this study from the ethical committee of the Faculty of Medical Sciences of Al-Razi University. A cover letter was sent to the principles of hospitals to obtain approval to conduct this study. The purpose of the study and its benefits were explained to the participants. The verbal consent was obtained from all nurses participating in this study. All nurses also have the right to refuse to participate or withdraw from the study.

Statistical analysis

Data processing, statistical analysis and graph drawing have been conducted using Statistical Package for Social Sciences software (SPSS, version 23) collected data were checked prior to computerized data entry and analysis. Data were

analyzed, quantitative variables through descriptive statistics frequency tables and pie chart are used for establishing the data. The independent t test, for

two groups, and one-way a nova was used to determine the relationship between variables.

Results

Table (1) show the sociodemographic characteristics of the ICU nurses. It clarified that 59.4% of nurses were males belonged age group 20-30 years 70.6%, with Mean ± SD 28.99 ± 5.35. More than half 52.3% of them were married. More

than two third of nurses had a diploma as an educational level 67.7%. The most of participants had 1-5 years' experience as nurse and experience with palliative care (58.2%,67.7%) respectively.

Table 1: Socio-demographic characteristics of ICU nurses

Socio-demographic characteristics	Frequency	Percent
Age group:		
• 20-30yrs	111	71.6
• 31-40yrs	41	26.5
• More than 40yrs	3	1.9
Mean± SD	28.99±5.35	
Sex:		
• Male	92	59.4
• Female	63	40.6
Education level:		
• Diploma	105	67.7
• Bachelor's degree	47	30.3
• Master's degree	3	1.9
Years' experience as nurse		
• 1-5yrs	91	58.7
• 6-10yrs	49	31.6
• More than 10yrs	15	9.7
Mean± SD	5.84±3.96	
Experience with palliative care		
• 1-5yrs	105	67.7
• 6-10yrs	39	25.2
• More than 10yrs	11	7.1
Mean± SD	4.81± 3.54	

Figure (1) noted that 61.3% of nurses did not get training course for palliative care, while 38.7% exciting training course.

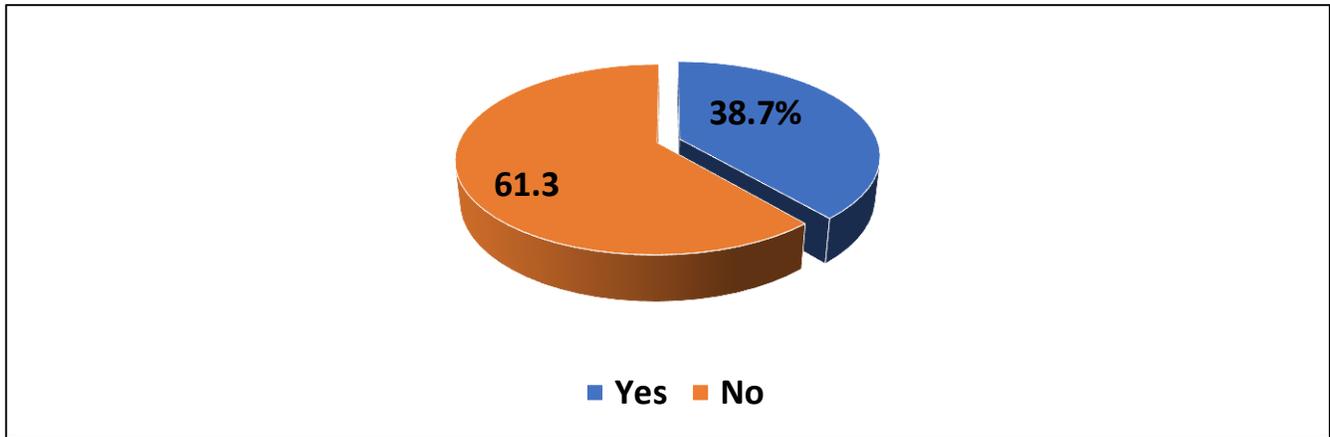


Figure 1: Training courses for intensive care nurses toward palliative care

Figure 2 noted that the 30.3% of nurses cared for patients with heart failure as chronic diseases, while 18.1% cared for patient with liver diseases.

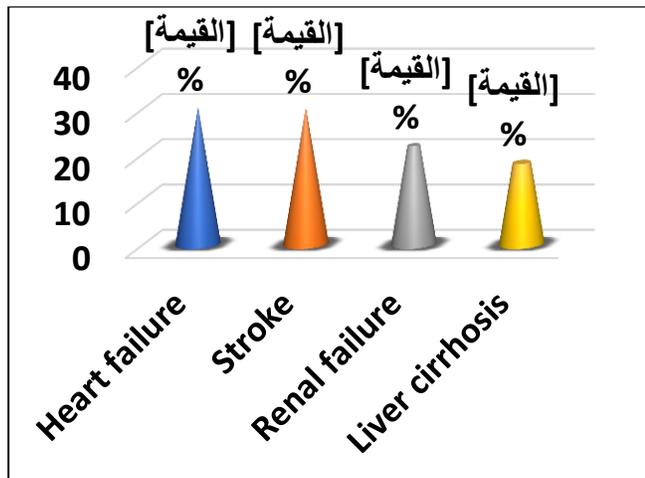


Figure 2: Main disease group that are ICU nurses cared.

Figure 3 showed that, 65.8% of ICU nurses had fair knowledge, while only 9% had good knowledge about palliative care, with Mean ± SD 11.48±3.142.

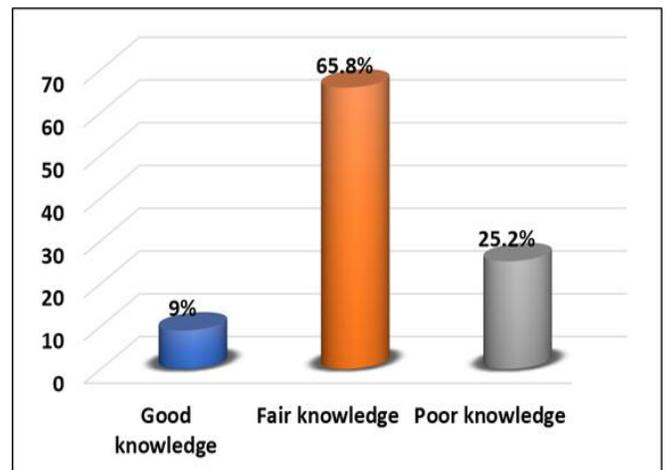


Figure 3: Level of knowledge among ICU nurses.

Figure 4 showed that, the most of ICU nurses 60.6% had negative attitude, while 39.4% had positive attitude about palliative care, with Mean ± SD 81.51 ± 19.71.

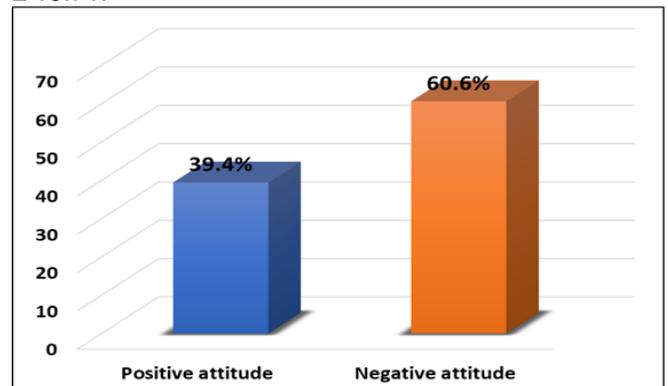


Figure 4: Level of attitude among ICU nurses.

Table (2) demonstrated that, there was not significantly association between socio-demographic characteristics and knowledge of nurses about palliative care were p value >0.05,

except in relation to experience with palliative care there was statistically significant differences were (p-value = 0.018). There was no significantly association between socio-demographic characteristics and attitude of nurses about palliative care were p value >0.05, except in relation

to years' experience as nurse and experience with palliative care there was statistically significant differences were (p-value = 0.018, 0.013) receptively.

Table 2: Relationships of knowledge, and attitude of palliative care among ICU nurses with demographic characteristic.

Demographic characteristic		No.	Knowledge	Attitude
			Mean ± SD	Mean ± SD
Age group	20-30yrs	111	11.68±3.15	82.50±19.81
	31-40yrs	41	11.17±2.91	78.93±19.59
	More than 40yrs	3	8.33±5.03	80.33±21.57
p-value			0.147	0.612
Sex	Male	92	11.61±3.24	81.59±19.26
	Female	63	11.29±3.01	81.40±20.50
p-value			0.531	0.953
Educational level	Diploma	91	11.57±3.24	82.53±19.84
	Bachelor's degree	49	11.49±2.73	80.40±19.59
	Master's degree	15	8.00±5.00	63.00±3.46
p-value			0.152	0.216
Years' experience as nurse	1-5yrs	105	11.26±2.94	78.08±17.71
	6-10yrs	47	12.02±3.60	88.22±22.02
	More than 10yrs	3	11.00±2.70	80.40±18.89
p-value			0.330	0.013
Experience with palliative care	1-5yrs	105	11.14±2.85	78.84±17.75
	6-10yrs	39	12.74±3.45	89.21±23.12
	More than 10yrs	11	10.18±3.66	79.73±19.04
p-value			0.018	0.018
Training courses toward palliative care	Yes	60	11.35±3.79	81.33±21.01
	No	95	11.56±2.67	81.62±18.96
p-value			0.690	0.930
Main disease group	Heart failure	47	11.04±3.34	81.64±21.35
	Stroke	46	11.15±2.92	75.89±14.93
	Renal failure	34	12.41±3.16	87.97±21.55
	Liver diseases	28	11.61±3.05	82.68±19.80
p-value			0.218	0.056

Discussion

Providing palliative care should be a key component of the healthcare system that all healthcare organizations should strive to improve. Despite the understanding of the benefits of palliative care, many people living with chronic life-threatening illnesses do not receive palliative care. The primary

challenges to apply palliative care are an overestimation of patient progress by health professionals and a low level of knowledge about palliative care (9).

Demographical characteristics of palliative care:

Our study shows that, 59.4% of nurses were males, belong to the age group 20-30 years 70.6%, with Mean± SD 28.99±5.35. This result in agreement

with the study was done by **Ayed et al.**, was 74% of nurses aged 20-30 years, and 68.8% were males⁽¹⁰⁾. More than half 52.3% were married its similar with the study conducted by⁽⁵⁾ 57.3% of the nurses were males. Moreover, **Putri Ria et al.**, shows that, the majority of respondents (73.3%) were within the age 20-30 years old⁽¹¹⁾. On the same line, Davis, who found that, the age group of the respondents range from 21-30 years of age 30.77%.⁽¹²⁾

Our result disagrees with **Zeru et al.**, who founded that, the majority of the participants were female⁽¹³⁾. Moreover, **Al Qadire** reported that, most of the participant were female (67%)⁽¹⁴⁾. On the line, **Hao et al.**, mentioned that, most of the participants were women, aged 18 to 30 years⁽¹⁵⁾.

As regarding educational level, more than two third of nurses had a diploma as an educational level, and 58.2% of nurses had 1-5 years as experience. This founding was nearly similar with the study conducting in Greek nurses, 54.7% had less than 10 years' experience⁽¹⁶⁾.

Furthermore, **Ayed et al.**, revealed that, the majority of nurses 56.2% had less than 5 years of nursing experience⁽¹⁰⁾. On the line, **Hao et al.**, mentioned that most participants had five or fewer years of experience⁽¹⁵⁾.

Furthermore, our result unaccepted with **Putri Ria et al.**, who revealed that, more female (95.5%) rather than male nurses⁽¹¹⁾. Educational qualifications recorded include most respondents (53.3%) have Bachelor of nursing degree. On the line, **Davis**, reported that, the highest degree held by the respondents was a bachelor's degree 46.15% and 42.31% the respondents have been practicing for 10 years or less⁽¹²⁾.

As regarding experience with palliative care, more than two third of nurses had 1-5 years' experience with palliative care. Our study agrees with **Putri Ria et al.**, who mentioned that majority of nurses had around 1-5 years working experiences⁽¹¹⁾. This finding was in disagreement with the findings of Ayed et al., showed that, more than half of the sample had obtained training course (59.4%)⁽¹⁰⁾.

As regard training course for palliative care, 61.3% of nurses did not get training course for palliative care. Our study accepted with **Zeru et al.**, who reported that, the majority of nurses were not trained about palliative care⁽¹³⁾. Furthermore, **Hao et al.**, founded that, approximately two-thirds of the participants had not previously received any palliative care training⁽¹⁵⁾. Moreover, **Putri Ria et al.**, revealed that respondents (51.1%) had never attended any palliative care training⁽¹¹⁾.

Level of knowledge about palliative care:

The current study showed that, 65.8% of ICU nurses had fair knowledge level toward PC, with Mean \pm SD 11.48 \pm 3.14. This result was similar

with a study conducted in Ethiopia they found that their fair knowledge was 76.2%⁽¹⁷⁾. On the other hand; a study done by **Etafa et al.**, representing inadequate level knowledge about palliative care⁽⁵⁾. Higher knowledge was in pain and symptom management during the last days of life, drowsiness associated with electrolyte imbalance may decrease the need for sedation, and pethidine is not an effective chronic pain reliever. While low knowledge of nurses was found in a chronic pain differs from acute pain, pain decreases due to anxiety or fatigue, and it is important for family members to stay at the patient's bedside until he dies. This result was an agreement with study conducted by **Etafa** were, both the highest and lowest correct answers be longed to the management of pain and other symptoms⁽⁵⁾. On same the line, **Putri Ria et al.**, who reported that, most of the nurses' knowledge was moderate level toward palliative care management (68.9%)⁽¹¹⁾.

Our study unaccepted with **Getie et al.**, who revealed that the pooled prevalence of nurses' knowledge about palliative care in Ethiopia was 45.57%. [9] Moreover, our finding not supported with **Ayed et al.**, showed that around half of the nurses (45.8%) had poor knowledge level of palliative care⁽¹⁰⁾. On the line, Bilal, reported that, nurses showed poor knowledge toward palliative care⁽¹⁸⁾. The results of this study disagreement with **Al Qadire** who mentioned that, students have insufficient knowledge about palliative care⁽¹⁴⁾.

Level of attitude about palliative care

The current study showed mostly of nurses had negative attitude 60.6%, with Mean \pm SD 81.51 \pm 19.71. Our result study accepted with **Putri Ria et al.**, who reported that, most of the nurses' attitude was negative toward palliative care management (55.6%)⁽¹¹⁾.

Our study unaccepted with **Ayed et al.**, revealed that the most respondents' attitudes levels towards palliative care were moderate attitude (56.2%)⁽¹⁰⁾. Moreover, our study was unsimilar to study conducted in Tigray (56.3%) of participants had a favorable attitude towards PC **Zeru et al.**, in Wollega zones;⁽¹³⁾ also, the nurses had positive attitudes towards palliative care⁽⁵⁾.

Higher positive attitude was found in statement of when a patient asks the nurse am I dying?" I think it is best to change the subject to something cheerful, and families should maintain as normal an environment as possible for their dying member with mean scores were 4.12 \pm 1.01, 4.04 \pm 0.90 respectively, while the participants had mostly negative attitude in relation to the length of time required to give nursing care to a dying person would frustrate me and I will be upset when the dying person I've been caring for gives up hope in

the improvement with mean scores were 2.25 ± 1.22 , 1.915 ± 1.01 respectively. This result was not similar with the study done by **Kim** they had higher attitude scores about communication with the dying person about impending death ⁽⁶⁾. On same line, **Bilal**, reported that, half of them showed a fair attitude toward palliative care ⁽¹⁸⁾.

As regarding relationships of knowledge, and attitude of palliative care among ICU nurses with demographic characteristic, there was statistical significantly differences between total mean knowledge of nurses and experience with palliative care (p-value = 0.018). The present study accepted with **Bilal**, who proved that there is a significant relation between knowledge and demographic data; p-value is 0.004 ⁽¹⁸⁾. On the line, **Getie et al.**, reported that, there is a significant association between experience on giving care for chronically ill patient and nurses' level of knowledge about palliative care ⁽⁹⁾.

There was no statistical significantly differences between total mean knowledge and sex, educational level nurses' experience and training of palliative care. Our study was in agreement with **Zeru et al.**, who founded that, a significant association between the knowledge towards PC of nurses and training on palliative care, however, age, gender, level of education, work experience and experience of caring for terminally ill patient did not ⁽¹³⁾. Moreover, Our result study agree with **Sato et al.**, reported there was no statistically significant relation between nurses' sex and knowledge palliative care ⁽¹⁹⁾. The present not supported with **Ayed et al.**, who revealed that, a highly statistically significant relation between nurses' qualification, nurses' experience, and training of palliative care

Conclusion

The most of nurses were male, belonged to most age group 20 to 30 years (71.6%), while the diploma degree was (67.7%) available qualification. Most of nurses had less than 5 years as general experience and experience with palliative care. More than half of nurses were don't had course training for palliative care. Concerning of nurse's knowledge, more than half (65.8%) of ICU nurses had fair knowledge. While 60.6% they had negative attitude toward PC.

There was a statistically significant differences between knowledge of nurses toward PC and experience with palliative care (p-value = 0.018). There was a statistically significant differences between attitude of nurses toward PC and socio-demographic characteristics regarding to years' experience as nurse and experience with palliative care (p-value = 0.018, 0.013) receptively.

with total mean of knowledge (0.020, 0.004, 0.015) respectively ⁽¹⁰⁾.

Our study was inconsistent with **Sato et al.**, who reported there was no statistically significant relation between clinical experience in a palliative care unit with and knowledge palliative care. There was statistically significant relation between age (years), and education with knowledge palliative care ⁽¹⁹⁾.

Our study shows a statistical significantly differences between total mean attitude of nurses with years' experience as nurse and experience with palliative care (p-value = 0.018, 0.013) receptively, however, age, gender, level of education, did not. Our result study supported with **Zeru et al.**, mentioned that, there were no statistically significant relationships between educational level and the attitude towards PC of nurses ⁽¹³⁾. However, unaccepted with **Zeru et al.**, reported that, a significant association between the attitude towards PC of nurses and socio-demographic variables towards age, and training towards PC. There were no statistically significant relationships between, work experience and experience in caring terminally ill patient ⁽¹³⁾.

There was not significantly association between chronic diseases group and knowledge of nurses about palliative care were p value >0.05. Our study disagrees with **Kim et al.**, who reported that, was significantly associated between the main disease group with total knowledge and attitude score (p = 0.029, 0.040) respectively ⁽⁶⁾. Moreover, our result unfortunate with **Getie et al.**, showed that, there is an association between the level of education, work experience, and training on palliative care and nurses' level of knowledge about palliative care ⁽⁹⁾.

Recommendations

1. Provide high-quality palliative care for non-cancer patients and their families, continuous and integrated palliative care education programs should be developed based on the nurses' palliative care knowledge, and attitude.
2. Palliative care should be specialised based on disease characteristics and coordinated professional disciplines.
3. Future studies should be considered to explore palliative care experiences in different types of health care professionals and different types of non-cancer patients.
4. Develop effective training programs for palliative care specialists caring for non-cancer patients.

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