

Nurses Knowledge Regarding Care of Dying Patients at Oncology Centers

Hussein Kadhim Hussein, * Sahar Adham Ali Ph.D**

ABSTRACT

Background; End-of-life care pertains to the healthcare and assistance that patients have when confronted with a life-threatening disease. Many medical personnel in Iraq are still uninformed about and undertrained in handling the EOL issue, despite the country's growing need for EOL treatment.

Objectives of the study were to assess the nurses' knowledge regarding care of dying patients at oncology centers, examine the relationships between nurse's attitude and demographic variables.

Methodology: A cross-sectional design was conducted on Iraqi nurses in Middle Euphrates at three centers (N =150). The results shows moderate mean score for nurses knowledge in these area. Analysis reveals it is evident that there are statistically significant differences among various education levels in terms of their knowledge ($p=0.000$) and a statistically significant distinction among nurses with varying years of experience in the oncology unit regarding their knowledge ($p = 0.000$).Therefore, end-of-life care education is necessary for nurses, and palliative care education on clinical skills and the shortcomings of effective care delivery need to receive greater attention. Include palliative education in the basic nursing curriculum as well.

Key words: Knowledge, Cancer, Dying, Palliative care, Nurses

INTRODUCTION

Patients with cancer experience great suffering, but their families may also suffer greatly. Frequently, informal family caregivers provide care for cancer patients at any stage of the disease. While receiving little formal training, these family caregivers still represent their loved one's interests. [1].

When it comes to the conversation about cancer and the difficulties it can create, family caregivers are an underrepresented group. The National Consensus Guidelines for Quality Palliative Care focuses on the importance of the patient and family as a "unit of care." [2].

Around the clock care is given by 74% of cancer caregivers, which can lead to tiredness, mental discomfort, and financial difficulties for the caregivers. Palliative care services also help families and caregivers by providing them with practical and emotional assistance, such financial planning, counseling, and education for caregivers. [3]. Palliative care encompasses end-of-life care, but these two types of care are not exactly the same [4].

End-of-life care(EOL) is a portion of palliative care directed towards the end of life; this care is defined as a "holistic approach that covers physical, emotional and spiritual dimensions of the illness, patients' and families' views regarding medical decision-making, including withholding or withdrawing of treatment, and the care of the dying" [5].

Professionals that are unfamiliar with palliative care may find it difficult to provide the patient with the care they need [6] .

The expertise of the medical staff is one of the key elements affecting the effective provision of palliative care. The most

important members of the palliative care team who deal with the medical, functional, social, and spiritual aspects of care are nurses. [7]

Lack of expertise and understanding regarding palliative care prevents nurses from providing the necessary skills to assess patients' needs, which prevents them from being allocated to palliative care units. To enhance patients' quality of life and alleviate their suffering, nurses can employ ongoing in-service education on end-of-life care (EOLC). [8]

Such training was necessary for nurses working in critical care units to overcome challenges in providing palliative care. [9] . One of these barriers is palliative care lack of knowledge [10].

Therefore the researchers want to know level of nurse's knowledge and what factors are associated with the nurses' knowledge and demographic variable.

MATERIALS AND METHODS

Quantitative study / descriptive design (A convenient non-probability) sample was selected about (150) nurses has been carried out for the period between 1st October 2022 to 8th April 2024. The study was conducted in Middle Euphrates Governorates, in independent oncology centers (Babylon Center for Oncology, Imam Hussein Center and National Hospital for Oncology and Hematology). The tool which used to facility data collection contains three parts (Demographical Data for Nurses, Employment characteristics for Nurses and the palliative care quiz for nursing (PCQN). The researcher conducted a pilot study in period 2nd July to 20th July 2023 to examine the reliability of the tool used in this study. Data collection was started by using tool which fill out by nurses.

* Adult Health Nursing, University of Babylon
College of Nursing, Iraq.
E-mail: huseain.ka@uowa.edu.iq

** Adult Health Nursing, University of Babylon, Iraq.

ETHICAL CONSIDERATION AND PERMISSION

Approval was obtained from the Research Ethics Committee at the University of Babylon / College of Nursing on 6/25/2023 after reviewing the research protocol, research tools, and the written consent of the participants, and it was completed.

Before data collection, a written informed consent form was signed by all included nurses. Besides, they were allowed to refuse to participate in the study without any consequences. The researcher emailed the main author to get an ethical permission to use (palliative care quiz for nursing (PCQN)).

RESULTS OF THE STUDY

According to socio-demographic data for study sample, the researcher found that the mean age was 27.18 years. The age group 25-29 years old accounted for the highest percentage. Regarding gender, approximately one-third of study participants were female nurses (62.0%), concerning education qualification, the majority held a diploma in nursing (61.3%). (Table 1-4).

Table 1. Distribution of Studied Sample related to their Socio-demographic Data

Socio-demographic data	Classification	No.	%
Age	20-24 years	31	20.7
	25-29 years	87	58.0
	30-34 years	21	14.0
	35-40 years	11	7.3
	<i>Mean age ± SD= 27.18 ± 3.73</i>		
Gender	Male	57	38.0
	Female	93	62.0
Educational qualification	Diploma in Nursing	92	61.3
	BSc. Nursing	55	36.7
	Master in Nursing	3	2.0

No. Number; %= Percentage

Table 2. Distribution of Studied Sample related to their Employment characteristics

Employment characteristics	Classification	No.	%
Years of experience in oncology center	1-3 years	95	63.3
	4-6 years	41	27.3
	> 6 years	14	9.3
	< 20 bed	132	88.0
No. of beds in your unit	20-30 bed	16	10.7
	>30 bed	2	1.3
No. of beds under your responsibility in unit	<5 bed	48	32.0
	5-10 bed	99	66.0
	>10 bed	3	2.0
Are you provided end-of-life care for dying patients	Yes	119	79.3
	No	31	20.7
Are you get educational program about end-of-life care	Yes	74	49.3
	No	76	50.7

No. Number; %= Percentage

Table 3. Overall Nurses Knowledge Regarding Care for Dying Patients

Scale	Min.	Max.	M	SD	Score	No.	%
Nurses Knowledge (20 Q)	23	53	35.13	7.13	Poor (20-33.33)	41	27.3
					Moderate (33.34-46.66)	103	68.7
					Good (46.67-60)	6	4.0
					Total	150	100.0

Min.: Minimum; Max.: Maximum, M: Mean for total score, SD=Standard Deviation for total score

Table 4. Differences in the Nurses Knowledge with demographical data

Variables	knowledge Ranks		Kruskal-Wallis H/ Mann-Whitney U	d.f	Asymp. Sig.	
Items	Sub- items	N	Mean Rank			
Age Groups	20-24 years	31	56.60	29.653	3	.000
	25-29 years	87	70.00			
	30-34 years	21	98.69			
	35-40 years	11	128.00			
Gender	Male	57	101.52	1167.500		.000
	Female	93	59.55			
Education level	Diploma	92	65.01	19.135	2	.000
	BSc.	55	89.15			
	Master	3	147.00			

Table 5. Differences in the Nurses Knowledge with employment characteristics

Variables	Knowledge Ranks		Kruskal-Wallis H/ Mann-Whitney U	d.f	Asymp. Sig.	
Items	Sub- items	N	Mean Rank			
Experiences	1-3 years	95	63.90	19.881	2	.000
	4-6 years	41	91.82			
	> 6 years	14	106.43			
Bed No. in oncology Unit	< 20 bed	132	77.31	2.214	2	.330
	>30 bed	2	77.25			
No. Bed under nurse Responsibility	<5 bed	48	75.24	.288	2	.866
	5-10 bed	99	76.02			
Provided End-of-life Care for Dying Patients	>10 bed	3	62.50	187.000		.000
	Yes	119	89.43			
Education sessions	No	31	22.03	1392.500		.000
	Yes	74	94.68			
	No	76	56.82			

The years of experience in the oncology unit, those with 1-3 years of experience constituted the majority at 63.3%. Regarding the number of beds in their units, the majority of nurses reported having less than 20 beds in their unit (88.0%). In terms of providing end-of-life care for dying patients, the majority of nurses had previously provided care for dying patients

(79.3%), Finally, approximately half of the study participants had not attended any education of sessions related to the care of dying patients (50.7%).

The findings reveal a range of responses among nurses in relation to their overall knowledge regarding care for dying patients, scoring between 23 and 53 on the assessment scale. The collective average score was calculated at 35.13 (SD= 7.13). According to the study's criteria, it becomes evident that a substantial proportion (68.7%) of nurses demonstrated a moderate knowledge in these area.

The Kruskal-Wallis analysis has revealed statistically significant differences among age groups with respect to nurses' knowledge and reveals statistically significant differences among various education levels. It is abundantly clear that there exist statistically significant disparities between male and female nurses in their knowledge.

The Kruskal-Wallis analysis reveals a statistically significant difference among nurses with varying years of experience in the oncology unit regarding their knowledge. The Mann-Whitney U analysis has unveiled significant findings within the study. It is evident that there are statistically significant differences between those who are provided care for dying patients or not in terms of their knowledge ($p= 0.000$).

DISCUSSION

1. Nurses' knowledge

The care of dying patients is a crucial aspect of nursing practice that requires a deep understanding of medical, psychological, and emotional aspects. In a recent study, nurses' knowledge and attitudes towards caring for dying patients were assessed using an assessment scale, revealing a wide range of responses among participants. This discussion will delve into the findings of this study, which highlight the diversity in nurses' knowledge levels and the implications for patient care.

The study's assessment scale revealed that nurses scored between 23 and 53, with a collective average score of 35.13 (SD=7.13). This wide range of scores suggests significant variability in nurses' knowledge regarding care for dying patients. Such variation is not uncommon in healthcare settings, as nurses come from diverse educational backgrounds and have varying levels of experience and exposure to end-of-life care situations. Given that EOLC and palliative care are not covered in Iraqi nursing curricula, the study's findings about nurses' moderate level of understanding are not shocking. This finding is consistent with a research conducted by Subih and colleagues to evaluate Jordanian nurses' understanding of end-of-life care (EOLC). Approximately 64% of survey participants believed they had intermediate expertise and could provide EOLC, according to study data [12].

The study finding agree with Morsy et al., 2014 when they conducted a study to assess Nurses' Knowledge and Practices

about Palliative Care among Cancer Patient in a University Hospital – Egypt. Their study revealed that the nurses had unsatisfactory knowledge level, with mean scores of 57.7% of $26.53 + SD= 613.28$ and there is need for continuing education for upgrading nurse' knowledge about palliative care. [13].

2. Socio-Demographic Characteristics of the Study Sample

The mean age of nurses involved in caring for dying patients is relatively young at 27.18 years, with a standard deviation of 3.73 years.

According to Alnajjar and others they utilized a descriptive cross-sectional design to study Knowledge and Attitudes Toward Cancer Pain Management Among Nurses at Oncology Units for Jordanian registered nurses they found participants' age ranged from 23 to 50 years ($M = 28.1$, $SD = 4.09$) similar results for our study. [14].

The gender distribution among participants shows that approximately two-thirds (62.0%) of nurses providing care for dying patients are female,

The present study agree with study of Admass and others when they found 62.3% of the oncology nurses were female while the minority of the study participants 37.7% was male [15]. Nurses with 1-3 years of experience constitute the majority at 63.3%, followed by those with 4-6 years at 27.3%, and those with more than 6 years of experience at 9.3%.

The present study agree with study of Admass and others when they found that the majority of oncology nurses have 1-3 years of experience in oncology unit with 52.2% while the minority of the study participants 9.4 % have more than 3 years of experience [15].

Approximately half of the study participants (50.7%) have not attended any education programs related to the care of dying patients

According to Ayed and others, they found in there study to assess The Nurses' Knowledge and Attitudes towards the Palliative Care in Palestine that majority of nurses (59.4%) received educational and training course about EOL while 40.6% do not receive any educational program to providing EOL care in oncology units [16].

3. Nursing knowledge related to age

There is a statistically significant differences among age groups with respect to nurses' knowledge. This result agree with Lange study also achieved similar results to the current study they found those older nurses and more experience caring for dying patients were more knowledgeable about concepts of pain management, spiritual support for patients, and assessment of stages of grief [17].

4. Nursing knowledge related to gender

The finding indicated that a statistically significant disparities between nurses gender in their knowledge. Male nurses had higher rank from female nurses.

This study's findings are consistent with another one that was carried out in Amman to evaluate nurses' attitudes, knowledge, and behaviors about palliative care given to cancer patients. The study's findings demonstrated that male nurses had greater levels of PC expertise.[18].

5. Nursing knowledge related to Educational level

The study finding indicated that there is a significant relationship between educational level and knowledge and another indication is that the master degree have highest rank between other categories. According to Ayed he found a relationship between education qualification and knowledge of nurses in palliative care. [15].

6. Nursing knowledge related to Years of Experience:

The finding of the study indicated that a statistically significant distinction among nurses with varying years of experience in the oncology unit regarding their knowledge ($p = 0.000$).

Moir and colleagues conducted that the level of palliative care, hospice care, and EOL care was affected by their years of service in intensive care, which leads to providing quality care for patients and their families. This service's effectiveness and long-term viability are contingent on healthcare provider education. [19].

7. Nursing knowledge related to Experience with End-of-Life Care:

The study finding reveal that are statistically significant differences between nurses who are provided car for dying patients and knowledge ($p= 0.000$),

Coffey and others, suggest that older nurses with longer durations of professional experience feel more confident about managing patients' symptoms and providing EOL care. Knowledgeable, highly self-competent, experienced nurse professionals can provide appropriate information to help terminally ill patients and their families make appropriate decisions. . [20].

8. Nursing knowledge related to Participation in Education Programs:

There are clear and statistically significant variations ($p= 0.000$), between nurses knowledge and participation in education sessions on caring for dying patients. The study finding reinforced by research by Ayed in Palestine which found a significant relationship between training of palliative care and nurses' knowledge of palliative care. [15].

CONCLUSION

Inadequate knowledge can hinder the provision of high-quality nursing care, potentially leading to nurses feeling

poorly prepared and stressed when caring for a person who needs PC and EOL care. The results of this study show that nurses in oncology centers have a moderate level of knowledge. This may be influenced by demographic factors and employments characteristics such as decrease years of experience and participation in educational program for nurses in oncology centers which may affect on quality of care providing for cancer patients.

THE STUDY LIMITATION

1. Some nurses refused to be involved in this study.
2. The area for data collection was very crowded.
3. Different working hours and days for some nurses.

Authorship Contribution: All authors share equal effort contribution towards (1) substantial contributions to conception and design, acquisition, analysis and interpretation of data; (2) drafting the article and revising it critically for important intellectual content; and (3) final approval of the manuscript version to be published. Yes.

Acknowledgments: The authors would like to express their appreciation and gratitude to the management and staff of the three participating Oncology Centers for their cooperation and facilitation of the study process. We would also like to thank all participating nurses for their time and cooperation.

Potential Conflicts of Interest: None

Competing Interest: None

Acceptance Date: 14-08-2024

REFERENCES

1. Silva, Jiselle. "Increasing Oncology Nurses Knowledge of Palliative Care and Trigger for Patients with Stage II and III Cancers: A Quality Improvement Project." (2021)†
2. Sherman DW. A review of the complex role of family caregivers as health team members and second-order patients. *Healthc.* 2019;7(2).
3. Sherman DW, Mcmillan SC. The physical health of patients with advanced pancreatic cancer and the psychological health of their family caregivers when newly enrolled in hospice. *J Hosp Palliat Nurs.* 2015;17(3).
4. Krau SD. The difference between palliative care and end of life care: more than semantics. *Nurs Clin North Am.* 2016;51(3):ix-x.
5. World Health Organization (WHO) (2018) https://www.who.int/health-topics/cancer#tab=tab_1
6. Harris P (2014). *Mosby's Dictionary of Medicine, Nursing and Health Professions-Australian & New Zealand Edition*-eBook, Elsevier Health Sciences.
7. Skår R. Knowledge use in nursing practice: The importance of practical understanding and personal involvement. *Nurse Educ Today* 2010;30:132-6.

8. Chan B. An Evaluation of the Influence of the Care (Compassion and Respect at the End-of-Life) Program on Registered Nurses' Knowledge and Comfort About End-of-Life Care and Care Delivery for Patients with Life-Limiting Illnesses: Azusa Pacific University; Feb, 2018.
9. Perrin KO, Kazanowski M. Overcoming barriers to palliative care consultation. *Crit Care Nurse*. 2015;35(5).
10. Beckstrand RL, Collette J, Callister L., *et al*. Oncology nurses' obstacles and supportive behaviors in end-of-life care: providing vital family care. *Oncol Nurs Forum*; 39(5):E398-406(2012).
11. Gray JR, Grove SK. Burns *et al*. the practice of nursing research : appraisal, synthesis, and generation of evidence. *Burn Grove's Pract Nurs Res Apprais Synth Gener Evid*. 2021;
12. Subih M, Al-Amer R, Malak MZ, *et al*. Knowledge of Critical Care Nurses about End-of-Life Care towards Terminal Illnesses: Levels and Correlating Factors. *Inq (United States)*. 2022;59.
13. Morsy WYM, Elfeky HA, Mohammed SE. Nurses ' Knowledge and Practices about Palliative Care among Cancer Patient in a University Hospital - Egypt. *Adv Life Sci Technol*. 2014;24.
14. Alnajar MK, Darawad MW, Alshahwan SS, *et al*. Knowledge and Attitudes Toward Cancer Pain Management Among Nurses at Oncology Units. *J Cancer Educ*. 2019;34(1).
15. Admass BA, Endalew NS, Tawuye HY, *et al* . Knowledge and attitude of ethiopian oncology nurses about cancer pain management: National survey. *Cancer Manag Res*. 2020;12. Ayed A, Sayej S, Harazneh L, Fashafsheh I, *et al*.. The nurses' knowledge and attitudes towards the palliative care. *Journal of Education and Practice* 2015;6:91-9.
16. Lange JW, Shea J, Grossman SC, *et al*. Validation of the end-of-life nursing education consortium knowledge assessment test: An abbreviated version. *J Hosp Palliat Nurs*. 2009;11(5).
17. Altarawneh WM, Masa'deh R, Hamaideh SH, *et al*. Nurses' knowledge, attitudes and practices towards palliative care provided to patients diagnosed with cancer. *PLoS One*. 2023;18(10 October).
18. Moir C, Roberts R, Martz K, Perry J, Tivis LJ. Communicating with patients and their families about palliative and end-of-life care: Comfort and educational needs of nurses. *Int J Palliat Nurs*. 2015;21(3).
19. Coffey A, McCarthy G, Weathers E, *et al*. Nurses' knowledge of advance directives and perceived confidence in end-of-life care: a cross-sectional study in five countries. *Int J Nurs Pract*. 2016;22(3).