Oncology Nurses' Knowledge and Attitude towards Palliative Care

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Abstract

Introduction: Palliative care (PC) is considered an integral component of comprehensive cancer care. Insufficient knowledge among nurses was one of the main obstacles to providing high-quality palliative care services. This study assessed oncology nurses' knowledge and attitude toward palliative care. **Method:** A cross-sectional study was conducted among 125 oncology nurses working at B.P. Koirala Memorial Cancer Hospital (BPKMCH). A simple random sampling technique was used. The self-administered questionnaire: Palliative Care Quiz for Nursing (PCQN) and "Frommelt Attitudes toward Care of the Dying Scale (FATCOD) were used to assess knowledge and attitude. The data were analyzed and interpreted using SPSS version 22. The p-value was set at <0.05. **Results**: The majority (59.2) of nurses had a poor level of knowledge with a mean PCQN score for was (9.208 ±2.052) out of 20. The lowest score in the psychological/spiritual subcategory. The majority (89.6%) of nurses had good attitudes, with a mean attitude score was (109.816 ± 9.788). There was a significant association found between the level of knowledge with educational status (P = 0.041), current working area (P = 0.017), and working experience (P = 0.008). Likewise, a significant association was also found between the level of attitude and current working area (P = 0.018). **Conclusion:** The majority of the nurses working at BPKMCH had poor levels of knowledge, whereas, most nurses had good attitudes toward PC. A significant association was found between the level of knowledge with educational status, current working area, and work experience.

***Keywords*:** Attitude; Knowledge; Nurses; Palliative care

Introduction

Palliative care (PC) is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness through the prevention and relief of suffering by employing early identification, impeccable assessment, and treatment of pain, other issues, physical, psychosocial, and spiritual".[1] PC is considered an integral component of comprehensive cancer care. [2] it needs to be provided at any time during cancer care.[3] The American Society for Clinical Oncology (ASCO) recommends the inclusion of PC with standard oncology care.

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[4.] The International Society of Nurses in Cancer Care (ISNCC) recommended that all cancer nurses should receive palliative care training for effective communication and proper symptom management.[5] Insufficient knowledge was considered one of the main obstacles to providing quality palliative care services.[6] Studies conducted in different countries have shown nurses working in cancer care have relatively poor knowledge of palliative care.[7-10] Nepalese clinical nurses had poor levels of knowledge but a fair attitude toward PC.[11] In Nepal, none of the previous studies assessed oncology nurses' knowledge and attitude toward PC. Therefore, this study aimed to assess the oncology nurses' knowledge and attitude toward PC. These findings might help to provide baseline information for the strategic plan to improve nurses 'knowledge and attitude on PC.

Methods

A cross-sectional study design was adopted to assess the nurses' knowledge and attitude towards palliative care. Ethical approval was obtained from the Institutional Research Committee of B.P. Koirala Memorial Cancer Hospital (BPKMCH). The study was conducted at BPKMCH, the 450-bed national referral comprehensive cancer center where the largest number of nurses are working.

The sample size was estimated by using http://www.raosoft.com/samplesize.html, where the total population size was 237, with a margin of error of 5% and a confidence level of 95%. The calculated sample size for the study was 157, and the actual sample was 125 nurses, with a response rate of 81.7%. The desired sample was taken from the computer-based random sampling technique. The study included all the nurses with at least six months of working experience and available during the study period and who gave voluntary consent for participation in the study. Whereas, nurses who were working in academia (nursing college) were excluded from the study.

A self-administered structured questionnaire was distributed to nurses randomly selected by computer-based random sampling technique. The researchers personally visited every nurse and requested to fill out the questionnaire. The instrument consisted of three parts: Part I: Socio-demographic information. Part II: Palliative Care Quiz for Nurses (PCQN) to assess nurses' knowledge of palliative care. Part III: Frommelt Attitudes toward Care of the Dying (FATCOD-B) scale to determine the attitude of nurses towards palliative care. Written informed consent was taken before the data collection by explaining the objective of the study. Anonymity and confidentiality were maintained during and after data collection. The data was collected over November 2022.

Knowledge of palliative care refers to basic palliative care knowledge, which was measured by using the Palliative Care Quiz for Nurses (PCQN), a validated tool developed by Ross et al. [12] which consisted of 20 items: four items on "philosophy and principle of palliative care," three items on "psychosocial and spiritual care", and thirteen items on "symptoms management".

Table 1. Nurses' Knowledge of Palliative Care Measured by PCQN (n=125)

No	PCQN Item	Responses		
	Philosophy of palliative care	**Yes**	**No**	**Don't Know**
1	PC is only appropriate in situations where there is evidence of a downward trajectory or deterioration.	55(44.0)	62(49.6)*	8 (6.4)
9	The provision of PC requires emotional detachment.	32 (25.6)	67(53.6)*	26(20.8)
12	The philosophy of PC is compatible with that of aggressive treatment.	33 (26.4)*	68(54.4)	24 (19.2)
17	The accumulation of losses makes burnout inevitable for those who work in PC.	91(72.8)	14(11.2)*	20(16.0)
	Psychosocial and spiritual care			
5	It is crucial for family members to remain at the bedside until death occurs.	102 (81.6)	18 (14.4)*	5 (4.0)
11	Men generally reconcile their grief more quickly than women.	72 (57.6)	26 (2 0.8)*	27(21.6)
19	The loss of a distant relationship is easier to resolve than the loss of one that is close or intimate.	101(80.8)	16 (12.8)*	8 (6.4)
	Symptoms management			
2	Morphine is the standard used to compare the analgesic effect of other opioids.	114 (91.1) *	10 (8.0)	1(0.8)
3	The extent of the disease determines the method of pain treatment.	89 (71.2)	29 (23.2)*	7 (5.6)
4	Adjuvant therapies are important for managing pain	107 (85.6)*	13 (10.4)	5 (4.0)
6	During the last days of life, drowsiness associated with electrolyte imbalance may decrease the need for sedation.	66 (52.8)*	40 (32)	19 (15.2)
7	Drug addiction is a major problem when morphine is used on a long-term basis for the management of pain.	86 (68.8)	36(28.8)*	3 (2.4)
8	Individuals who are taking opioids should also follow laxative treatment	118 (94.4)*	4 (3.2)	3 (2.4)
10	During the terminal stages of an illness, drugs that can cause respiratory depression are appropriate for the treatment of severe dyspnea.	53 (42.4)*	54 (43.2)	18 (14.4)
13	The use of placebos is appropriate in the treatment of some types of pain.	89 (71.2)	15 (12.0)*	21 (16.8)
14	High-dose codeine causes more nausea and vomiting than morphine.	92 (73.6)*	20 (16.0)	13 (10.4)
15	Suffering and physical pain are identical.	81 (64.8)	38 (30.4)*	6 (4.8)
16	Demerol (Pethidine) is not an effective analgesic for the control of chronic pain.	79 (63.2)*	44 (35.2)	2 (1.6)
18	Manifestations of chronic pain are different from those of acute pain.	111(88.8)*	10(8)	4 (3.2)
20	Pain threshold is lowered by fatigue or anxiety.	57(45.6)*	49 (39.2)	19 (15.2)

* Right answer

Each correct answer was given a score of 1, and incorrect or "don't know" answers received a score of 0. An overall score was calculated, which ranges from 0 to 20. The overall score was converted into a percentage, and the level of knowledge was categorized as poor (<50%), fair (50 - 75%), and good (>75%), as revealed in the literature by Elsaman. [13]

Attitudes toward palliative care refer to nurses' feelings, thoughts, and comfort levels toward palliative care. Nurses' attitude was measured using the FATCOD - B. scale, a validated questionnaire to assess nurses' attitude toward death and dying, and the scale consisted of a 5-point Likert scale. [14] Positive statement was scored as (1=Strongly Disagree, 2=Disagree, 3=Uncertain, 4=Agree, and 5=Strongly Agree) whereas, the score was reversed for negative statements. Statement numbers (3, 5, 6, 7, 8, 9, 11, 13, 14, 15, 17, 19, 26, 28, and 29) were negative statements. Of 30 items, 20 items were patient-related, and 10 items were family-related. An overall score was calculated with ranges from 30 to 150 and further converted into percentages. Levels of attitude were categorized as poor (<50%), fair (50 - 75%), and sound (>75%), as revealed in the literature by Elsaman. [13]

All the collected data were analyzed in Statistical Package for Social Science (SPSS) version 22. The data was analyzed and interpreted using descriptive and inferential statistics (frequency, mean, standard deviation, range, and chi-square). The p-value was set at <0.05 significance level.

Results

The descriptive findings related to demographic information showed that the mean age of the nurses was 31.81 years with a range of 22 to 53 years. The majority, 92 (73.6%) were bachelor's degree graduates. Out of 125 nurses, 58 (46.4%) were currently working in surgical oncology, followed by 32(25.6%) from medical oncology and only 5(4.0%) from the hospice and palliative care unit. Nearly half of 59 (47.2%) nurses had more than five years of working experience in BPKMCH and only 17(13.6%) nurses participated in palliative care training.

Almost half 62(49.6%) of the nurses stated that palliative care was appropriate only in situations where there is evidence of a downhill trajectory or deterioration. More than half of 67(53.6%) nurses agreed that the provision of palliative care requires emotional detachment. Out of 125 respondents, 26 (20.8 %) answered that men generally reconcile their grief more quickly than women. Likewise, only 18 (14.4%) agreed that family members must remain at the bedside until death occurs. A majority 114(91.1%) answered that morphine is the standard used to compare the analgesic effect of other opioids. The majority 107(85.6%) agreed that adjuvant therapies are important for managing pain. Whereas, only 29 (23.2%) answered that the extent of the disease determines the method of pain management. Likewise, 36 (28.8%) gave the correct answer that drug addiction is a major problem when morphine is used on a long-term basis for the management of pain. More than two-thirds 111(88.8%) of respondents correctly answered that manifestations of chronic pain are different from those of acute pain. **[Table 1]** In this study, the majority 74(59.2) of nurses had a poor level of knowledge,

49(39.2) had a fair level, and very few 2(1.6%) of nurses had a good level of knowledge of PC. The nurses' mean knowledge of palliative was 9.20±2.05 with a range of (5-18). Out of 125 nurses. Most 112(89.6%) of nurses had good attitudes, and 13(10.4 % had fair attitudes. No one had a poor attitude toward palliative care. The mean attitude toward palliative care was 109.81 ± 9.78 with a range of (87-144). **[Table 2]**

Table 2. Level of Nurses' Knowledge and Attitude on Palliative Care (n=125)

Characteristics	Level	N (%)	Mean ± SD	Range
Knowledge	Poor	74 (59.2)	9.20 ± 2.05	5-18
	Fair	49 (39.2)		
	Good	2 (1.6)		
Attitude	Fair	13 (10.4)	109.81 ± 9.78	87-144
	Good	112(89.6)		

Regarding the PCQN subcategory, a higher score was found in symptom management and the lowest score in the psychological/spiritual subcategory. In this study, the mean score for philosophy of palliative care was 1.40±0.91 with a range of (0-4), the mean score for psychological/spiritual, was 0.48 ± 0.76 with a range of (0-2), and in symptom management, the mean score was 7.32 ± 1.66 with a range of (3-12). **[Table 3]**

Regarding the FATCOD subcategory, the majority 117(93.6%) of nurses also had a good attitude toward family-related domains with a mean score of 39.208 ± 4.147 with a range of (29-50).

Table 3. Mean Score of Nurses' Knowledge based on PCQN (n=125)

PCQN Sub Category	Poor	Fair	Good	Mean SD	Range
Philosophy of PC (4)	72 (57.6)	37(29.6)	16(12.8)	1.40 ± 0.91	(0-4)
Psychosocial/ spiritual (3)	110 (88.0)	12 (9.6)	3 (2.4)	0.48 ± 0.76	(0-2)
Symptom management (13)	42 (33.6)	71(56.8)	12(9.6)	7.32 ±1.66	(3-12)

Similarly, more than two-thirds of 99(79.2%) had a good attitude toward the patient-related domain, with a mean score of 70.608 ± 7.256, with a range of (60 – 96). [**Table 4]**

Table 4. Mean Score of Nurses' Attitude based on FATCOD Questionnaire (n=125)

FATCOD Sub Category	Fair N/%	Good N/%	Mean SD	Range
Patient-related domain (20)	26(20.8)	99 (79.2)	70.60 ± 7.25	60 - 96
Family-related domain (10)	8(6.4)	117(93.6)	39.20 ± 4.14	29 – 50

There was a significant association found between the level of knowledge with educational status (P = 0.041), current working area (P = 0.017), and working experience (P = 0.008). Similarly, a significant association was also found between the level of attitude and the current working area (P = 0.018), whereas no significance was found with other demographic variables.

Discussion

The current study revealed that the majority 74 (59.2) of nurses had a poor level of knowledge, with a mean knowledge score of 9.20 ±2.05, which is consistent with the studies conducted among oncology nurses in various countries: in Southwest China, the mean knowledge was 10.77 ±2.03, in Mongolia, the median knowledge score was 8.0 out of 20 and in Southeast Iran, mean knowledge was 7.59±2.28.[7, 15, 16] Similarly, in Egypt, majority of (74.3%) of oncology nurses had an unsatisfactory level of knowledge on PC. [17] Likewise, this current study finding was also similar to the survey conducted on general clinical nurses in Nepal, where the majority (70.5%) of nurses have a poor level of knowledge with a mean knowledge score was 8.82 ± 1.95. [11] In addition, the finding of Manipur, India also consistent with the current findings which showed the majority (82.8%) of nurses had poor level of knowledge with the mean score was 7.6±2.8 on PCQN.[9]

Regarding the PCQN subcategory, a higher score was found in symptom management and the lowest score in the psychological/spiritual subcategory. The mean score in philosophy was 1.40±0.91, in psychological/spiritual, 0.48±0.76 (range=0-2), and in symptom management, 7.32±1.66 (range=3-12). These findings were similar to the study conducted among Nepalese clinical nurses' revealed the mean score of philosophy and principles was 1.38±0.98 (range=0-4), symptoms management 7.18±1.66 (range=3-11), and psychological aspects 1.25±0.50 (range=0-2). [11] A similar finding was also found in Mongolia where the mean percent of knowledge on philosophy & principle of palliative care was (37.7%) the management of pain and other symptoms management (43.9%) and psychosocial and spiritual care (25.5%.). [15] The lowest knowledge score on the psychosocial and spiritual was also found among the oncology nurses in Southeast Iran. [16]

As regards attitude toward PC, measured by "Frommelt Attitude toward the Care of the Dying Scale (FATCOD-B). In this study, the majority 112(89.6%) of nurses had good attitudes toward PC. These findings were consistent with the other previous studies [8. 11, 18] Whereas, the contrast findings found in Egypt, showed 62.9 % of nurses had a negative attitude [17,] and in Southeast Iran, nurses had moderately negative to neutral attitudes toward PC. [16]

There was a significant association found between the level of knowledge with educational status (P = 0.041), current working area (P = 0.017), and working experience (P = 0.008). Similarly, a significant association was found between the level of attitude and the current working area (P = 0.018), whereas no significance was found with other demographic variables. Similar findings were also found in the study conducted in Ethiopia. [8]

Conclusion

Most of the nurses working at B.P. Koirala Memorial Cancer Hospital had a poor level of knowledge but they had a good attitude toward palliative care. None of the nurses had a poor level of attitude toward PC. There was a significant association found

between the level of knowledge with educational status, current working area, and working experience. Training and regular in-service education for nurses can enhance their knowledge level.

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