Knowledge of Palliative Care among Nurses in a Tertiary Hospital in Manipur

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Abstract:
Background: With the rising burden of non-communicable diseases and ageing population, the need for palliative care (PC) will continue to grow. Nurses who are the primary caregivers to the hospitalized are expected to possess good knowledge about PC to provide quality services to those who need such care. Knowing the present level of knowledge can help in formulating strategies to address the deficits and thereby improve the delivery of care.
Objective:To determine the knowledge of palliative care among nurses in RIMS, Imphal, Manipur
Materials and methods:Across-sectional study was conducted in December, 2017 amongnurses working in the wards of Medicine, Surgery, Radiotherapy, and Physical Medicine and Rehabilitation (PMR) and intensive care units in RIMS, Imphal, Manipur. The self-administered Palliative care quiz for nursing (PCQN) was used to assess the nurses' knowledge of PC. Data were analyzed using IBM SPSS Statistics 21.0. A p-value of <0.05 was considered significant.
Results: Out of the 157 who returned completed questionnaires, 82.8% had poor knowledge and the mean PCQN score was 7.6±2.8. The mean age of the nurses having adequate knowledge was significantly higher than those having inadequate knowledge (41.30 ± 7.258 vs 37.73±6.087, p value 0.023).
Conclusion: Four out of every five nurses had inadequate knowledge. This emphasizes the need for PC education among the nurses. Further studies with larger sample size are also recommended.
Keywords: Palliative care, Knowledge, Nurses

I. Introduction

Noncommunicable diseases (NCDs) are the leading global cause of death and are responsible for 70% of deaths worldwide and 61% of deaths in India.[1]They also account for 43% of the disease burden worldwide and are expected to be responsible for 60% of the disease burden by 2020, with most of this increase accounted by developing countries.[2]The WHO recognizes Palliative care (PC) as an essential component in the comprehensive management of NCDs. PC aims to improve the quality of life of patients and their families facing the problem associated with life-threatening illness.It is achieved through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.[3]With the rising burden of non-communicable diseases and ageing populations, the need for PC will continue to grow. It is estimated that 40 million people are in need of PC each year, 78% of them live in low- and middle-income countries. However, only about 14% of people who need PC currently receive it. Lack of training and awareness of palliative care among health professionals is a major barrier to improving access.[4]

Nurses form a major part of the healthcare profession and are the primary caregivers to the hospitalized. They are frequently exposed to patients with life limiting or life threatening illness and have to inevitably provide care to the terminally ill patients. They also play an integral role in helping to meet the patients' and families' wishes. In order to provide quality PC services, they must possess good knowledge about it.

Despite its importance, PC is a new concept in Manipur. There is little literature regarding PC in Manipur. Previous studies conducted elsewhere showed that knowledge regarding PC is poor among nurses.[5-7]Knowing the present level of knowledge can help in formulating strategies to address the deficits and thereby

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improve the delivery of care. Thus, this study was conducted to assess the knowledge of palliative care among nurses and identify the factors associated with inadequate knowledge.

II. Material and Methods

Study Design: Cross sectional study

Study Location: The study was conducted at Regional Institute of Medical Sciences (RIMS), Imphal, which is a teaching hospital in Manipur.

Study Duration: December1 to December 21, 2017.

Sample size calculation: Sample size was not calculated as we intended to cover all the nurses in the selected wards.

Subjects & selection method: Thenurses working in the wards of Medicine, Surgery, Radiotherapy, Physical Medicine and Rehabilitation (PMR), Intensive Care Unit (ICU), Surgical Intensive Care Unit (SICU) and Intensive Coronary Care Unit (ICCU) at RIMS were included in the study. These departments were selected as these were most likely to encounter patients requiring palliative care.

Exclusion criteria:
1. Those who were absent during data collection
2. Those who refused to participate

Data collection:

The participants were approached in their respective departments. They were requested to fill in the questionnaires after explaining about the study and taking their consent. The questionnaire contained two parts; the first one on sociodemographic characteristics and the second was the Palliative Care Quiz for Nursing (PCQN). The PCQN is a validated questionnaire consisting of 20 items that measures nurses' knowledge of palliative care. The responses to the statements in the PCQN were: true, false, and I don't know.A correct answer was scored 1 while an incorrect or I don't know was scored 0, giving a maximum score of 20.[8]

A score equal to or less than mean obtainable score i.e. ≤10 on PCQN was considered inadequate knowledge while a score >10 was considered adequate knowledge.

Statistical analysis:

Data collected were sorted and checked for completeness and consistency.It was then analysed using IBM SPSS Statistics for Windows, version 21.Descriptive statistics like percentages, mean with standard deviation were used.Bivariate analysis was done using Chi-squared test, Fisher's exact test and t-test. A p-value of <0.05 was considered significant.

Ethical issues:

Approval was obtained from the Research Ethics Board, RIMS, Imphal. Informed verbal consent was taken from the participants before data collection.

III. Result

Out of the total 195 nurses, questionnaires were distributed to 190 (2 refused to participate and 3 were absent).160 questionnaires were returned andafter excluding 3 incomplete questionnaires, 157 were considered for analysis (effective response rate of 80.5%). All the participants were females withmean age of 38.34±6.42 years and mean nursing experience of 11.48±5.97 years. Majority of the participants were Hindus and had a GNM (diploma in nursing) qualification. More than 60% of the participants were working either in surgery or medicine wards. Less than 10% had training in palliative care.82.8% scored ≤10 on the PCQN indicating inadequate knowledge of PC (Table 1). The mean PCQN score was 7.65±2.84.

The responses of the participants are illustrated in Table 2. A higher percentage correctly answered statement 2 (73.2%) and statement 18 (68.8%). In five more statements (4, 6, 8, 14 and 20), more than 50% could give the correct answers. Meanwhile, seven statements (1, 3, 5, 7, 13, 17, 19 and 23) were correctly answered by fewer than 25%, including statement 7 "Drug addiction is a major problem when morphine is used on a long-term basis for the management of pain" where only 11.5% of the participants correctly answered it as false.

Those with inadequate knowledge had significantly lower mean age than those with adequate knowledge. There was no significant association with other variables (Table 3).

Table 1. Characteristics of the participants (N=157)

Characteristic	n(%)
Religion	
Hindu	118(75.2)
Christian	32(20.4)
Others	7(4.4)
Nursing qualification	
GNM (diploma)	111(70.7)
BSc. Nursing	44(28.0)
MSc. Nursing	2(1.3)
Ward	
Surgery	48(30.6)
Medicine	54(34.4)
Radiotherapy	11(7.0)
PMR	14(8.9)
Intensive care units	30(19.1)
Training in palliative care	
Yes	14(8.9)
No	143(91.1)
PCQN score	
>10	27(17.2)
≤10	130(82.8)

Table 2. Responses to the items of PCQN (N=157)

Question	True n(%)	False n(%)	Don't know n(%)
1. Palliative care is appropriate only in situations where there is evidence of a downhill trajectory or deterioration(false)	82(52.2)	32 (20.4)	43 (27.4)
2. Morphine is the standard used to compare the analgesic effect of other opioids(true)	115 (73.2)	27 (17.2)	15 (9.6)
3. The extent of the disease determines the method of pain treatment(false)	108 (68.8)	32 (20.4)	17 (10.8)
4. Adjuvant therapies are important in managing pain(true)	87 (55.4)	26 (16.6)	44 (28.0)
5. It is crucial for family members to remain at the bedside until death occurs(false)	109 (69.4)	31 (19.7)	17 (10.8)
6. During the last days of life, the drowsiness associated with electrolyte imbalance may decrease the need for sedation(true)	90(57.3)	35(22.3)	32(20.4)
7. Drug addiction is a major problem when morphine is used on a long-term basis for the management of pain (false)	123(78.3)	18(11.5)	16(10.2)
8. Individuals who are taking opioids should also follow a bowel regime (true)	90(57.3)	21(13.4)	46(29.3)
9. The provision of palliative care requires emotional detachment (false)	95(60.5)	44(28.0)	18(11.5)
10. During the terminal stages of an illness, drugs that can cause respiratory depression are appropriate for the treatment of severe dyspnoea(true)	75(47.8)	39(24.8)	43(27.4)
11. Men generally reconcile their grief more quickly than women(false)	86(54.8)	47(29.9)	24(15.3)
12. The philosophy of palliative care is compatible with that of aggressive treatment(true)	60(38.2)	63(40.1)	34(21.7)
13. The use of placebos is appropriate in the treatment of some types of pain(false)	74(47.1)	33(21.0)	50(31.8)
14. In high doses, codeine causes more nausea and vomiting than morphine(true)	83(52.9)	25(15.9)	49(31.2)
15. Suffering and physical pain are synonymous(false)	72(45.9)	52(33.1)	33(21.0)

16. Demerol(pethidine/meperidine) is not an effective analgesic in the control of chronic pain(true)	51(32.5)	38(24.2)	68(43.3)
17. The accumulation of losses renders burnout inevitable for those who seek work in palliative care(false)	65(41.4)	28(17.8)	64(40.8)
18. Manifestations of chronic pain are different from those of acute pain(true)	108(68.8)	28(17.8)	21(13.4)
19. The loss of a distant or contentious relationship is easier to resolve than the loss of one that is close or intimate(false)	91(58.0)	36(22.9)	30(19.1)
20. The pain threshold is lowered by anxiety or fatigue(true)	89(56.7)	45(28.7)	23(14.6)

Table 3. Association of knowledge with the characteristics of participants (N=157)

Characteristic	Knowledge		P value
	Inadequate, n (%)	Adequate, n (%)	
Age in years (mean ± SD)	37.73 ± 6.09	41.30 ± 7.26	0.023[*]
Experience in years (mean ±SD)	11.18 ± 5.70	12.93 ± 7.09	0.237[*]
Religion			
Hindu	99(83.9)	19(16.1)	
Christian	26(81.3)	6(18.8)	0.674[**]
Others	5(71.4)	2(28.6)	
Nursing qualification			
GNM	93(83.8)	18(16.2)	0.613[**]
BSc. Nursing/MSc. Nursing	37(80.4)	9(19.6)	
Ward			
Surgery	40(83.3)	8(16.7)	
Medicine	44(81.5)	10(18.5)	0.346[**]
Radiotherapy	8(72.7)	3(27.3)	
PMR	10(71.4)	4(28.6)	
Intensive care units	28(93.3)	2(6.7)	
Training in palliative care			
Yes	13(92.9)	1(7.1)	0.467[***]
No	117(81.8)	26(18.2)	

*t test, **chi square test, ***Fisher's exact test

IV. Discussion

The present study found out that majority (82.8%) of the nurses had inadequate knowledge about palliative care. The nursing curricula lack palliative care education content and as such the nurses have not been adequately trained on PC in their nursing schools. Besides, there are not any dedicated PC services in most of the hospitals, including the one where this study was conducted which may have led to little exposure to PC among the nurses. In short, PC remains a relatively new concept in Manipur. This can be an explanation for the inadequate knowledge found in our study.

The low level of knowledge of PC among nurses in our study is comparable to that reported by Sorifaet al[9]who observed that 79% of nurses in hospitals of Guwahati city, Assam had inadequate knowledge regarding PC. The study of Karkadaet al[10] also showed that 80% of nursing students had poor knowledge.The mean PCQN score in our study was 7.6±2.8 which is similar to the mean PCQN score of 7.6 ±2.28 reported by Iranmaneshet al[11] among oncology and intensive care units nurses.However, this is slightly lower than the mean scores of 8.3 - 8.9 reported by Al Qadire[12] among Jordanian nurses, by Maria et al[13]among Geek nurses and by Choi et al[14]among Korean nurses. Nevertheless, all these mean PCQN scores are low and indicate poor knowledge.

In our study, the nurses with adequate knowledge had higher mean age as compared to those with inadequate knowledge (41.30±7.26 vs 37.73±6.09) while years of experience did not have any significant association with knowledge. Choi et al[14] demonstrated that the PCQN score was positively correlated with nurses' age but not with years of total experience, which is in agreement with our findings. Meanwhile, Maria et al[13]found that both age and years of experience were associated with PCQN scores with older nurses(>40 years of age) and those with more years of experience (>10 years) scoring better than younger nurses and those with lesser years of experience.In contrast, neither age nor years of experience was associated with knowledge in the studies by Premet al[6] and Al Qadire et al.[12]

There was no significant association between the knowledge level and previous training on PC.This finding is in contradiction to previous reports,[15-17]including that of Kassa et al[15] who found that nurses who had

training on PC were nearly three times likely to have good knowledge than those who had no such training.Our results could have been influenced by the small number of nurses who received PC training (14/157).

The study was conducted in only some selected wards of one hospital. This might be a limitation; the findings might not be generalizable to nurses working in other wards or in other health care facilities.

V. Conclusion

The knowledge of palliative care was inadequate among the nurses with four out of every five nurses having inadequate knowledge. Older nurses were more likely to have adequate knowledge as compared to younger nurses. Inorder to improve the nurses' knowledge, palliative care should be incorporated as an integral part of nursing curriculum and adequate training programs/continuing education should be provided to the nurses. Further studies with larger sample size can be conducted to identify the gaps in knowledge.

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