

Knowledge and Attitude towards Palliative Care among Nurses Working in Public Hospitals of the South Gondar Zone, Northwest Ethiopia: Facility-based Cross-sectional Study

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Abstract

Introduction: The World Health Organization defined palliative care as “an approach that improves the quality of life of patients and their families facing problems associated with life-threatening diseases, through prevention and relief of suffering by means of early identification and impeccable evaluation and treatment of pain and other physical, psychosocial, and spiritual problems.” In Africa, including Ethiopia, due to limited development of palliative care, many patients have not received formal palliative care. However, there are very limited studies on palliative care in Ethiopia, especially in the study area.

Objective: The purpose of this study was to evaluate the knowledge and attitude toward palliative care among nurses working in Public Hospitals of the South Gondar Zone, northwest Ethiopia, 2020.

Methods: A facility-based cross-sectional study design was conducted. All nurses (402) working in all public hospitals in the South Gondar Zone was included in the study. The collected data were verified for completeness, edited, coded manually, entered into Epi Data version 4.2 and exported to SPSS version 22.00 for analysis. Binary logistic regression was used to analyze the outcome variables.

Results: This study revealed that 304 (78.55%) of the respondents had inadequate knowledge and 273 (70.54%) also had an unfavorable attitude towards palliative care. In general, the level of education of nurses and the year of work experience showed a significant association with the knowledge and attitude of nurses towards palliative care.

Conclusion: This study revealed that most nurses had inadequate knowledge and an unfavorable attitude toward palliative care. Therefore, all the concerned bodies, including nurses, must work together to improve the knowledge and attitude of nurses towards palliative care by providing sustainable training and involving the philosophy of palliative care in nursing education to expand the limited palliative care service in the area and the country at large. Knowledge, Attitude, Palliative Care and Nurses

Keywords: Knowledge • Attitude • Feeding • Palliative care • Nurses

Introduction

The World Health Organization (WHO) defined palliative care (PC) as ‘an approach that improves the quality of life (QOL) of patients and their families facing the problems associated with life-threatening diseases, through prevention and relief of suffering through early identification and impeccable assessment and treatment of pain and other physical, psychosocial and

spiritual” [1]. The philosophy of palliative care is based on a holistic approach to patients, which aims to relieve and control pain and other symptoms and improve the quality of care for patients and their families [2]. Despite the importance of PC in the treatment of non-communicable diseases (NCD), its limited development in Africa indicates that many patients have not received formal PC services [3]. Recently, there has been a tremendous growth in palliative care as an integral part of healthcare worldwide; but unfortunately not all countries have well-established palliative care services or recognize the importance of palliative care [1]. Nurses are key members of the health team who typically have the most contact time with the patient and participate in related decision-making processes. This prolonged contact gives the nurse the unique opportunity to know the patients and their caregivers in order to evaluate in depth what is happening and what is important to the patients, and to help them cope with the effects of advancing disease [4]. Palliative care includes the time range from the onset and progression of chronic disease, through the terminal stages of the disease and until the end of life [5]. The ultimate goal of PC is to improve the quality of life of both the patient and the family, regardless of diagnosis [6]. Palliative care can be delivered in a variety of settings including institutions such as hospitals, inpatient hospice, and home care for older people with advanced diseases [7]. Advances in palliative

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care have not yet been effectively integrated into standard clinical practice effectively [1].

General objective

Assess knowledge and attitude toward palliative care among nurses working in public hospitals in the South Gondar Zone, northwest Ethiopia, 2020

Specific objectives

- To determine the level of knowledge of nurses working in South Gondar zone, northwest Ethiopia, 2020.
- To determine the attitude of nurses towards PC working in Public Hospitals in the South Gondar Zone, northwest Ethiopia, 2020
- To identify factors associated with knowledge and attitude towards palliative care among Nurses working in public hospitals in the South Gondar Zone, northwest Ethiopia, 2020.

Study design

A facility-based cross-sectional study design was conducted among nurses working in public hospitals in the South Gondar Zone public hospitals, Northwest Ethiopia from December 01- 21/2020.

Study population

All nurses working in public hospitals in the South Gondar Zone public hospitals

Inclusion and exclusion criteria

All nurses working in public hospitals in the South Gondar Zone public hospitals at the time of data collection period were included in the study. Nurses who were on sick leave, maternity leave, annual leave, and training at the time of data collection period were excluded from the study.

Methodology

Sample size determination

The sample size was calculated using the proportion of a single population in a 95% confidence interval, with a 5% error margin, and by assuming the level of attitude (56.3%) [5]. Based on this assumption using a single population proportion formula, the actual sample size (n) for the study was:

$n = (Z\alpha/2)^2 P(1-P)/d^2$ The calculated sample size for this was (378+10%=416). But, since the source population (402) was less than the calculated sample size (416), we have taken the entire source population (402) as the sample size for this study.

Dependent variables

- Knowledge of nurses towards palliative care
- Attitude of nurses towards palliative care and

Independent variables

Socio demographic factors: sex, age, marital status, level of education, salary, and work experience in years.

Environmental factors: Working Department/Unit, Training, and Support by the Facility

Operational definitions

Knowledge: Nurses who have scored <75% of the total score of the Palliative Care Quiz for Nursing (PCQN) scale have adequate knowledge; while those nurses who have scored <75% of the PCQN scale have inadequate knowledge [8].

Attitude: Nurses who have scored <50% of the total score of the from melt attitude toward the care of the dying (FATCOD) scale have a favourable attitude; while those nurses who have scored <50% of the total score of the FATCOD Scale have unfavourable attitude [8].

Data collection tool and procedures

A structured and pre-tested self-administered questionnaire was used to collect data. The questionnaire was adapted using the Palliative Care Quiz for Nursing (PCQN) for knowledge and From melt's Attitude Toward Care of the Dying (FATCOD) scale for attitude and modified so as to make it fit the context of Ethiopia; and by reviewing different literatures [3,5,7-13].

The questionnaire was prepared in English language; it contains socio demographic, environmental factors, and knowledge and attitude related questions from nurses.

Before data collection, investigators gave two days of training to data collectors and prior to providing the questionnaire, data collectors also informed nurses about the goals/purposes, risks and possible benefits of the study, the right and refusal to participate in the study and the collected information will remain confidential.

After all, those nurses who were willing and signed the voluntary consent form were asked to fill out the questionnaire.

Data quality control, processing, and analysis

Five per cent of the questionnaires were pre-tested at Addisalem district hospital, Bahir Dar to assess the reliability, clarity, sequence, consistency, understand ability, and the total time that it would take to complete the questionnaire before the actual data collection. Then the necessary comments and feedbacks were incorporated into the final tool to improve its quality. Trained diploma nurses were involved for the data collection process and the investigators were closely involved in supervision. Two days of training was given to data collectors on the objective of the study, the data collection tool, methods of data collection, the completeness of the data collection tool and how to maintain confidentiality. Proper coding and categorization of data was maintained for the quality of the data to be analysed. The collected data were checked for completeness, cleaned, edited, coded manually and entered into Epi data version 4.2 to minimize logical errors and design skipping patterns. The data was then exported to SPSS window version 22 for analysis. Double data entry was performed for validity and compared to the original data. Simple frequencies and cross-tabulation were done for missing values and variables. Descriptive analysis was performed by computing proportions and summary statistics. Then, the information was presented by using simple frequencies, tables, and figures. Binary logistic regression was used to analyse the outcome variable. Bivariate and multivariate analysis was performed to see the association between each outcome variable and the independent variable. The assumptions for binary logistic regression were checked. The goodness-of-fit was tested by Hosmer-Lemeshow statistic and Omnibus tests. All variables with $P < 0.25$ in the bivariate analysis were included in the final model of the multivariate analysis to control all possible confounders and the variables were selected by the enter method. The directions and strengths of the statistical association were measured by odds ratio with 95% CI. Adjusted odds ratios along with 95% CI were estimated to identify factors associated with knowledge and attitude toward palliative care by using multivariate analysis in logistic regression. In this study, the P -value < 0.05 was considered statistically significant.

Ethical considerations

Ethical clearance was obtained from Debre Tabor University, College of Health Sciences, and institutional review board. All study participants were informed about the purpose of the study, their right to refuse, and written and signed voluntary consent was obtained from all study participants prior to data collection. The participants were told that the information obtained would be treated with complete confidentiality and would not cause any harm to them.

Results

Of the total of 402 respondents, 387 of them were included in the final analysis, giving a response rate of 96.27%. Socio demographic-related characteristics Of the total of the respondents, 216 (55.81%) were women and 321 (82.95%) were between the ages of 20-30 with a mean \pm SD of age 28.50 \pm 3.59 years ranging from 24 to 46 years. Two hundred twenty-five (58.14%) were single, 242 (62.53%) were also BSc nurses. On the other hand, 220

(56.85%) have worked less than 5 years with a mean ± SD work experience of 5.25 ± 3.28 years (Table 1).

Characteristics related to the working environment

Of the total of the respondents, 151 (39.01%) were from Debre Tabor Referral Hospital and 116 (29.97%) worked in medical wards. On the other hand, none of the respondents received palliative care training (Table 2).

The level of knowledge and attitude of nurses towards palliative care

Of the total of the respondents, only 83 (21.4%) had good knowledge about PC and 114 (21.46%) also had a favourable attitude towards PC (Table 3).

Nurses' knowledge towards palliative care and related characteristics: Forty-eight (22.22%) of the nurses had adequate knowledge and of the nurses who were 41-50 years old, 3 (37.5%) also had adequate knowledge of PC. On the other hand, of nurses who had a B.Sc. degree, 66 (27.27%) and of nurses with 16-20 years of work experience, 7 (63.64%) had adequate knowledge about palliative care.

Furthermore, of nurses who had a favourable attitude towards PC, 39 (34.11%) had adequate knowledge about PC (Table 4).

Table 1. Socio demographic characteristics of the respondents in Public Hospitals of the South Gondar Zone, Northwest Ethiopia, 2020 (n=387).

Variables	Category	Frequency	Percentage (%)
Sex	Male	171	44.19
	Female	216	55.81
Age	20-30	321	82.95
	31-40	58	14.98
	41-50	8	2.07
Marital status	Single	143	36.95
	Married	225	58.14
	Divorced	12	3.1
	Widowed	7	1.81
Educational Level	Diploma	145	37.47
	BSc	242	62.53
Year of work Experience	<5	220	56.85
	44839	130	33.59
	42309	26	6.72
	16-20	11	2.84

Table 2. Characteristics related to the working environment of the respondents in the public hospitals in the South Gondar Zone, Northwest Ethiopia, 2020 (n=387).

Variables	Category	Frequency	Percentage (%)
Working Facility	DTRH	151	39.01
	Addis Zemen PH	39	10.08
	Ebnat PH	32	8.27
	Mekane-Eyesus PH	35	9.04
	Andabet PH	34	8.79
	Wogeda PH	31	8.01
	Nefas Mewcha PH	35	9.04
	Dr. Ambachew Mekonnen PH	30	7.76
Working Unit	Medical ward	116	29.97
	Surgical ward	92	23.77
	Pediatric ward	53	13.7
	Emergency ODD	45	11.63
	Cold OPD	34	8.79
	ICU	32	8.27
	Others	15	3.87
Did you get palliative care training?	Yes	0	0
	No	387	100

Nurses' attitude towards palliative care and related characteristics: Of the total of women who responded, 65 (30.09%) had a favorable attitude towards P; and of nurses with 16-20 years of work experience, 8 (72.73%) also had a favorable attitude towards palliative care (Table 5). The association of independent variables and nurses' knowledge toward palliative care Nurses who had a Bachelor's degree were 2.6 times more likely to have adequate knowledge of PC than nurses who had a diploma (AOR = 2.61,95% CI: 1.39,4.89). On the other hand, nurses who had 16-20 years of work experience were 5.9 times more likely to have adequate knowledge about PC compared to nurses who had less than 5 years of work experience (AOR=5.86,95%CI:1.27,26.92) (Table 6).

The association of independent variables and nurses' attitude toward palliative care: Nurses who had a Bachelor's degree were 2.2 times more likely to have a favorable attitude toward PC than nurses who had a diploma (AOR=2.21,95% CI: 1.28,3.82). On the other hand, nurses who had 11-15 years of work experience were 7.4 times more likely to have a favorable attitude toward PC than nurses who had less than 5 years of work experience (AOR=7.38,95%CI: 2.74,19.83); and those nurses who had 16-20 years of work experience were also 7.7 times more likely to have a favorable attitude toward PC than nurses who had less than 5 years of work experience (AOR=7.65,95%CI:1.65,35.40) (Table 7).

Table 3. Nurses' knowledge, attitude, and practice-related characteristics of the respondents in the public hospitals in the South Gondar Zone, Northwest Ethiopia, 2020 (n=387).

Variables	Category	Frequency	Percentage (%)
Nurses' knowledge about PC	Adequate knowledge	83	21.45
	Inadequate knowledge	304	78.55
Nurses' attitude towards PC	Favorable attitude	114	29.46
	Unfavorable attitude	273	70.54

Table 4. Distributions of nurses' knowledge about palliative care in public hospitals in the South Gondar Zone, Northwest Ethiopia, 2020 (n=387).

Variables	Categories	Nurses' Knowledge	
		Adequate Knowledge (%)	Inadequate Knowledge (%)
Sex	Male	35 (20.47)	136 (79.53)
	Female	48 (22.22)	168 (77.78)
Age	20-30	68 (21.18)	253 (78.82)
	31-40	12 (20.69)	46 (79.31)
	41-50	3 (37.50)	5 (62.50)
Marital status	Single	31 (21.68)	112 (78.32)
	Married	49 (21.78)	176 (78.22)
	Divorced	2 (16.67)	10 (83.33)
	Widowed	1 (14.29)	6 (85.71)
Educational Level	Diploma	17 (11.72)	128 (88.28)
	BSc	66 (27.27)	176 (72.73)
Year of work Experience	<5	37 (16.82)	183 (83.18)
	44839	30 (23.08)	100 (76.92)
	42309	9 (34.62)	17 (65.38)
	16-20	7 (63.64)	4 (36.36)
Working Unit	Medical ward	28 (24.14)	88 (75.86)
	Surgical ward	17 (18.48)	75 (81.52)
	Pediatric ward	10 (18.87)	43 (81.13)
	Emergency ODD	11 (24.44)	34 (75.56)
	Cold OPD	5 (14.71)	29 (85.29)
	ICU	8 (28.13)	24 (71.87)
	Others	3 (20.0)	12 (80.0)
Nurses' attitude towards PC	Favorable attitude	39 (34.21)	75 (65.79)
	Unfavorable attitude	44 (16.12)	229 (83.88)

Table 5. Distributions of nurses' attitude towards palliative care in public hospitals in the South Gondar Zone, Northwest Ethiopia, 2020 (n=387).

Variables	Categories	Nurses' Attitude Towards PC	
		Favorable Attitude (%)	Unfavorable ATTITUDE (%)
Sex	Male	49 (28.65)	122 (71.35)
	Female	65 (30.09)	151 (69.91)
Age	20-30	92 (28.66)	229 (71.34)
	31-40	19 (32.76)	39 (67.24)
	41-50	3 (37.50)	5 (62.50)
Marital status	Single	42 (29.37)	101 (70.63)
	Married	68 (30.22)	157 (69.78)
	Divorced	3 (25.0)	9 (75.0)
	Widowed	1 (14.29)	6 (85.71)
Educational Level	Diploma	29 (20.0)	116 (80.0)
	BSc	85 (35.12)	157 (64.88)
Year of work Experience	<5	45 (20.45)	175 (79.55)
	44839	43 (33.08)	87 (66.92)
	42309	18 (69.23)	8 (30.77)
	16-20	8 (72.73)	3 (27.27)
Working Unit	Medical ward	39 (33.62)	77 (66.38)
	Surgical ward	25 (27.17)	67 (72.83)
	Pediatric ward	13 (24.53)	40 (75.47)
	Emergency ODD	15 (33.33)	30 (66.67)
	Cold OPD	7 (20.59)	27 (79.41)
	ICU	13 (40.62)	19 (59.38)
	Others	2 (13.33)	13 (86.67)
Nurses' knowledge towards PC	Adequate knowledge	39 (46.99)	44 (53.01)
	Inadequate knowledge	75 (24.67)	229 (75.33)

Table 6. The association of independent variables and the knowledge of nurses about PC in public hospitals in the South Gondar Zone, Northwest Ethiopia, 2020 (n=387).

Variables	Categories	Nurses' Knowledge		COR (95%CI)	AOR (95%CI)	P-value
		Adequate Knowledge	Inadequate Knowledge			
Nurses' attitude towards PC	Favorable attitude	39 (46.99)	75 (24.67)	2.71 (1.64, 4.48)	1.63 (0.91, 2.89)	0.099
	Unfavorable attitude	44 (53.01)	229 (75.33)	1	1	
Educational Level	Diploma	17 (20.48)	128 (42.11)	1	1	
	BSc	66 (79.52)	176 (57.89)	2.82 (1.58, 5.04)	2.61 (1.39, 4.89)	0.003*
Year of work Experience	<5	37 (44.58)	183 (60.20)	1	1	
	44839	30 (36.14)	100 (32.89)	1.5 (0.87, 2.55)	1.10 (0.61, 1.97)	0.754
	42309	9 (10.84)	17 (5.59)	2.62 (1.08, 6.32)	1.35 (0.46, 3.95)	0.582
	16-20	7 (8.44)	4 (1.32)	8.66 (2.41, 31.08)	5.86 (1.27, 26.92)	0.023*

Table 7. Association of independent variables and nurses' attitude toward PC in public hospitals in the South Gondar Zone, Northwest Ethiopia, 2020 (n=387).

Variables	Categories	Nurses' Attitude		COR (95%CI)	AOR (95%CI)	P-value
		Favorable Attitude	Unfavorable Attitude			
Nurses' knowledge towards PC	Adequate knowledge	39 (34.21)	44 (16.12)	2.71 (1.64, 4.48)	1.65 (0.93, 2.92)	0.087
	Inadequate knowledge	75 (65.79)	229 (83.88)	1	1	
Educational Level	Diploma	29 (25.44)	116 (42.49)	1	1	
	BSc	85 (74.56)	157 (57.51)	2.17 (1.33, 3.52)	2.21 (1.28, 3.82)	0.005*
Year of work Experience	<5	45 (39.47)	175 (64.10)	1	1	
	44839	43 (37.72)	87 (31.87)	1.92 (1.18, 3.14)	1.59 (0.95, 2.70)	0.079
	42309	18 (15.79)	8 (2.93)	8.75 (3.58, 21.41)	7.38 (2.74, 19.83)	0.0001*
	16-20	8 (7.02)	3 (1.10)	10.37 (2.64, 40.68)	7.65 (1.65, 35.40)	0.009*

Discussion

The finding of this study revealed that 304 (78.55%) of the respondents had inadequate knowledge about PC, which is higher than a study conducted in referral hospitals in the Amhara region, northeast Ethiopia (61.0%), Addis Ababa, Ethiopia (63.6%), ShireEndesilasie, Tigray, Ethiopia (73.8%), Palestine (45.8%) and Saudi Arabia (38%). [5,6,12,13]. This variation might be due to the

lack of palliative care training in the area, and since most hospitals are primary hospitals with limited health care services for patients with life-threatening diseases in need of PC, nurses have less chance to be aware and develop knowledge about palliative care.

This study showed that the level of education and the year of work experience of nurses showed a significant association with the knowledge of nurses about PC at $P < 0.05$ which is consistent with studies conducted

in hospitals of referrals from Addis Ababa, Ethiopia and the Amhara region, Northwest Ethiopia, which reported that the level of education and work experience showed a significant association with the knowledge of nurses about [9,13]. It might be due to the fact that when the educational level and years of work experience increase, the tendency to learn about advanced diseases and getting patients with these life-threatening diseases in need of PC also increases; as result, knowledge about PC has the chance to increase. However, this finding showed that 114 (24.96%) of the respondents had a favorable attitude towards palliative care, which is much lower than the studies conducted in Saudi Arabia(83%), Addis Ababa, Ethiopia (2014) (46.3%), selected hospitals of Tigray, Ethiopia(56.3%), Addis Ababa, Ethiopia (2018) (44.4%) and referral hospitals of the Amhara region, northwest Ethiopia (70.7%) [1,7,9]. This variation might be due to the fact that no palliative care training was given to nurses, more than a third of nurses (37.57%) graduated and more than half of nurses, 236 (60.98%) worked in primary hospitals where there are limited health care services for patients with life-threatening diseases in need of PC. This study also revealed that the educational level of nurses and the years of work experience showed a significant association with the attitude of nurses toward PC at $P < 0.05$. It might be due to the fact that when there is an increase in the educational level and the year of work experience, there is the possibility of a change in attitude towards PC.

Limitation of the study

Since there were limited studies on palliative care, comparison and discussion are difficult. On the other hand, since the design was cross sectional, it might not show the cause-and-effect relationship because independent variables; and the study also might be subjected to recall and social desirability biases.

Conclusion

This study revealed that the majority of nurses had inadequate knowledge and an unfavorable attitude towards palliative care. In general, the level of education of nurses and the year of work experience were independent predictors of nurses' knowledge and attitude toward palliative care.

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First we express our deepest gratitude and appreciation to Debre Tabor University, College of Health Science, for giving us this opportunity to conduct this study.

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Data Availability

All data used for the study were included in the manuscript.

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