

Nurses' Knowledge and Attitudes towards Palliative Care: A Study in a Western Province in Indonesia

Masli Yuzar¹, Kartini Hasballah², Teuku Tahlil³, Irwan Saputra², Elly Wardani³

¹Postgraduate Student, Faculty of Nursing, ²Faculty of Medicine, ³Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh-Indonesia

Abstract

Background: The delay in the development of palliative care in Indonesia is also related to the dearth of studies related to palliative care in Indonesia, including the study of nurses' knowledge and attitudes towards palliative care. Efforts are needed to explore the knowledge and attitudes of nurses about palliative care. This research was aimed to identify the determinants of related factors to knowledge and attitudes of nurses towards palliative care.

Methods: A quantitative research with cross sectional study design was used for research. Data was collected by using several well-reported questionnaires, namely the the Palliative Care Quiz for Nurses (PCQN) questionnaire to assess level of knowledge, and the Frommelt Attitudes Toward Care of the Dying Scale (FATCOD) Form-B questionnaire to analyze nurses' attitudes. With the Systematic Random Sampling, 256 nurses participated in this online survey. The respondent's response rate which was 94.9%.

Conclusions: This research showed that there was no significant relationship between knowledge and nurses' attitudes about palliative care. However, there was a significant relationship between age, and training of palliative with nurses' knowledge of palliative care. Level of education, and nurses' employment status with nurses' attitudes about palliative care also showed a significant relationship. Further analysis revealed that level of education was the only predictor which related to nurses' attitudes about palliative care.

Keywords: knowledge, attitude, palliative, PCQN, FATCOD

Introduction

Palliative care is an approach taken to prevent and reduce the suffering of adult patients, children and families in dealing with problems related to life-threatening diseases²⁴. Palliative care was originally derived from caring for cancer patients in hospitals⁶. Hospital care with a palliative approach was

introduced in the US in the late 1970s at the Hospice of Connecticut⁴. Until now, the philosophy and practice of palliative care has spread and developed in 136 countries out of 234 countries worldwide⁵.

The World Health Organization (WHO) (2014) states that worldwide, more than 20 million people are estimated to need palliative services at the end of life every year. Lifestyle was identified as the most significant cause of palliative cases²³. Hannon et al (2015) stated that there were many palliative cases that were under-served and even in 42% of countries there was no access at all to palliative care services¹¹. Knaul

Corresponding Author:

Dr Elly Wardani

Email: ellywardani@unsyiah.ac.id

et al (2018) stated that gaps in palliative services, especially pain management, are very visible between developed and developing countries¹³.

Putranto’s research (2017) found that the efficiency of cancer treatment costs in hospitals can be done with palliative care interventions¹⁶. DesRosiers et al (2014) found an indication that palliative care is more effective in the form of home care in more advanced palliative cases.¹¹ The evidence base is used as a basis for thinking that palliative care continues to grow rapidly abroad, however in Indonesia the development of palliative programs seems relatively slow.

Minimum implementation of palliative services in Indonesia is also related to the knowledge and skills of health workers that have not been properly managed⁸. Such delay and slow progressive of the

development of palliative services in Indonesia is also related to the dearth of studies related to palliative care¹⁷. In cognizant of such gap, this research was, therefore, initiated to explore knowledge and attitudes of nurses towards palliative care in Indonesia.

Materials and Methods

This research is a type of quantitative research with a cross sectional study design. The total population is 696 nurses, who are involved in providing palliative care to patients in the hospital. Sampling in this study was conducted using systematic random sampling technique. The number of samples was determined using the Isaac and Michael method¹⁸. The number of respondents involved in the study was 230 respondents. Based on the results of the sample calculation coupled with the possibility of a drop out of 10 percent, the number of samples is 256 respondents.

$$s = \frac{\lambda^2 \cdot N \cdot P \cdot Q}{d^2 \cdot (N-1) + \lambda^2 \cdot P \cdot Q}$$

$$N' = \frac{n}{1 - f}$$

Data collection was carried out using a questionnaire which consisted of 3 parts. The first part is demographic variables including age, gender, religion, latest education, employment status, years of service, and training of palliative. The second part is the collection of data on knowledge variables which is carried out using the PCQN questionnaire which contains 20 statements to respond with choices of right, wrong, and don’t know¹⁰.

The third part is the collection of data on attitude variables using the FATCOD Form B questionnaire

which consists of 30 items. This instrument consists of positive statements and negative statements arranged on a 5-point Likert scale¹.

Result

Of the 256 questionnaires circulated online in the form of google forms, 243 have been completed. All distributed questionnaires were filled in with a response rate of 94.9%. The frequency distribution of nurse demographic data is attached in table 1.

Table 1. Frequency distribution of the demographic data of nurses at the Referral General Hospital of Aceh Province (n=243).

Variable	Category	Frequency	Percent
Age	< 30 Years	83	34,2
	≥ 30 Years	160	65,8
Sex	Men	36	14,8
	Female	207	85,2
Religion	Islam	242	99,6
	Christian	1	0,4
Training of Palliative	Ever	39	16,0
	Never	204	84,0
Level of Education	Vocational (Diploma)	140	57,6
	Profession (Bachelor)	103	42,4
Employment Status	State Civil Apparatus	92	37,9
	Contract	151	62,1
Years of Service	< 10 Years	193	79,4
	≥ 10 Years	50	20,6

The frequency of distribution of nurses' knowledge and attitudes towards palliative care is shown in table 2.

Table 2. Distribution of Knowledge Frequency and Attitudes towards Palliative Care at the Referral General Hospital of Aceh Province (n = 243).

Variable	Category	Frequency	Percent
Knowledge	High	123	50,6
	Low	120	49,4
Attitude	Positive	124	51,0
	Negative	119	49,0

The data shows that most of the nurses' knowledge is in the high category, and the majority of nurses have a positive attitude towards palliative care.

The relationship between knowledge and attitudes of nurses about palliative care can be seen in table 3.

Table 3. Relationship of Knowledge and Attitudes of Nurses to Palliative Care at the Referral General Hospital of Aceh Province (n = 243).

Knowledge	Attitude				Total		α	P Value
	Positive		Negative					
	f	%	f	%	f	%		
High	67	54,5	56	45,5	123	100	0,05	0,277
Low	57	47,5	63	52,5	120	100		
Total	124	51,0	119	49,0	243	100		

Based on the results of the study, it was found that the P value = 0.277 (> 0.05), so it could be concluded that there was no relationship between knowledge and attitudes of nurses in palliative care.

The relationship between the demographic characteristics of respondents to the knowledge of nurses about palliative care can be seen in table 4.

Table 4. Relationship of Demographic Characteristics to Knowledge and Attitudes of Nurses at the Referral General Hospital of Aceh Province.

Variable	Knowledge						Attitude							
Age	High		Low		Total		P Value (α 0,05)	Positive		Negative		Total		P Value (α 0,05)
	f	%	f	%	f	%		f	%	f	%	f	%	
< 30 Years	33	39,8	50	60,2	83	100	0,015	36	43,4	47	56,6	83	100	0,086
≥ 30 Years	90	56,3	70	43,8	160	100		88	55	72	45	160	100	
Sex	High		Low		Total		0,244	Positive		Negative		Total		0,820
	f	%	f	%	f	%		f	%	f	%	f	%	
Men	15	41,7	21	58,3	36	100	19	52,8	17	47,2	36	100		
Female	108	52,2	99	47,8	207	100	105	50,7	102	49,3	207	100		
Level of Education	High		Low		Total		0,064	Positive		Negative		Total		0,028
	f	%	f	%	f	%		f	%	f	%	f	%	
Vocational (Diploma)	78	55,7	62	44,3	140	100	63	45	77	55	140	100		
Profession (Bachelor)	45	43,7	58	56,3	103	100	61	59,2	42	40,8	103	100		
Employment Status	High		Low		Total		0,241	Positive		Negative		Total		0,033
	f	%	f	%	f	%		f	%	f	%	f	%	
State Civil Apparatus	51	55,4	41	44,6	92	100	55	59,8	37	40,2	92	100		
Contract	72	47,7	79	52,3	151	100	69	45,7	82	54,3	151	100		

Cont... Table 4. Relationship of Demographic Characteristics to Knowledge and Attitudes of Nurses at the Referral General Hospital of Aceh Province.

Years of Service	High		Low		Total		0,826	Positive		Negative		Total		0,430
	f	%	f	%	f	%		f	%	f	%	f	%	
< 10 Years	97	50,3	96	49,7	193	100	0,826	96	49,7	97	50,3	193	100	0,430
≥ 10 Years	26	52	24	48	50	100		28	56	22	44	50	100	
Training of Palliative	High		Low		Total		0,011	Positive		Negative		Total		0,463
	f	%	f	%	f	%		f	%	f	%	f	%	
Ever	27	69,2	12	30,8	39	100	0,011	22	56,4	17	43,6	39	100	0,463
Never	96	47,1	108	52,9	204	100		102	50	102	50	204	100	

The results showed that there was a relationship between age and palliative training on nurses’ knowledge of palliative care. The results also showed that there was a relationship between education and employment status on nurses’ attitudes about palliative care.

The most dominant factor related to the knowledge and attitudes of nurses in palliative care can be seen in table 5.

Table 5. Relationship between age, gender, education level, employment status, years of service, and training with the knowledge and attitudes of nurses in palliative care at the Referral General Hospital of Aceh Province.

Variable Predictor	Knowledge					Attitude				
	B	OR	P-value	95% CI		B	OR	P-value	95% CI	
				Lower	Upper				Lower	Upper
Intercept	14,12	-	.	-	-	-15,924	-	.	-	-
Age	-0,675	0,509	0,028	0,278	0,933	0,540	0,583	0,74	0,321	1,057
Sex	-0,740	0,477	0,060	0,218	1,042	0,182	1,2	0,637	0,563	2,558
Level of Education	0,685	1,984	0,014	1,142	3,448	0,564	0,569	0,039	0,332	0,975
Employment Status	0,545	1,725	0,066	0,959	3,105	0,544	1,7	0,061	0,972	3,051
Years of Sevice	0,536	1,709	0,155	0,814	3,587	0,176	1,1	0,226	0,576	2,470
Training of Palliative	1,050	2,859	0,006	1,305	6,263	0,172	1,1	0,215	0,574	2,457

Based on the results of the analysis above, it can be seen that the training variable with a P value of 0.006 (<0.05) is the most dominant variable related to nurses' knowledge in palliative care. The results of the analysis also shows that only predictors of education level are related to attitudes.

Discussion

The results showed that the majority of nurses' knowledge level in palliative care was still in the high category, but the number of nurses who had palliative knowledge in the low category was still very significant (49.4%). These results are supported by research by Ayed (2015) which found that there are still many nurses who lack knowledge of palliative care [3].

Based on the research results, it is known that the majority of nurses have a positive attitude in palliative care. Fitri (2017) also states that more than half of the research respondents have a good attitude in terms of palliative care⁹. Researchers assess that the high number of nurses who have positive attitudes about palliative care may be influenced by cultural backgrounds and the application of Islamic nuanced services in the hospital.

Based on the results of the analysis, it was found that the value of P value = 0.277 (> 0.05), so it can be concluded that there is no relationship between knowledge and attitudes of nurses in palliative care. However, Ilham (2019) found a relationship between knowledge and attitudes of nurses about palliative care¹². Effendy (2015) further explains that one of the reasons for the not optimal palliative services in Indonesia is related to the problem of knowledge, skills and attitudes of health workers⁸. The difference between the researchers' findings and the results of previous studies is likely due to other factors that influence attitudes, such as level of education.

The result of the analysis shows that the value of P value = 0.015 (<0.05), so it can be concluded that

there is a relationship between age and knowledge of nurses in palliative care. Researchers consider that the more mature a person is, the more his knowledge will be. Widowati (2019) also states that there is a relationship between age and nurses' knowledge of palliative care²¹.

Based on the results of the analysis, it shows the value of P value = 0.244 (> 0.05), so it can be concluded that there is no relationship between gender and knowledge of nurses in palliative care. Siagian (2020) also found that there was no relationship between gender and nurses' knowledge of palliative care¹⁹.

The results of the analysis show that the P value = 0.064 (> 0.05), so it can be concluded that there is no relationship between the level of education and knowledge of nurses in palliative care. However, Ayed (2015) found a relationship between education and knowledge of nurses in palliative care³. According to researchers, this difference can occur because palliative knowledge can not only be found through formal education. But palliative education can also be improved by nurses by deepening literacy about palliative through journals, books and other readings about palliative care.

Based on the results of the analysis, it was found that the P value = 0.241 (> 0.05), so it can be concluded that there is no relationship between the employment status of nurses and the knowledge of nurses in palliative care. Researchers consider that the nursing status of the nurses is not an obstacle to obtaining better knowledge. Nurses who are motivated to continue learning and want to improve are likely to have better knowledge. Wulandari (2012) also states that the level of knowledge is influenced by various other factors such as experience, culture and environment²². Notoadmodjo (2014) suggests that a person's knowledge will be influenced by various factors including age, experience, education, work, information, environment, and socio-culture¹⁵.

The results of data analysis showed the value of P value = 0.826 (> 0.05), so it can be concluded that there is no relationship between tenure and knowledge of nurses in palliative care. These results are different from previous research, for example research by Ayed (2015) which found that tenure greatly influenced nurses' knowledge of palliative care.³

Based on the results of the analysis, it was found that the P value = 0.011 (<0.05), so it can be concluded that there is a relationship between palliative training and nurses' knowledge in palliative care. These results are reinforced by research by Ayed (2015) in Palestine which found a significant relationship between training of palliative care and nurses' knowledge of palliative care³. Researchers assess the research findings as a phenomenon that emphasizes the importance of training to increase nurses' knowledge of palliative care. With education and training according to predetermined standards, palliative care can be provided in a more optimal and quality manner.

The results of the analysis showed the value of P value = 0.086 (> 0.05), so that the researchers concluded that there was no relationship between age and nurses' attitudes about palliative care. These results are different from previous research, for example by Maghfirah (2017) which found a relationship between age and the measure of an individual's attitude¹⁴. The researcher assessed that the difference in these results was likely due to other factors that were more dominant in relation to the respondent's attitude in this study, these factors included the education variables and the nurse's employment status.

The results of the analysis show that the P value = 0.820 (> 0.05), so it can be concluded that there is no relationship between gender and nurses' attitudes in palliative care. These results are reinforced by research by Siagian (2020) which states that there is no relationship between gender and nurses' attitudes in palliative care¹⁹.

The results of the analysis also showed a P value = 0.028 (<0.05), so that the researcher concluded that there was a significant relationship between the level of education and the attitudes of nurses in palliative care. Researchers assess that the higher the education of a nurse, the better the nurse's attitude in caring for palliative patients. Furthermore, Notoadmodjo (2014) states that one of the factors that can affect a person's attitude is the factor of education¹⁵.

The results of the analysis show the value of P value = 0.033 (<0.05), so it can be concluded that there is a relationship between nurses' employment status and nurses' attitudes in palliative care. Agustine (2016) explains that the need to show achievement will encourage someone to overcome challenges in carrying out tasks to achieve the goals set². Researchers assess that there are internal factors such as a contract nurse to give more than expected, which is one of the causes emotionally so that nurses have a positive attitude in working as a palliative nurse. Other internal factors that are contributing to nurses include their previous personal experiences as nurses when working in other agencies, and the possibility of making nurses more comfortable working at referral public hospitals in the Aceh province.

Based on the results of the analysis, it was found that the P value = 0.430 (> 0.05), so that the researcher could conclude that there was no relationship between nurses' tenure and nurses' attitudes in palliative care. These results are supported by research by Siagian (2020) which also states that there is no relationship between tenure and nurses' attitudes in palliative care¹⁹.

The results of the analysis show that the P value = 0.463 (> 0.05), so it can be concluded that there is no relationship between palliative training and nurses' attitudes in palliative care. These results are reinforced by research by Widowati (2019) which shows that there is no relationship between palliative training and nurses' attitudes in palliative care²¹.

Based on the results of the analysis, it can be seen that the training variable with a P value of 0.006 (<0.05), is the most dominant variable related to nurses' attitudes in palliative care. These results are reinforced by experimental research by Wibowo (2019) which found a significant influence between palliative training on nurses' knowledge about palliative care²⁰.

Based on the results of the analysis, it was found that only predictors level of education was related to attitudes. The analysis showed that the nurse education level variable had a P-value of 0.036 (<0.05). Therefore, researchers can conclude that there is a relationship between the level of education of nurses and nurses' attitudes in palliative care.

Conclusion

Most of the nurses at the referral general hospital in the Aceh province have a high level of knowledge about palliative care. The majority of nurses have positive attitudes about palliative care.

Researchers hope that hospital management can optimize the demographic potential associated with the knowledge and attitudes of nurses in palliative care, so that the results of palliative care will be better. Hospitals also need to pay attention to the presence of factors that are quite dominant in influencing nurses' knowledge of palliative care, namely the factor of palliative training.

Acknowledgement: Researchers give high appreciation for hospital management support which is very significant for researchers in carrying out the research process. The researchers also expressed their deep gratitude for the participation of fellow nurses and nurse managers at the Aceh government hospital so that this research was successfully carried out even in the COVID-19 pandemic conditions.

Ethical Clearance: The ethical clearance was obtained from the Health Research Ethical Committee, Zainoel Abidin General Hospital, Indonesia

Source of Funding: This is a self-funded research

Conflict of Interest: There is no conflict of interest to disclose

References

1. A'la, M, Z. The Frommelt Attitude Toward Care of the Dying Care Form B (FATCOD B) Indonesian version: Measuring the validity of nursing students Using Factor Analysis. 2016. NurseLine Journal Vol. 1 No.1May2016. ISSN2540-7937. (Accessed May 10, 2019).
2. Agustine, U. The Relationship between Motivation and Demographic Characteristics with Nurse Performance at Health Community in East Sumba. Journal of Primary Health. 2016. Vol. 1 Ed. 1, pp. 28-37.
3. Ayed, A, Sayej, S, Harazneh, L, Fashafsheh, I, Eqtait, F. The Nurses' Knowledge and Attitudes towards the Palliative Care. Nursing Department, Arab American University, Palestine. 2015. Journal of Education and Practice. ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.6, No.4.
4. Chow K, Dahlin C. *Integration of Palliative Care and Oncology Nursing*. 2018. <http://doi.org/10.1016/j.soncn.2018.06.001>.
5. Clark, J, Barnes, A, Campbell, Gardiner, C. A Life or "Good Death" Situation? A Worldwide Ecological Study of the National Contexts of Countries That Have and Have Not Implemented Palliative Care. 2018. <http://doi.org/10.1016/j.jpainsymman.2018.12.007>.
6. Dahlin, CM, Mazanee, P. Building from our past: celebrating 25 years of clinical practice in hospice and palliative nursing. 2011. J Hospice and palliative Nurs. 13:S20-S28.
7. DesRosiers T, Cupido C, Pitout E, et al. A Hospital Base Palliative Care Service For Patient With Advanced Organ Failure in Sub-Saharan Africa Reduces Admissions And Increase Home

- Death Rates. 2014. *J Pain Symptom Manage* 2014; 47:786-792.
8. Effendy, C, Agustina, R, H, Kristanti, S,M, Engels, Y. The Nascent Palliative Care Landscape of Indonesia. 2015. *European Journal of Palliative Care*. www.ejpc.eu.com. (Diakses 17 Oktober 2019).
 9. Fitri, E.Y, Natosba, J, Andhini, D. Overview of Knowledge, Attitudes, and Nursing Palliative Care Actions. National Nursing Seminar and Workshop “Implications of Palliative Care in the Health Sector”. Sriwijaya University Faculty of Medicine. 2017.
 10. Hertanti, S, N, Wicaksana, L, A, Effendy, C. Palliative Care Quiz for Nurses-Indonesia Version (PCQN-I): A cross-Cultural Adaptation, Validity, and Reliability Study. 2019. Doi.10.21203/rs.2.16229/v1.
 11. Hannon, B, Zimmermann, C, Knaul, F, M, Powell, R, A, Mwangi-Powell, F, N, Rodin, G. *Provision of Palliative Care in Low- and Middle-Income Countries: Overcoming Obstacles for Effective Treatment Delivery*. 2015. doi: 10.1200/JCO.2015.62.1615.
 12. Ilham, R, Muhammad, S & Yusuf, M, N, S. Relationship between the level of knowledge and the attitudes of nurses about palliative care. 2019. *Jambura Nurs. J*. doi: 10.37311 / jnj.v1i2.2515.
 13. Knaul, MF, Farmer, PE, Krakaver, L, E, et al. Alleviating the Access Abyss in Palliative Care and Pain Relief an Imperative of Universal Health Coverage: the Lancet Commission Report. 2018. [http://dx.doi.org/10.1016/S0140-6736\(17\)32513-8](http://dx.doi.org/10.1016/S0140-6736(17)32513-8).
 14. Maghfirah. The Relationship between Knowledge Level and Age and Attitude in Facing Menarche. Banda Aceh. Medical School. Syiah Kuala University. 2017.
 15. Notoadmodjo, S. *Health Behavioral Science*. Jakarta: Rineka Cipta. 2014.
 16. Putranto, R, Trisnantoro, L, Hendra, Yos. Cost Savings in the Treatment of Adult Terminal Cancer Patients through consultation of the palliative team at Dr. hospital. Cipto Mangunkusumo. Department of Internal Medicine. FKUI / RSCM. 2017. *Indonesian Journal of Internal Medicine*. (Accessed 8 April 2020).
 17. Rachmawati, E, Wiechula, R, Cameron, K. Current Status of Palliative Care Services in Indonesia: a literature review. 2016. *International Nursing Review* 63,180-190. (Diakses 10 Agustus 2019).
 18. Sugiono. *Statistics for Research*. Bandung: Alfabeta. 2016.
 19. Siagian, E, Perangin-angin, M. Knowledge and Attitude of Nurses about Palliative Care at Home. 2020. DOI: 10.33221 / jiki.v10i02.587. 2020. Faculty of Nursing, Advent Indonesia University.
 20. Wibowo, A. The Effect of Palliative Care Training on Nurses’ Knowledge at the Central General Hospital dr. Sardjito. ‘Aisyiyah University. Yogyakarta. 2019.
 21. Widowati, R, E,D. Determinants of Factors Related to Knowledge and Attitudes of Nurses in Palliative Care at Dr. Soetomo. 2019. <http://lib.unair.ac.id>.
 22. Wulandari, F. The Relationship between Nurses’ Knowledge Level about Palliative Care and Attitudes towards Patient Management in Palliative Care at Dr. Moewardi Surakarta. 2012.
 23. WHO. *Planning and Implementing Palliative Care Services: a guide for programme managers*. Geneva: World Health Organization. WHO Library Cataloguing-in-publication Data. 2016. ISBN9789241565417.
 24. World Health Organization. *Integrating Palliative Care and Symptom Relief Into Primary Health Care; a WHO Guide For Planners, Implementers And Manager*. Geneva: WHO. 2018.