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The Association of Demographic Characteristics with Confidence Level and Perceived Barriers to Involvement in Palliative Care among Critical Care Nurses

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Abstract

Palliative care refers to the management of severe pain and its effects, communication regarding the purpose of care, the process of individualized value-based treatment, transitional planning, and family support. Intensive care nurses play a crucial role in enhancing the integration of application systems, including family decision-making regarding care objectives. Using a self-administered questionnaire, the purpose of this cross-sectional study is to determine the relationship between nurses' confidence levels and perceived barriers to their involvement in palliative care with their demographic characteristics. The convenience sampling technique was used to collect samples from critical care unit nurses. Descriptive statistics and Chi-square were used for data analysis using SPSS (Statistical Package for Social Science) Version 23.0. Most participants reported confidence in this research where the patients and family received care when needed and could describe palliative care and understand the patient's goal of care and providing emotional support for family and patients. Burnout or loads of work and the task of work are potential stressors for nurses in palliative care. In this case, critical care nurses say that they are unable to attend family meetings and engage in palliative care because they have little time to attend. This study also found a statistically significant association between the demographic characteristics of the participants and the barriers nurses perceived to their involvement in palliative care.

Keywords: Demographic Characteristics, Confidence Level, Barriers, Palliative Care, Critical Care Nurses.

Introduction

Palliative care management is a strategy for enhancing the quality of life of patients and their families confronting the challenges of a life-threatening illness by preventing and relieving suffering through early identification, meticulous assessment, and treatment of pain

and other physical, psychosocial, and spiritual issues. Healthcare professionals should be able to provide adequate palliative care and meet the needs of patients and their families through palliative care treatment. Nurses are essential to the delivery of palliative care, and their critical care expertise is essential to the maintenance of high-quality care. There is consensus that a lack of knowledge and education is a common barrier to quality treatment (Soikkeli-Jalonen et al., 2020).

Among hospital-based interventions, palliative care activities have the potential to enhance the quality of care for patients, particularly those in critical condition, according to a study by (Khandelwal et al., 2017). Additionally, it has been found to reduce the patient's medical expenses. This investigation replicates the findings of previous research. The provision of early palliative care services to patients will have a positive impact on patient progress.

Lack of confidence in palliative care by healthcare providers lowers the standard of care for hospitalized patients. Confidence levels and educational requirements in palliative care should be examined to establish evidence-based education programmes. To provide effective and high-quality palliative care, it is necessary to incorporate awareness, expertise, and positive attitudes towards palliative care. Previous studies have also mentioned that education is essential for improving the trust of palliative care professionals in health care. Education is also required to increase nurses' confidence in providing care, particularly in communication (Zante & Schefold, 2017).

Kim et al (2020) analysed the awareness, attitude, trust, and educational requirements of palliative care patients among nurses caring for non-cancer patients to determine the factors influencing their trust in palliative care. The conclusion was that the nurses' palliative care experience was consistent but lower than that of nurses caring for cancer patients. In addition, this study reveals moderate attitudes towards palliative care for non-cancer patients.

In their study, Chong and Khalid (2014) determined that the barrier to palliative care administration in several Malaysian institutions was a lack of knowledge and understanding of palliative care among healthcare providers. To improve the quality of palliative care services in Malaysia, a focus on training and supportive policy is required. Half of the paediatricians and one-fourth of the nurses in this study agreed that they possessed only fundamental palliative care knowledge. Developing countries also report this knowledge gap. A dearth of knowledge in this field also leads to misunderstandings and a lack of practical training and experience. The application of system modelling has little effect on enhancing palliative care proficiency. To enhance the quality of palliative care among novice staff, retraining from senior providers is required.

Wang and Tsai (2010) conducted a study on palliative care barriers among a group of Chinese nurses. The quality of care is dependent on a nurse's knowledge and expertise. In this cross-sectional study, only one-third of critical care unit nurses demonstrated moderate pain knowledge management prior to knowledge enhancement activities. The results indicate that nurses' knowledge of palliative care, particularly pain management, is the most significant barrier to providing palliative care to patients. Communication, decision-making, and the expectations of family members are obstacles to the management of critically ill patients. Brooks et al (2017) determined that communication problems are related to medical terms that were not understood during the family meeting.

There are seven essential domains for enhancing the quality of palliative care, which classifies end-of-life care. These include the participation of patients and their families in decision-making, communication, ongoing maintenance, emotional and physical care,

symptom management, spiritual support, and emotional and organisational support for ICU clinicians (Cook & Rockefeller, 2014).

In Malaysia, few studies on the level of confidence and barriers to nurses' involvement in palliative care for end-of-life care patients in the intensive care unit have been conducted and published. This study will provide evidence for Malaysian nurses to adopt or plan activities to increase nurses self-confidence in palliative care participation. It can also assist policymakers in identifying strategies to improve nurses' communication and participation to enhance health services.

Methodology

Registered nurses in the General Intensive Care Unit (GICU), Coronary Care Unit (CCU), Paediatric Intensive Care Unit (PICU), and Neuro Intensive Care Unit (NICU) of Penang General Hospital were involved in this non-experimental, cross-sectional quantitative study. Non-probability convenience sampling was used in data collection where subjects are selected according to their convenient accessibility. The inclusion criteria are nurses with at least six months of experience in intensive care facilities. According to studies, personnel with less than six months of experience are less familiar with end-of-life (EOL) patient care. They also lack the confidence to handle EOL cases.

The population for this study aimed at the nurses who were directly involved in the care of the patient in GICU (N=96), NICU (N=21), PICU (N=27) and CCU (N=20); a total of 164 nurses. The study's sample size was calculated using a sample size calculator, Raosoft Software (Khan et al., 2013). With a margin error of 5%, the confidence level is 95 %, and the recommended minimum sample size is 116 respondents. The total sample size in this study is 157 respondents of critical care nurses in GICU, CCU, PICU and NICU in Penang Hospital.

In this investigation, the IMPACT-ICU self-administered structured questionnaire was used. It has been adapted from the article "ICU bedside nurses, involvement in Palliative Care Communication: A Multicentre Survey" (Anderson et al., 2016). The questionnaire contains 2 sections. Part 1 includes inquiries regarding demographic information, personal factors, educational level, and employment-related factors. Part 2 is divided into three sections: Section B (7 questions on the frequency of participation in palliative care), Section C (11 questions assessing the level of confidence in providing palliative nursing care), and Section D (14 questions pertaining to perceived barriers to participation in palliative care). All questions in sections B, C and D are using Likert Scale.

After receiving ethical approval from the UITM Research Ethic Committee, the Medical Research and Ethics Committee (MREC), the CRC Penang Hospital, the Head of Department (HOD), and the Director of Penang Hospital, a pilot study with 30 participants conducted to test the reliability of the questionnaire. The participants are nurses enrolled in advanced diploma programmes at various intensive care facilities. The instrument's alpha coefficients were 0.85, so it is considered reliable. Between 0.6 and 0.7 for Cronbach's alpha indicates an acceptable level of reliability (Manerikar & Manerikar, 2015). The questionnaires were also validated using back-to-back translation. The original English version of the questionnaire was translated into Malay by Institut Terjemahan dan Buku Malaysia (ITBM), which then translated the draught of the translation back into English. In addition, a discussion with the chief nurse of each ward included in this study was conducted to assess the questionnaire's clarity and comprehensiveness. 0.80 The Cronbach alpha value was 0.80.

All data were initially collected and compiled in Microsoft Excel before being encoded and analysed with SPSS (Statistical Package for Social Science, Version 23.0). Frequency of participation in palliative care, level of confidence in performing palliative nursing, and

perceived barriers to participation in palliative care were analysed using descriptive statistics. The Chi-square test was used to determine the association between the level of confidence in performing palliative nursing and the barriers nurses perceived to their involvement in palliative care with the participants' demographic characteristics.

Results

Table 1 displays the socio-demographic characteristics of critical care nurses in terms of frequency and percentage. One hundred fifty-seven nurses (n=157) met the inclusion criteria for this study. They consist of nurses who provide critical care in the GICU, CCU, NICU, and PICU. In this survey, 157 questionnaires were distributed, and the response rate was one hundred percent.

In the table, 78 (49.7%) of the participants' ages fell between 20 and 30 years, 75 (47.8%) between 31 and 40 years, and only 4 (2.5%) between 41 and 50 years. There were 140 (89.2%) female nurses and 17 (10.8%) male nurses. The majority (n = 153; 97.5%) had a diploma in nursing, while only four (2.5%) had a degree in nursing. More than two-thirds of the nurses had 1 to 9 years of experience (n = 105; 66.9%), 49 (31.2% of the nurses) had 10 to 19 years of experience, and 3 (1.9% of the nurses) had 20 to 29 years of experience.

59 (37.6%) of the participants had one year of experience in the critical care nursing unit; 73 (46.5%) had two years of experience; 19 (12.1%) had three years of experience; 5 (3.2%) had four years of experience; and only 1 (0.6%) had six years of experience in intensive unit. Half of the participants in this study (n = 80; 51.0%) were from the GICU, 26 (16.6%) were from the PICU, 26 (16.6%) were from the CCU, and 25 (15.8%) were from the NICU.

Table 1
Characteristics of the Respondents (n=157)

Variables	Frequency	Percentage
Age (years old)		
20-30	78	49.7
31-40	75	47.8
41-50	4	2.5
Gender		
Female	140	89.2
Male	17	10.8
Education level		
Diploma	153	97.5
Degree	4	2.5
Year in Nursing (years)		
1-9	105	66.9
10-19	49	31.2
20-29	3	1.9
Year in ICU (years)		
1	59	37.6
2	73	46.5
3	19	12.1
4	5	3.2
5	1	0 .6
Working Area		
PICU	26	16.6
CCU	26	16.6
NICU	25	15.8
GICU	80	51.0

Results in Table 2 shows that they were very confident in identifying the family's informational needs regarding the care and treatment of the patient (n = 32; 20.4%), identifying and responding to family members' emotional distress (n = 25; 15.9%), and assessing the need for family discussion (n = 25; 15.9%).

While 13 (8.3%) said they lacked confidence in their ability to be an active contributor in family meetings, obtain information from a physician to understand the patient's care objectives (n = 8; 5.1%), and communicate the value of care consultation to the physician (n = 9; 5.9%), respectively.

Table 2
Nurses' confidence level in performing palliative nursing.

Confidence in performing palliative nursing	Frequency *n* (%)			
	Not Confident	Somewhat Confident	Confident	Very Confident
Ensure Patients and families received palliative care when needed	4 (2.5)	32 (20.4)	102 (65.0)	19 (12.1)
Describe the palliative care and how it can be useful to patient's family	6 (3.8)	56 (35.7)	78 (49.7)	17 (10.8)
Define palliative care	6 (3.8)	46 (29.3)	93 (59.2)	12 (7.6)
Communicate the value of care consultation to physician	9 (5.7)	57 (36.3)	83 (8)	8 (5.1)
Be an active contributing participant in family meeting	13 (8.3)	64 (40.8)	71 (45.2)	9 (5.7)
Obtain information from a physician to understand of patient's goals of care	8 (5.1)	43 (27.4)	89 (56.7)	17 (10.8)
Assess family understand in patient prognosis	6 (3.8)	38 (24.2)	91 (58.0)	17 (14.0)
Arrange family meeting with clinicians	6 (3.8)	41 (26.1)	77 (49.0)	33 (21.0)
Identify and respond to family members emotional distress	1 (0.6)	105 (32.5)	80 (51.0)	25 (15.9)
Identify family needs for information of patients care and treatment	1 (0.6)	34 (21.7)	90 (57.3)	32 (20.4)
Assess for family discussion needed	3 (1.9)	45 (28.7)	84 (53.5)	25 (15.9)

Table 3 shows the barriers nurses perceived to their involvement in palliative care. The majority of participants strongly agreed and agreed that they needed more training in palliative care (n: 132; 84.1%); 43.3% (n: 68) of them agreed and strongly agreed that physicians did not ask for their perspective on palliative care; 39.5% (n: 62) agreed and strongly agreed that their involvement in palliative care discussion was emotionally exhausting; and 38.9% (n: 61) agreed and strongly agreed that it was difficult to get coverage for their patients, so they can attend a family meeting

However, the majority of respondents disagreed (strongly disagreed, disagreed, and neutral) with the statement that they do not have time for bedside discussions of prognosis (n = 146; 93.0%); their managers do not support their participation in the discussions (n = 141; 89.8%); and the physicians have a negative reaction to palliative care (n = 136; 86.6%).

Table 3
The barriers nurses perceived to their involvement in palliative care

Barriers nurses perceived to their involvement in palliative care discussions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I need more training in palliative care	1 (0.6)	1 (0.6)	23 (14.6)	99 (63.1)	33 (21.0)
Physicians do not ask for my perspective in palliative care	2 (1.3)	19 (12.1)	68 (43.3)	52 (33.1)	16 (10.2)
Involve in palliative care discussion is emotionally exhausted	12 (7.6)	31 (19.7)	52 (33.1)	57 (36.3)	5 (3.2)
I am unsure of my role in discussing prognosis in palliative care	10 (6.4)	47 (29.9)	63 (40.1)	33 (21.0)	4 (2.5)
I am not sure how to bring up the prognosis and goals of care with families	7 (4.5)	52 (33.1)	60 (38.2)	35 (22.3)	3 (1.9)
I do not feel that physicians support my involvement in these discussion	4 (2.5)	77 (49.0)	36 (22.9)	37 (23.6)	3 (1.9)
Physicians have negative reaction to palliative care	25 (15.9)	76 (48.4)	35 (22.3)	18 (11.5)	3 (1.9)
Families have negative reaction to palliative care	11 (7.0)	59 (37.6)	57 (36.3)	27 (17.2)	3 (1.9)
It is hard to get coverage for my patients, so I can attend family meeting	3 (1.9)	38 (24.2)	56 (35.7)	55 (35.0)	5 (3.2)
I am not invited to family meeting	9 (5.7)	47 (29.9)	58 (36.9)	33 (21.0)	10 (6.4)
I do not have time to attend family meeting	15 (9.6)	73 (46.5)	37 (23.6)	30 (19.1)	2 (1.3)
I do not know when and where family meeting occurring	25 (15.3)	59 (37.6)	46 (29.3)	25 (15.9)	3 (1.9)
I do not have time for bedside discussions of prognosis	24 (15.3)	82 (52.2)	40 (25.5)	11 (7.0)	0
My managers do not support my involvement in these discussions	27 (17.2)	66 (42.0)	48 (30.6)	14 (8.9)	2 (1.3)

This study showed that there was no significant association between the level of confidence in performing palliative nursing with the demographic characteristic of the participants. However, Table 4 shows that there were a statistically significant association between the barriers nurses perceived to their involvement in palliative care with the demographic characteristic of the participants with a p-value less than 0.05. The perception of barriers that were significantly associated with the demographic characteristic of the participants was, the perception of the physicians' had a negative reaction to palliative care with participants' age (x2: 9.58); families have a negative reaction to palliative care with their years of working in an intensive care unit (x2: 11.04); the perception of hard to get coverage for their patients, so they cannot attend a family meeting with the years of services (x2: 8.27);

and their years of working in an intensive care unit (x2: 812.27); and their perception that they did not have time to attend a family meeting with the years of services (x2: 7.83).

This study found that the nurses with the youngest age (20-30 years old) agreed and strongly agreed that the physicians had a negative reaction to palliative care (n: 17; 21.8%). The nurses who had 1 to 9 years of services were reported agreed and strongly agreed that it was hard to get coverage for their patients, so they can attend family meetings (n: 48; 45.7%) and they did not have time to attend family meeting (n: 28; 26.7%) compared to the other range of age.

Compare to the years of the nurses experienced working in intensive care unit, the group of nurses who had a year of working experiences in the intensive care unit were found the most frequent reported that they agreed and strongly agreed, families had negative reaction to palliative care (n: 19; 32.2%) and it was hard to get coverage for their patients, so they can attend family meeting (n: 28; 47.5%).

Table 4
The association between the level of confidence and the barriers nurses perceived to their involvement in palliative care discussions with the demographic characteristic of the participants

Variables	**Age**	***n* (%)**	***x*²**	**Sig-*p***
			9.58	0.01
	20-30 years	17 (21.8)		
	31-40 years	4 (5.3)		
	41-50 years	0		
Families have negative reaction to palliative care (agreed and strongly agreed)	Years of services in ICU	*n* (%)	*x*²	Sig-*p*
			11.04	0.03
	1	19 (32.2)		
	2	9 (12.3)		
	3	2 (10.5)		
	4	0		
	5			
It is hard to get coverage for my patients, so I can attend family meeting (agreed and strongly agreed)	Years of nursing experiences	*n* (%)	*x*²	Sig-*p*
			8.27	0.02
	1-9 years	48 (45.7)		
	10-19 years	12 (24.5)		
	20-29 years	0		
It is hard to get coverage for my patients, so I can attend family meeting (agreed and strongly agreed)	Years of services in ICU	*n* (%)	*x*²	Sig-*p*
			12.27	0.02
	1	28 (47.5)		
	2	30 (41.1)		
	3	2 (10.5)		
	4	0		

	6	0		
I do not have time to attend family meeting (agreed and strongly agreed)	Years of nursing experiences	*n* (%)	x^2	Sig-*p*
			7.83	0.02
	1-9 years	28 (26.7)		
	10-19 years	4 (8.2)		
	20-29 years	0		

Discussion

In this study, there are no significant associations between the level of confidence in performing palliative nursing with the participants' demographic characteristics. This is in line with Etafa et al (2020), where the authors also found the level of hospitals, respondents' age, gender, the level of education, nursing work experience, clinical work units, and place of training about PC did not show a significant association.

This study found a statistically significant association between the barriers nurses perceived to their involvement in palliative care with the demographic characteristic of the participants. Results showed nurses with the youngest age (20-30 years old) agreed and strongly agreed that the physicians had an adverse reaction to palliative care. This study showed that critical care nurses who are younger tend to face barriers in engaging in palliative care compared to older staff. This is also closely related to the experience and knowledge that influences an individual's attitude and skills.

However, the finding of this research is in-line with Nelson et al (2010) where the author indicates that age and gender or other characteristics can affect some palliative care attitudes, various participants in the study, who had encountered ICU management over a long period of time, expressed broad agreement in this environment on important aspects of palliative care. Farmani et al (2018), also agree that ward and level of education had a significant association with participating nurses' practice toward palliative care. The nurses who work in intensive care units had better participation in practice toward palliative care.

1 to 9 years of services were reported agreed and strongly agreed that it was hard to get coverage for their patients to attend family meetings, and they did not have time to attend family meetings compared to the other range of age. This happened because this group is given a lot of tasks in daily tasks activities. Various new things to learn and various procedures carried out. The participants comprised participants of different experiences and backgrounds.

Employees caring for older adults are expected to have sufficient experience to address an ageing population's diverse needs and ensure that proper care is provided. The study found that employee awareness deficits were connected to sociological aspects of ageing. From the viewpoint of an education provider, the introduction of activities to enrich nurses' learning activities will help dismiss positive behaviors and perceptions of older adults and help them understand the importance of engaging with older adults. A critical care nurse who is an ageing specialist can play an important role in promoting positive attitudes and reducing PC treatment (Parker et al., 2021).

Experienced working in the intensive care unit, the group of nurses who had a year of working experience in the intensive care unit found the most frequently reported that they

agreed and strongly agreed. It was hard to get coverage for their patients, so they can attend family meetings. As a newcomer, this group of nurses is not yet good in time management during their tasks.

Research on "Hospital staffing, organization and quality of care" by Kayode et al (2018) mentions that the working environment is "the sum of the interrelationship between staff and staff with the environment in which the staff work". They also found that adequate nurse staffing and nursing organizational/managerial support are essential to enhancing the quality of patient care, minimizing frustration, and burning out of nursing work and eventually improving nurse retention in hospital settings. This highlights the fact that sufficient human resources are important to the success of health care delivery.

Conclusion

In this region of the globe, critical care nurses have a strong desire to be involved in palliative care in intensive care units. It will assist to strengthen the multidisciplinary practise of palliative care treatment in the Intensive Care Unit. Additionally, critical care nurses can facilitate palliative care by collaborating with other healthcare providers to determine the precise unit requirements for patient referral and by ensuring that the correct patients are referred. Palliative care is more likely to be incorporated into critical care if nurses routinely advocate for it and educate the critical care team about its benefits. Because they can do all of these things routinely, critical care nurses will become palliative care champions.

To thoroughly comprehend how these variables function in environments of palliative care, additional research is required. Employers and administrators play a crucial role in providing palliative care nurses with education and training to foster their development and reduce their vulnerability and occupational stress.

The increased participation of critical care nurses in decision-making and debates regarding palliative care will increase their job satisfaction. In addition, they desire greater patient and family engagement, sustained respect for patients' religious values, and integrity to keep patients as pain-free and happy as possible. Due to their distinct relationship with patients, nurses must be involved in palliative care decision-making. Global Critical Unit Palliative Care Practise Standards and policies that define the process of palliative care in critical care units must be established. This standard includes the duties and responsibilities of each member of the health care team, as well as the patient's and their family's roles in critical care, in an effort to enhance palliative care services.

The findings of this study indicate that the principles of critical care nurse participation in palliative care conversations and decisions remain ambiguous, indicating a need to improve coordination between health care staff, patients, and their families. Aspects of appropriate treatment, the role of families, and ethical concerns were discussed. The intended outcome of this study is the dissemination of knowledge that will contribute to changes in mortality treatment in all of these nations.

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