ORIGINAL RESEARCH

THE RELATIONSHIP BETWEEN NURSES' PERCEPTIONS AND SELF-EFFICACY IN IMPLEMENTING PALLIATIVE CARE IN THE INTENSIVE CARE UNIT

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Abstract

Background: The increasing need for palliative care in intensive care unit (ICU) is indicated by the increasing number of patients with critical and terminal conditions or life-threatening diseases. A comprehensive handling through palliative care by nurses is needed. Self-efficacy is the main predictor that influences the application of palliative care in ICU. Therefore, nurses should have high self-efficacy in order to provide qualified palliative care for patients and their families.

Objective: This study aimed to analyze the relationship between perceptions and self-efficacy of nurses in applying palliative care in ICU.

Methods: This study was a correlational study with a cross sectional approach. The sampling technique used was total sampling, which involved all nurses who were actively working at the Bandung General Hospital during the study. There were 127 people in total. Data were collected using questionnaires. Descriptive analysis was used for the univariate analysis and Pearson correlation test was used for bivariate analysis.

Results: The results of univariate analysis showed that the majority of respondents had high self-efficacy (56.7%) and negative perceptions (52%) related to palliative care in the intensive room. Based on the results of bivariate analysis, there was a significant relationship between perception and self-efficacy variables (p value = 0.000).

Conclusion: The results showed that high number of respondents had negative perceptions related to their competences in implementing palliative care in the ICU. Therefore, socializations and trainings related to this are needed, which focus on nurses' beliefs in their abilities.

KEYWORDS

ICU; nurses; palliative care; self-efficacy

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INTRODUCTION

Palliative care is basically a comprehensive care given to patients with serious diseases that are life-threatening or lifelimiting (Shreves & Marcolini, 2014). The increasing need for palliative care arose since the introduction of the importance of this program in the health care area in the United States (US). There was an increase of up to 125% from 2000-2008 (Urden & Stacy, 2013). Palliative care is not only given in community settings, but also given in the care of in patient services in hospitals, such as the Intensive Care Unit (ICU) (Payne, Seymour, & Ingleton, 2008). ICU is a treatment area which is full of various sophisticated technological innovation tools aiming to extend the lives of patients with critical conditions (Cox, Handy, & Blay, 2012). This critical patient condition often causes pain that is not recognized or treated, shortness of breath, delirium, fatigue, lack of appetite, drowsiness, dyspnea, anxiety, depressive mood and weakness, constipation, tightness, nausea and vomiting, fever and infection, edema, anxiety, delirium, and metabolic disorders (Ayasrah, O'Neill, Abdalrahim, Sutary, & Kharabsheh, 2014; Delgado-Guay, Parsons, Li, Palmer, & Bruera, 2009; National Clinical Effectiveness Committee, 2015; Nelson, Mulkerin, Adams, & Pronovost, 2006; Urden & Stacy, 2013; Wilkie & Ezenwa, 2012). The palliative care provided in ICU contributes positively to the patient, family and clinician team (Aslakson, Curtis, & Nelson, 2014). In providing high-quality and effective palliative care in ICU, nurses play a strategic role for being the primary liaison between patients, families and other members of the multi-professional team. However, professional nurses nowadays may not always be ready to provide qualified palliative care for patients and families (Fitch, Fliedner, & O'Connor, 2015; World Health Organization, 2008).

Self-efficacy is an internal factor that greatly influences nurses in implementing palliative care (Gaffney, 2015). This is supported by the statements in previous studies (Ferrell, Coyle, & Paice, 2015; Lenz & Shortridge-Baggett, 2002; Zulkosky, 2009) that self-efficacy is the most important predictor in influencing changes in individual behavior and providing satisfactory results. It is also a predictor that influences nurses in providing quality palliative care. Self-efficacy is someone's belief in his ability to do something to achieve his goals (Bandura, 2005). Within the context of nursing, self-efficacy is an important aspect that supports nurses' skill performance (Tyler et al., 2012). Nurses' self-efficacy correlates with professional autonomy and empowerment. Nurses with high self-efficacy perceive obstacles as opportunities instead of threats (Manojlovich, 2005). High self-efficacy also influences the quality of clinical performance which later leads to satisfactory outcome of patients (Joy, 2015).

According to the study (Gaffney, 2015), the current phenomenon happened is that nurses' self-efficacy is not balance. There are nurses who have low self-efficacy while some others have high self-efficacy. This problem relates with individual perception about the importance of palliative care. Perception is the final process of observation, in which individuals will recognize and understand the condition of the surrounding environment (external perception) as well as the condition within themselves (internal perception). Eventually, the perception affects one's self-efficacy in determining the objective of certain action to do (Bandura, 2004; Sunaryo & Kes, 2004). Nurses' perception of palliative care supports and enhances a therapeutic relationship between nurses and patients (Johnston & Smith, 2006). The perception might differ among nurses (Rodriguez, Barnato, & Arnold, 2007) in which they found a number of nurses who believed that palliative care should only be given to patients who are badly, dying, suffering form cancer, and to perform pain-relieving treatment in the last moment of one's life.

Study (Sarfo, Opare, Awuah-Peasah, & Asamoah, 2017) also found that 22% nurses believe that palliative care is only given to dying patients. In addition, many nurses have wrong perception that palliative care, especially spiritual support, is not a priority care that should be given to patients. This different perception obstructs the process of palliative reference, resulting in less optimal utilization of palliative care which eventually decreases self-efficacy among nurses in achieving certain goals of certain action (Gaffney, 2015; <u>Rodriguez et al., 2007</u>). Regarding those explanation, the researchers were intrigued to analyze the relationship between nurses' perception about palliative care and their self-efficacy in implementing palliative care in ICU.

METHODS

Study design & sample

This research was a quantitative research, which used analytic descriptive study with cross sectional study design or cross sectional. The study was conducted in the intensive room of the Bandung General Hospital from May to June 2018. The sampling technique used in the study was a non-probability sampling technique, namely total sampling. There were 127 actively working nurses involved in this research.

Instrument

This study employed 3 questionnaires, namely demographic questionnaire, perception questionnaire and nurse self-efficacy in the application of intensive palliative questionnaire. Questionnaire on respondents' characteristics contained age, sex, intensive unit, religion, recent education, ethnicity and palliative education activities. The researcher used the standard perception questionnaire from White & Coyne (White & Coyne, 2011) and self-efficacy questionnaire from Desbiens, Gagnon & Fillion (Desbiens, Gagnon, & Fillion, 2012). A survey questionnaire namely Palliative Care Practice of Registered Nurses (PCPCRN) proposed by White and Coyne since 1999 was employed to collect data on nurses' perception about palliative care. This instrument consisted of some questions which were categorized into two parts based on the level of importance of palliative care (10 domains) and the level of individuals' competence in performing palliative care (10 domains) (White, Roczen, Coyne, & Wiencek, 2014). Nurses' self-efficacy was measured using a survey questionnaire namely Palliative Care Nursing Self-Competence Scale (PCNSC) developed by Desbiens & Fillion (Desbiens et al., 2012). In this research, surveys were conducted to measure nurses' self-efficacy based on ten categories or ten palliative care dimensions which included physical needs: pain (5 items), physical needs: other symptoms (5 items), psychological needs (5 items), social needs (5 items), spiritual needs (5 items), needs related to patients' functional status (5 items), ethical and legal issues (5 items), inter-professional collaboration and communication (5 items), personal and professional issues related to nursing care (5 items) and end-of-life care (5 items).

The results of measurement on perception and self-efficacy were then analyzed using T score using this following formula: T = 50 + 10 (x - X/s) (Azwar, 2010). The score obtained from the test were then categorized into these following categories: positive perception or high efficacy = if T score \geq mean score, whereas, negative perception or low efficacy = if T score is lesser than the mean T score. The researcher categorized the variables to make it easier to describe the results of research based on those categories, which results were not to be analyzed. The researcher did a back translation and retested the validity and reliability of the questionnaire on 42 intensive nurses using Pearson product moment correlation for validity and Cronbach alpha for reliability. All items on the perception questionnaire and self-efficacy were valid. The PCPCRN and PCNSC questionnaire were reliability because the reliability coefficient value was greater than 0.7 (Cronbach alpha = 0.841for perception about importance of palliative care, Cronbach alpha = 0.888 for perception about individuals' competence in performing palliative care, Cronbach alpha = 0.908 for physical needs: pain, Cronbach alpha = 0.948 for physical needs: other symptoms, Cronbach alpha = 0.873 for psychological needs, Cronbach alpha = 0.913 for social needs, Cronbach alpha = 0.889 for spiritual needs, Cronbach alpha = 0.903 for needs related to patients' functional status, Cronbach alpha = 0.927for ethical and legal issues, Cronbach alpha = 0.952 for interprofessional collaboration and communication, Cronbach alpha = 0.959 for personal and professional issues related to nursing care, and Cronbach alpha = 0.930 for end-of-life care).

Ethical consideration

Before collecting data, the researcher conducted ethical clearance from the Ethics Committee of Hasan Sadikin

General Hospital (RSUP) Bandung on March 29, 2018 number: 1193 / UN6.L6 / LT / 2018. The authors confirmed that all respondents have obtained an appropriate informed consent.

Data analyses

Univariate analysis was used to determine the frequency of each variable. For bivariate test analysis, Pearson correlation test was used because the data were normally distributed.

RESULTS

Based on the results of the statistical analysis in **Table 1**, the data on respondents' characteristics showed that the majority of respondents were female (73.2%), came from the GICU treatment room (57.5%), had the last education of D3 in Nursing (62.2%) and had not attended education related to palliative care (75.6%). In addition, almost all respondents aged 26-45 years (86.6%), were Muslim (97.6%) and were Sundanese (76.4%).

Table 1 Characteristics of ICU Nurses in Bandung General Hospital in 2018

Characteristics	n = 127	
Characteristics	Frequency	%
Age (years)		
17-25 (Late Adolescence)	3	2.4
26 - 35 (Early Adulthood)	52	40.9
36-45 (Late Adulthood)	58	45.7
46 - 55 (Early Old Age)	12	9.4
56 - 65 (Late Old Age)	2	1.6
Gender		
Male	34	26.8
Female	93	73.2
Intensive Unit		
Cardiac Intensive Care Unit (CICU)	20	15.7
General Intensive Care Unit (GICU)	73	57.5
Neonatal Intensive Care Unit (NICU)	19	15.0
Pediatric Intensive Care Unit (PICU)	15	11.8
Religion		
Islam	124	97.6
Non – Islam	3	2.4
Last education		
D3	79	62.2
Bachelor degree	45	35.4
S2	3	2.4
Tribe		
Sunda	97	76.4
Java	19	15.0
Others	11	8.7
Palliative Education		
Never joined any	96	75.6
Non-formal education	20	15.7
Formal education	2	1.6
Formal and Non-Formal Education	9	7.1

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 Table 2 Frequency Distribution of Nurses' Perception and Self-Efficacy Variables in Implementing ICU Palliative Care in Bandung

 General Hospital in 2018 (n = 127)

Variable	Frequency	%
Efficacy		
Low	55	43.3
High	72	56.7
Nurse's Perception		
Negative	66	52
Positive	61	48

Table 3 Bivariate Analysis of Dependent and Independent Variables of ICU Nurses in Bandung General Hospital in 2018 (n = 127)

Independent Variable	Mean ± SD	Min - Max	Self-efficacy	
			p value	
Nurse's perception	44 ± 7	27 - 60	0.000 *	

Based on the results of data analysis in **Table 2**, most respondents (56.7%) had high self-efficacy and had negative perceptions related to the practice of intensive palliative care (52%). While the results of data analysis in **Table 3** showed that the significance value was $\alpha = <0.05$ in the perception variable (p = 0.000). It showed that the research hypothesis was accepted, which indicated that there was a correlation between nurses' perception and self-efficacy variables in implementing palliative care in ICU in Bandung General Hospital.

DISCUSSIONS

Most respondents in this study had negative perceptions related to the practice of intensive palliative care (52%). This was supported by the data, which showed that the majority of respondents rated that assessing support and resources (51.2%) and providing culturally sensitive care for patients and families (53.5%) were quite important to be implemented. There were respondents (0.8% - 15%), which rated that all domains of palliative care were quite important to implement. In addition, respondents also considered themselves not (2.2%) and quite competent (21%) in carrying out all domains of intensive palliative care. The majority of respondents mentioned that the obstacles which were often encountered in implementing palliative care in ICU were the lack of socialization and training provided for the nurses (57.5%), difficulties in communicating with teams and families (23.6%), human resources (HR) who were not competent enough (3.9%), and there was no standard operating procedure (SOP) related to the implementation of palliative care (0.8%).

This was supported by the results of previous study (<u>Gulini et al., 2017</u>), which showed that there was the lack of standardization set by hospitals in providing palliative services for patients and families; according to the nurses, (protocol, SOP) and lack of training for medical teams specifically nurses related to palliative care. The other factors included a bad role

model for ICU nurses, lack of experience in applying palliative care, lack of knowledge of nurses in understanding the symptoms of death, and communication with families in preparing the dying process of patients (<u>Ahmed et al., 2004</u>).

The results of this study were also similar to the research (Wolf, 2016), which the domain of assessing support and resources and providing culturally sensitive care for patients and families was ranked lowest in the percentage of "very important" category. In addition, as many as 45.8% of respondents stated that they were not or quite competent in the domain of knowledge of advanced instruction, living will, power of attorney and DNR policy. 25% of respondents considered themselves not and rather competent in the domain of reviewing support and resources, giving culturally sensitive care and communication with patients and families.

Study shown that cultural factor was one of the obstacles that affected nurses in implementing palliative care. Different cultures can lead to different perceptions and increase misunderstandings between nurses, patients and families, for example the intonation or dialect in communication. Therefore, in improving the relationship between nurses and patients and families, there is a need for mutual respect to minimize the occurrence of misunderstanding due to differences in culture and language culture (Arumsari, Emaliyawati, & Sriati, 2017).

Based on the results of this study, the majority of respondents rated all domains of palliative care as very important to be carried out in intensive space (57.42%), but there were only 14.50%. respondents who considered themselves highly competent in carrying out all domains of palliative care. This was similar to the results of previous study (Wolf, 2016) that almost all respondents (90%) rated the domain of pain management, interdisciplinary collaboration, and communicating the death to patients and families as very important domains. However, there were only less than 35 % of respondents who felt that they were very competent in one of the three domains. This phenomenon shows that there are

differences in respondents' perceptions or understanding. They perceived that all domains of palliative care are very important to implement, but they considered themselves to be incompetent in implementing all domains of palliative care.

Based on the results of bivariate analysis, there was a positive correlation between respondents' perceptions of the practice of palliative care and self-efficacy in applying palliative care in intensive room ($p \ value = 0.000$). This was supported by research data, which showed that the majority of respondents who had positive perception had high self-efficacy (62.5%). It was also supported that the majority of respondents realized that the support and resource assessment (51.2%) and culturally sensitive care for patients and families (53.5%) were quite important to implement.

The results of this study were in line with the opinion of Sunaryo (Sunaryo & Kes, 2004) which states that perception is the final process of observation that begins with the sensing process, namely the process of receiving stimuli by the sensory organs, forwarded to the brain and ultimately the individual realizes perception. Through perception, individuals are aware and understand the environmental conditions that exist around them (external perception) as well as things that exist within themselves (internal perception). In the end, the perceptions can influence the individual's self-efficacy in determining the behavioral goals to be addressed (Bandura, 2004; Sunaryo & Kes, 2004).

Findings of this study showed that respondents with positive perceptions had high self-efficacy (62.5%). Respondents stated that all domains of palliative care were important to be implemented and they considered themselves competent in implementing these domains. This showed that respondents who had high self-efficacy could believe in their abilities and tried to deal with any existing obstacles. This was supported by our research data that showed that in facing the existing obstacles respondents would try to provide care comprehensively and accustomed themselves to apply palliative care.

CONCLUSIONS

Based on the results of research on ICU nurses at Bandung General Hospital, it can be concluded that most nurses had high self-efficacy in applying all domains of intensive palliative care. Most respondents had negative perceptions related to palliative care. They considered that all domains of palliative care were very important to be implemented, but only a few felt that they were very competent in implementing the domain of palliative care. The lowest rank was the domain of culturally sensitive care, studying spiritual needs and communicating with patients and families. In addition, most respondents who had positive perception regarding palliative care had high selfefficacy in implementing palliative care. The high self-efficacy level of nurses in implementing palliative care was related to the nurses' perception related to the practice of palliative care. The results of this study indicated that there were still many nurses who had insufficient knowledge related to symptom management and psychosocial aspects and negative perceptions related to competence in implementing palliative care in intensive unit. It was due to the lack of information and training related to palliative care. Therefore, it was important for the hospital to provide socialization and training related to palliative care in intensive unit for all intensive nurses.

Declaration of Conflicting Interests

None declared.

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Authorship Contribution

TAK, YT and **AP** have designed, compiled and completed this study together, and the final version of the article was agreed by all authors.

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