

Evaluation of Factors Affecting Quality of Nursing Cares for Dying Patients in ICUs

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Abstract

Nursing managers have paid special attention to quality assessment as an important management tool for improving nursing performance and the quality of nursing care. This study aimed to evaluate the aspects and factors involved in the quality of nursing cares for dying patients in ICUs in 2016-7. This descriptive and analytical study was conducted in ICUs of Imam Khomeini Hospital Complex and Shahid Rajaei Cardiovascular Medical & Research Center, Tehran. In total, 191 working nurses were selected via convenience sampling. Data collection tool was quality patient care scale (QUALPACS). In addition, data analysis was performed in PSSS version 20 using descriptive and inferential statistics. The mean score for end-of-life care was 83.62 ± 8.62 in the psychosocial, 85.36 ± 7.74 in the communication and 92.23 ± 10.88 in the physical aspects. According to the results, a significant relationship was observed between passing educational courses related to end-of-life care and quality of end-of-life care in the physical ($P=0.002$), psychosocial ($P=0.02$) and communication ($P=0.01$) aspects. According to the results of the study, the quality of care for dying patients was higher in the physical aspect, compared to other aspects. However, the quality of nursing care was poor in the psychosocial aspect.

Keywords: *Quality, End-of-Life Care, Nursing Care, Intensive Care Unit*

Introduction

Today, with the advancements in technology and new therapies in recent decades, we are faced with a high incidence and long-term hospitalization of critically ill patients in intensive care units (ICUs), which is accompanied with the suffering of the patient and the family without hope for improvement and, on the other hand, imposing heavy financial and mental burdens on the patient, the family and the health system¹. Helping patients in the final stages of life involves a period of

the imminent death of patients. In this regard, the great number of demands and needs of patients and companions and stressful situations prevent participation in care decisions, caregivers' dissatisfaction, disregard for care details, and poor quality of care for patients².

Similar to other countries, with regard to the advances made in the field of medical and paramedical sciences, we are faced with a higher number of people in need of special care due to chronic diseases or problems caused by life-threatening and incurable diseases in Iran^{3,4}. Recently, national attention and focus have been on the provision of end-of-life care, where palliative care is the center of attention and includes a range of management of physical, mental, and social sufferings associated with health status for which the treatable cure is not a remedy⁽⁵⁾.

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In the field of modern medical ethics, special attention has been paid to the rights of patients⁽⁶⁾. All over the world, numerous differences are observed in end-of-life treatment methods for dying patients considering the ethical principles⁽⁷⁾. While the goal of end-of-life care is death with dignity and respect, its concept is vague in articles and has no comprehensive definition⁽⁸⁾.

Nurses and physicians in intensive care units (ICU) are a group of professional healthcare providers, who deal with problems related to end-of-life care on a daily basis⁽¹⁾. While nurses all over the world share many commonalities in terms of different physical, psychological, and social needs of patients, there are differences in patterns of end-of-life care that are rooted primarily in the culture and beliefs of the community⁽⁹⁾.

Since nurses are the largest group of medical staff in the hospital to provide care services^(10, 11), Quality is a multi-dimensional concept with mental, social, and spiritual aspects⁽¹²⁾. The quality of care provided is an important factor in the satisfaction of patients and their families and even the job satisfaction of nurses in the health system and is recognized as a priority of the health care system, especially in the field of nursing. In most countries, including Iran, a hospital's grading and accreditation are influenced by the quality of nursing care provided and is assessed along with other validation measures^(13, 14). With this background in mind, this study aimed to evaluate the aspects and factors involved in the quality of nursing care for dying patients.

Materials and Methods

This descriptive and analytical research was conducted to evaluate the aspects and factors involved in nursing care quality for dying patients in ICUs. In this research, 19 nurses working in the mentioned medical centers were selected through convenience sampling. Inclusion criteria included a willingness to participate in the research, working in ICUs, having a minimum degree of BSc in nursing, and minimum work experience of more than a year in ICUs. Data were collected using demographic characteristics questionnaire and quality patient care scale (QUALPAC) in three communication, psychosocial and physical aspects.

The demographic characteristics questionnaire included 18 items on age, gender, marital status, level of education, number of beds in ICU, work experience in ICU, average working hours per week, type of work

shift, type of intensive care unit (internal and surgical), passing intensive care courses, passing educational courses on end-of-life cares, and experience of caring for dying patients. On the other hand, the QUALPAC contained 64 items on quality of nursing cares with the care aspects of psychosocial (27 items), physical (23 items), and communication (14 items) scored using a four-point Likert scale from always (four scores) to never (one score). In this regard, the score range of the psychosocial, physical, and communication aspects was 27-108, 23-92, and 14-56, respectively. In addition, the total score of the scale varied from 64 to 256. The validity of the questionnaire was confirmed in the United States, England, and Nigeria in 1975⁽¹⁵⁾. In Iran, Haghghi and Khoshkhoo (2004) confirmed the validity and reliability of this scale in a research conducted to assess the quality of nursing cares from the perspective of nurses and patients hospitalized in training healthcare centers affiliated to Tabriz University of Medical Sciences, Tabriz, Iran⁽¹⁶⁾.

In addition, the scale was used in studies by Akbari Kaji and Farahmini (2009) and Neyshabouri et al. (2010)^(17, 18). In the present study, the reliability of this tool was confirmed at 0.82 using the split-half method. Data analysis was performed in SPSS version 20 using Chi-square, correlation bivariate, and Pearson's correlation to assess descriptive and inferential statistics. Moreover, P-value of less than 0.05 was considered statistically significant.

Results

In this study, the majority of nurses (54.5%) were within the age range of 30-40 years. In addition, 74.3% of the participants were female, whereas 51.3% of the subjects were married. In terms of work experience, 58.1% had less than 10 years of work experience. Moreover, 59.7% of the nurses had permanent contracts, and 136 subjects were working in special surgical sections, including heart surgery, transplantation, neurology, cancer, and gynecology. Furthermore, 87.4% of nurses had a BSc degree, and 66.5% of the subjects were highly interested in working in ICUs.

Statistical tests demonstrated a significant relationship between the physical aspect and type of employment ($P=0.01$), the experience of the death of a family member or close friend ($P=0.005$), passing critical care courses ($P=0.03$), and gender ($P=0.02$). (Table 1).

Table 1: Relationship between Demographic Characteristics and Aspects of End-of-life Care in Dying Patients in ICUs

Various aspects of end-of-life care Variable	Psychosocial aspect	Physical aspect	Communication aspect
	P-Value	P-Value	P-Value
Type of employment	0.3	*0.01	0.1
Type of ICU (internal and surgical)	0.2	0.8	0.3
Number of ICU beds	0.2	0.5	0.5
Level of education	0.7	0.8	0.3
Interest in working in the current ward	0.1	0.09	0.08
Average working hours per week	0.9	0.8	0.7
Type of work shift	0.9	0.1	0.8
Caring for dying patients	0.2	0.3	0.4
Caring for how many dying patients	0.3	0.08	0.2
experience of the death of a family member or close friend	0.06	*0.005	0.9
Passing intensive care courses	0.6	*0.03	0.3
Passing educational courses related to end-of-life cares	*0.02	*0.002	*0.01
History of working in ICU	0.07	0.1	0.1
Marital status	0.8	0.5	0.9
Gender	0.4	*0.02	0.2

The quality of end-of-life care for dying patients showed an undesirable level (46.1%=low) considering the overall score of end-of-life care areas, which was favorable (53.9%=moderate). In addition, the mean score of end-of-life care in the psychosocial aspect was 83.62±8.63 (%37.7 favorable and 62.3% lower), whereas the same mean in the communication aspect

was 85.36±7.74. In addition, the mean score of end-of-life care in physical aspect was 92.23±10.88 (Table 2). Moreover, the score of psychosocial aspect of end-of-life care in ICUs of Imam Khomeini and Shahid Rajaei Cardiovascular Medical Center of Tehran was reported to be 82.61±8.52 and 85.42±8.59, respectively.

Table 2: Quality of End-of-life Care in Dying Patients in Various Aspects in ICUs

Quality of end-of-life care Aspects	Unfavorable	Favorable	Mean±standard deviation
	N (%)	N (%)	
Psychosocial	119 (62.3)	72 (37.7)	83.62±8.63
Physical	35 (18.3)	156 (81.7)	92.23±10.88
Communication	95 (49.7)	96 (50.3)	85.36±7.74
Total score	53.9 (103)	46.1 (88)	173.31±2.1

According to correlation bivariate analysis, the level of correlation between psychosocial aspect with the physical aspect ($R=0.7$, $P=0.001$) and between psychosocial aspect with the physical aspect ($R=0.6$, $P=0.001$) was significant and direct. On the other hand, a reverse association was found between the physical aspect and psychosocial aspect ($R=-0.7$, $P=0.001$) (Table 3).

Table 3: Relationship between Quality of End-of-life Care for Dying Patients in ICUs of Hospitals

Aspect		Psychosocial	Physical	Communications
Psychosocial	Pearson's correlation coefficient	1	0.652	0.715
	P-value		0.0001	0.0001
Physical	Pearson's correlation coefficient	0.652	1	0.605
	P-value	0.0001		0.0001
Communications	Pearson's correlation coefficient	0.715	0.605	1
	P-value	0.0001	0.0001	

Discussion

The results showed that the total mean quality of end-of-life care provided by nurses in ICU was desirable while the quality of nursing care was undesirable in the psychosocial aspect and desirable in the communication and physical aspects. Similar results showed that the quality of care in the psychosocial aspect was desirable from the perspective of 31.6% patients and 92.6% nurses. In the communication aspects, quality of care was favorable from the viewpoint of 24.7% of patients and 56.8% of nurses. In the psychosocial aspect, 73.5% of patients stated that nurses would rarely introduce themselves to patients. Moreover, 77.9% claimed that new patients were rarely introduced to patients. In the communication aspect, 42.5% of patients stated that they were rarely assured of the confidentiality terms⁽¹⁹⁾.

Although various studies conducted in Iran have demonstrated attention to functional and care aspects, studies have shown that lack of time and fatigue, and any factor that leads to a negative attitude and emotional stress in nurses, can result in emotional and physical withdrawal of nurses from patients, and in many cases, neglecting the emotional needs of patients and ignoring the aspects of care quality^(20,15). Meanwhile, nurses are legally and morally responsible for the quality of care they provide and must be aware that both psychosocial aspects, as well as their expertise and skills in providing care, are effective in understanding the quality of care by patients.

Since nurses primarily aim to meet the basic needs through communication, intervention and assisting in treatment, these communications must be increased and

appropriate and accurate care must be provided so that patient satisfaction could be ultimately achieved⁽²¹⁾. By better identification of the quality of nursing care for dying patients (in the face of death), we can provide evidence-based care and reduce the severity of illness in the final stages of life. Convincing evidence has shown that the inadequate association between the ICU group and the family members of patients is common, which can have serious consequences. When ICU staff are not well-trained in this aspect, families often regard communication with ICU personnel as a major concern. Accurate, sensitive, and inclusive communication is the key to the success of the discussion and the problems that arise in end-of-life care⁽¹⁶⁾.

Statistical tests showed that the correlation between psychosocial aspect and the physical aspect was direct and significant since the increase in social psychosocial score was associated with an increased score of the physical aspect. In this respect, Izadji et al. (2013) marked that the highest priority of caring behaviors by nurses was related to a relationship based on trust and emotional and physical well-being of patients, whereas the availability and anticipation of the needs of patients was the last care priority, which could reduce the quality of care⁽²²⁾. According to the results of the present research, end-of-life care had a higher quality in the physical aspect, compared to communication and psychosocial aspects. In addition, the professional attitude of nurses toward the subject of death affected caring for dying patients. Therefore, discussion of attitudes toward death, including the inevitability of death and fear of death, must be included in the education of these individuals.

Ethical Clearance: This article is the result of a research project (a master's thesis critical care nursing) approved by the in Shahid Rajaei Cardiovascular Research and Academic Center. After the necessary coordination and receiving the relevant licenses, the researcher met with the subjects at their working hour in the hospital to introduce himself, explain about the objectives of the research, and obtain oral and written consents prior to the research. Moreover, the participants were assured of the confidentiality terms regarding their personal information since the questionnaires would be completed anonymously.

Conflicts of Interest: None declared

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