Care Needs of Older Patients in the Intensive Care Units

Concise Title: care needs of older patients

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**Aims.** To explore the care needs of older patients in the intensive care units (ICUs).

**Background.** As the numbers of older patients admitted to the ICUs are growing, care quality of critically ill older patients has become an important issue. However, there are few studies directly investigating perceived care needs of hospitalized older patients and the studies on care needs of older patients in the ICUs are even fewer. The identification of care needs from older patients’ perspective will help develop qualified nursing practice.

**Design.** A qualitative exploratory design.

**Methods.** Purposive sampling was performed to recruit 35 older patients from three hospitals in Taiwan. The interview transcripts were analyzed by qualitative content analysis.

**Results.** The results revealed that care needs of older patients in the ICUs are multidimensional, including physical, informational and psychosocial dimensions. Older patients’ needs of the physical dimension included relieving pain and discomfort, starting oral intake as soon as possible and having continuous sleep. Informational needs included adequate explanations about their disease progression and prognosis and information on recovery-promoting activity. Psychosocial needs included caring behavior of ICU staff, flexible visiting hours, increase in control ability and maintenance of good communication with ICU staff.

**Conclusion.** The findings can assist nurses in understanding the interventions necessary to meet care needs of critically ill older patients. The critically ill older adults need more than medical-technical care. They need more holistic care. The psychosocial and informational needs must be considered commensurate with the presenting physical needs.
Relevance to clinical practice. Nurses have an important role in meeting ICU older patients’ care needs. ICU nurses should conduct comprehensive assessment regarding older patients’ needs at the beginning and at various points in their ICU stay and match these needs with appropriate nursing interventions.
Introduction

Aging society is a worldwide phenomenon. Because of the aging process, the decline in both physical and mental functions of older adults leads to poorer functional status and higher probability of disability and death (Wood & Ely, 2003). In addition, when experiencing acute diseases, older patients tend to exhibit higher levels of severity and are more likely to be admitted to the intensive care units (ICUs) (Watson et al. 1999). In the ICUs of Taiwan, approximately 50% of the critically ill patients are older adults, and this proportion is very close to that of older patients in the ICUs of the United States (Marik 2006, Chen et al. 2007). Vosylius et al. (2005) also indicated that the average age of critically ill patients is around 60 years old, and there is an increasing number of older patients in the ICUs. The care quality of critically ill older patients has become an important issue.

Patient satisfaction is often used as an important indicator of care quality. On the other hand, some researchers have argued that the focus of attention should shift to investigate patients’ dissatisfaction with hospital care (Eriksson & Svedlund 2007). Regardless of either perspective, it can be presumed that not until the needs of patients are met can the care quality be improved. As opposed to younger patients, the disease pattern of older patients is significantly different (Jacobs 2003, Palmer et al. 2003). In addition, the aging process leads to alterations in physical, psychosocial and cognitive functions. Therefore, older patients need unique care measures. The identification of care needs will help nurses provide appropriate care to meet the individual needs of older patients. However, the unique care needs of older patients have not been adequately
identified and thus appropriate nursing care cannot be provided (Chang et al. 2003).

There are few studies directly investigating perceived care needs of hospitalized older patients and the studies on care needs of older patients in the ICUs are even fewer. Among the few studies concerning care needs of older patients, Wilde et al. (1995) investigated care quality from the perspective of older patients. The results indicated that the most important aspects of care were medical-technical competence of caregivers and care environment. Because most participants of the study were from nursing homes or were receiving home nursing services, the results cannot be generalized to older patients in the ICUs. Santo-Novak (1997) used qualitative research method to explore older patients’ expectations of the role of nursing staff. The results showed that older patients expected nurses to be knowledgeable, caring and attentive. Participants of this study were older patients who had been hospitalized during the past two years and were not hospitalized at the time of this study. Therefore, the conclusion does not apply to older patients in the ICUs. Hancock et al. (2003) investigated care needs of acutely ill older patients. They found that older patients rated carrying out doctors’ order as the most important dimension of nursing care, followed by physical care, psychosocial care and discharge planning. However, participants of this study were older patients in the elder care/medical wards. The findings also could not reflect the unique needs of older patients in the ICUs.

Other studies concerning care needs of patients in the ICUs investigated the needs or experiences of general adult patients in the ICUs. The qualitative study by Hupcey (2000) explored the psychosocial needs of ICU patients and found that the overwhelming need was to
feel safe while they were in the ICUs. Four categories affect patients’ experiences of feeling safe, which are knowing, regaining control, hoping and trusting. Hofhuis et al. (2008) explored the perceptions of patients regarding nursing care in the ICU. Three categories emerged from the interview data: providing illness-related information and explanation, placing the patient in a central position and personal approach by nurses. Based on the above, it can be concluded that the care needs of patients in the ICUs are multidimensional. Due to the influence of the ageing process, the care needs of older patients are not exactly the same as that of general adult patients. Therefore, it is important to obtain older patients’ perspectives in order to provide appropriate care to meet their needs.

**Aim**

The aim of this study was to explore the care needs of older patients in the ICUs.

**Methods**

A qualitative exploratory design was adopted for this study.

**Participants**

Purposive sampling was used to recruit participants from three hospitals in the middle region of Taiwan; one was a medical centre and the others were district teaching hospitals. The sampling criteria were patients aged 65 or older, had never been admitted in ICUs before, had no known cognitive and mental impairment. Finally, a total of 35 participants were interviewed.

**Ethical consideration**

Formal ethical approval for the study was obtained from the relevant ethical committee.
The interviews were conducted after explaining the research purpose and method to participants who met the sampling criteria and obtaining their written consent.

**Procedure**

Participants were interviewed 2-4 days after transfer from the ICUs to the wards. They were interviewed at hospital lounges or wards without interrupting their meal and rest times. The major guidelines for the interview were: “During your stay in the ICU, what care did you expect to obtain from the ICU staff?” and “In your opinion, which parts of the care provided by the ICU staff should be improved or strengthened?” The duration of interview was approximately 25 to 35 minutes.

**Data analysis**

The tape-recorded interviews were transcribed verbatim. Transcripts were analyzed by qualitative content analysis to identify patterns of caring needs of older patients in the ICUs (Tesch 1990). To get a sense of the whole, all interview transcripts were first read several times. Then, significant statements that directly pertained to the study object were identified and their underlying meanings were formulated as topics (codes). The following step was to make a list of all topics. These topics were compared and similar topics were clustered together to form categories. Coding categories were refined until all data were coded into exhaustive and exclusive categories.

Trustworthiness of the study was ensured by four criteria: credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985). Credibility was ensured by peer
debrieing whereby the analysis was discussed with one colleague of the second author who has expertise in qualitative research. For ensuring transferability, thick descriptions were provided. Direct quotations from the interview transcripts were included to provide examples of categories when presenting the findings. Dependability was ensured through the engagement of two authors in the iterative data analysis process detailed above. For enhancing confirmability, the audio tapes, interview records, field notes and data analysis results are all well preserved to establish a detailed audit trail.

Results

Females comprised 62.8% of the sample. The mean age of participants was 72.78 (SD 5.77) years, with ages ranging from 65 to 86. The length of stay in the ICUs ranged from 2 to 37 days and with a mean of 7.76 (SD 6.63) days. The major cause for being admitted in the ICUs was acute respiratory failure (34.2%). According to the results of content analysis, care needs of older patients in the ICUs included physical, informational and psychosocial dimensions. Each of these dimensions is outlined below. The number at the end of each quotation indicates the age of the participant and M and F indicate male and female, respectively.

Physical dimension

Participants’ needs of the physical dimension included: relieving pain and discomfort, starting oral intake as soon as possible and having continuous sleep.

ICU patients often experience pain and discomfort. The pain and discomfort of participants were caused by disease condition, surgical wounds, endotracheal intubation and ungentle care
actions of nurses. Regarding the pain caused by surgical wounds, the statement from a participant who had undergone abdominal surgery was as follows:

“Take good care of me and don’t let me feel any pain. The surgical wound made me feel like being stuck by needles. They should give me painkillers routinely.” (M, 67)

Another long-term dialysis patient mentioned that bone pain was her old problem and she continuously received hemodialysis at the same hospital and how could the ICU staff fail to detect the problem. She stated:

“Make me feel comfortable without bone pain…It is my old problem and every doctor in the hemodialysis center is aware of it. Every time during dialysis, if the pain is severe, they always prescribe analgesics for me. However, doctors and nurses in the ICU failed to detect my problem and alleviate my pain…With the endotracheal tube, I could not tell them. They were not alert enough regarding patients’ conditions.” (F, 72)

The pain caused by endotracheal intubation was also intolerable for participants. For example, one participant stated:

“I suffered from the endotracheal tube…I begged the doctor to remove my endotracheal tube as soon as possible. My throat and mouth hurt and I could not speak. This is my only request to the doctor and nurses.” (F, 68)

In addition, some participants mentioned that nurses’ actions for turning patients’ bodies over and conducting sputum suction were ungentle. For example, one participant described:

“Please be gentle when turning my body over. When the nurse suddenly turned my body
over, I felt pain in bones. My cancer cells have spread to my bones and thus I hoped nurses could be gentle when they touched me.” (F, 65)

To participants who were restricted to oral intake, they worried that they might have the problem of malnutrition. They hoped that the ICU staff could help them start oral intake as soon as possible. For example, one participant stated:

“I hoped my stomach stop aching and get healed as soon as possible. I wanted to eat food from mouth…I could not remember how long had I been fasting. Although I had received the injection of nutritional supplements prescribed by the doctor, I was still very worried that I might become weaker and weaker due to fasting…When my mouth became dry, I asked nurses to use the swab to dab my mouth with water. However, it was still torturous to eat and drink nothing.” (F, 68)

Many participants indicated that they could not have continuous sleep because of the constant noise in the ICUs, such as noisy machines and equipments and staff conversations. In addition, routine nursing works also disturbed their sleep. For example, participants stated:

“The blood pressure cuff was always wrapped around my arm. When I fell asleep in the midnight, the machine suddenly measured my blood pressure automatically, which scared me frequently. I told one nurse, but she said that it would be more convenient for them to monitor patients’ conditions. Anyway, a patient always has to tolerate everything during hospitalization.” (F, 75)

“I did not have enough sleep. Nurses were constantly working around my bed and the
machines were noisy as well. In addition, the sound of closing trash can lid was very noisy as well.” (M, 78)

“The ICU was too noisy. Patients always need a quiet environment to take rest. Nurses kept talking. They talked loudly and did not consider the feelings of patients. I could not sleep well in the ICU. I wanted a quiet environment, so I asked nurses to speak in low voice. A quiet environment is the only thing I want.” (M, 80)

**Informational dimension**

Informational needs of participants included adequate explanations about their disease progression as well as prognosis and information on recovery-promoting activity. Although nurses are the first-line ICU staff taking care of patients, the duty for explanation of disease-related information is dominated by doctors. However, participants perceived that doctors did not give them an explicit explanation but explained to their families in front of them instead. Participants did not understand the course of their diseases and treatment. For example, a participant who had undergone abdominal surgery indicated that:

“I would like to understand the circumstance of the operation. The doctor just explained to my daughter and only said “You are all right.” to me. However, my wound still hurt and I had backache after lay on the bed for several days.” (M, 72)

Moreover, several patients who had undergone endotracheal intubations would like to know exactly the time for removing the endotracheal tube. One of the patients stated:

“The doctor should explain the disease condition to me voluntarily to make me understand
the extent of recovery. Every time when several doctors came to my bed, they discussed for while and only told me “There is a progress.” However, the tube in my mouth was not removed. I can tolerate any kind of pain. At least, they should tell me the possibly removing time.” (M, 66)

Some patients mentioned that they hoped to obtain relevant instructions about what to do to help themselves recover from the disease. For example, one participant stated:

“Nurses should instruct me with some approaches to let me cooperate with them and recover from the disease as soon as possible. I would like to know if there is any approach to alleviate the pain of the surgical wound and how to cough out sputum. My doctor said that the sputum was still in my throat so the tube had to be placed inside again. I was very afraid of it…I had tried my best to cough out sputum. However, it was stuck in my throat. I still failed to cough it out.” (M, 81)

**Psychosocial dimension**

Psychosocial needs of participants included caring behavior of ICU staff, flexible visiting hours, increase in control ability and maintenance of good communication with ICU staff.

When participants were admitted in the alien unit due to their critical illness, they expected that ICU staff could provide enthusiastic and attentive care to comfort their emotion. However, some participants mentioned that nurses lacked of concern for them. For example, one participant stated:

“Nurses were always in a hurry and they were all busy taking care of those patients whose
conditions were more severe than me. It might be because my disease severity was not the worst one in the ICU. Nobody showed any concern over me. Nurses could stop by and say, “Do you feel better?” or “How are you feeling now?” Nurses should know how to express their caring to patients and comfort them.” (M, 72)

Moreover, several patients mentioned that nurses could give them positive emotional support through verbal encouragement. For example, one participant stated:

“They should know how to comfort and encourage patients and understand our suffering. They could simply encourage patients by saying “You can do it.” or “There is a progress.” to make patients feel better.” (M, 74)

Because of the restriction on visiting hours of ICUs, participants missed their families and pointed out that the visiting hours should be more flexible. One participant stated:

“Three visits a day are not enough and the length of each visit is too short. Furthermore, only one person is allowed to enter the ICU is not reasonable. Sometimes, there were many families coming over, I could not see them all…Especially, I really needed my wife to be with me for a longer time.” (M, 65)

In ICUs, patients might be given protective restraints for preventing therapy disruption and fall. However, physical restraints led to the sense of losing control. For example, participants stated:

“My hands were tied up since I became conscious. Of course, I did not want to be tied. I felt as if I were a dog. They should treat me as a human being…My hands and back all hurt. You cannot understand such pain.” (M, 71)
“Don’t tie my hands. Being sick was pitiful enough and the worst part was tying my hands up. I could bear all the pain and just didn’t tie my hands. It was unreasonable. They could discuss with me or tell me how to do to cooperate with them. Nurses should not use the restraint as a tool to force patients to cooperate with them.” (F, 68)

Participants tended to feel nervous and anxious when the existence of endotracheal tubes inhibited verbal communication. This situation led to poor communication and participants’ dissatisfaction. For example, one participant stated:

“Removing the tube as soon as possible because I could not speak. Sometimes, I felt out of breath and intended to ask nurses to help me. However, I could not talk so I felt very anxious and terrified.” (M, 74)

To illiterate older patients with endotracheal tubes, it was even more difficult to communicate with ICU staff. One participant stated:

“I could neither talk nor write while intubated. It was such a torment.” (F, 72)

**Discussion**

Care needs of older patients in the ICUs are multidimensional, including physical, informational and psychosocial dimensions. In the physical dimension, pain and discomfort led to unsatisfied experiences of participants. Previous research also indicates alleviation of pain is the physical need which patients most desired to be met (Doering et al. 2002). Because of pharmacokinetics alterations in older adults, ICUs older patients are at greater risk of unrelieved pain (Tullmann & Dracup 2000). As Herr (2010) indicates, it is imperative for nurses to identify
instances of pain and be familiar with pain assessment. Nurses should also be able to implement
effective pain management approaches and preventive measures for older patients.

Because of the surgery or disease condition, some participants were restricted to oral
intake temporarily. They believed that oral intake was very important to their health and worried
fasting could lead to the malnutrition problem. Therefore, they wanted to start oral intake as soon
as possible. The gastrointestinal system changes with aging. Hickson et al. (2004) address that
malnutrition problem in the hospitalized critical ill older patients is considerably severe not only
because of the disease itself but also because of the failure to manage it immediately. Because of
the critical illness, older patients in the ICUs are especially vulnerable to malnutrition. The
problem of malnutrition may be undetected and increase the risk of adverse outcomes, such as
increased morbidity and mortality (Vanderkroft et al. 2007). Therefore, a careful nutritional
assessment is essential for determining older patients’ nutritional status and planning adequate
nutrition care when necessary. Concurrently, nurses should provide older patients with clear
explanations to make the intake restriction more acceptable then reduce their anxiety.

Older patients in this study complained that their need for sleep could not be met. Sleep
disruption is a common problem in ICU patients (Fontaine 2007). Price (2004) indicates that the
improvement in routine nursing practice is helpful in satisfying patients’ need for sleep. Therefore,
nursing activities should be minimized when patients are sleeping unless the patient’s condition is
considered emergent or unstable. Besides preventing the routine practice from disturbing sleep,
noise reduction is another important intervention to promote older patients’ sleep quality.
Donchin and Seagull (2002) indicate that the noisy ICU environment and the noise from routine nursing works are annoying to patients. Fontaine (2007) stresses that the ICU nurses are often unaware of the loudness of their conversations are irritating to patients. Therefore, nurses should take notice of the noise level and its influence on patients’ physical and psychological consequences. The overall volume of machines, monitoring equipments and staff conversations should be decreased especially at bedtime.

In the informational dimension, the rights of older patients tend to be neglected. Participants hoped to obtain disease-related information. However, physicians often explained the information to patients’ families. Participants watched physicians talk to their families and were not given the opportunity to grasp what was going on. Their understanding of the disease is merely the information that their families report to them. Bizek (2007) indicates that critically ill patients hope to know all aspects of patient care, including what is happening, what will happen to them and what they can expect. Meeting the need for information can decrease patients’ sense of uncertainty and fear as well as maintain their dignity (Hofhuis et al. 2008, Matiti &Trorey, 2008). Moreover, patient participation is a central concept of nursing (Tutton 2005). Tutton suggests that frail older patients should be allowed to participate in their care and nurses should use facilitative strategies to enable participation to take place in practice. Consequently, informational needs of older patients should not be neglected because of the cognitive change accompanying with the ageing process. Instead, ICU staff should consider older patients’ comprehension, clearly explain to them, and provide them with adequate information and
guidance to enable them to participate in the care activity.

Through the interaction with ICU staff and families, ICU patients can obtain emotional support and sense of safety (Bridges et al. 2010). Hofhuis et al. (2008) indicate that ICU patients are very sensitive to the attitudes and behavior of nurses. In addition, caring behavior of nurses can relieve ICU patients’ fears and worries. Except being busy with routine works, nurses should always provide comforting strategies and continuous support to patients to alleviate their emotional reactions. Besides, family members are valuable sources of patients’ support and motivation to stay alive (Hupcey 2000, Engström & Söderberg 2007). Especially, spouses play a key role (Tullmann & Dracup 2000). This study found that older patients are in desperate need of the extension of visiting hours and increase in the number of visitors. Fontaine (2007) states that the design of ICUs can be based on the precepts of family-focused care, which enables and encourages patients’ families to become key partners in patient care instead of just visitors. Before the policy of visiting restriction is changed, for patient with strongly negative emotional reactions, the visiting hours should be flexible to enable their families to visit them to alleviate their emotional reactions. Furthermore, because most older patients were unable to speak while intubated and nurses could not fully understand their non-verbal expression. Communication problems existed. Webster and Bryan (2009) stress that if nurses can maintain effective communication with older patients to increase their sense of control, older patients’ self-esteem can be increased and negative emotional reactions can be decreased. In addition to showing patience to and using body language to communicate with patients, nurses can also use pictures
or picture cards to promote their communication with patients.

Physical restraints were unacceptable to older patients in this study. Physical restraints are frequently used in ICUs and are mainly used to prevent falls or potentially serious disruptions in patient care such as accidental dislodgment of endotracheal tubes, IV lines and other invasive therapies (Bizek 2007, Minnick et al. 2007). However, physical restraints restrict patients’ mobility and may result in impaired circulation and skin alteration (Demir 2007). Physical restraints can also cause older patients to feel powerless, anxious, angry and depressed (Huang et al. 2005). It is therefore important that nurses should clearly inform older patients about the reason for using restraints and maintain their physical and psychological comfort during restraint.

The findings of this study should be interpreted within the limitation of the nonrepresentative sampling. In addition, participants were interviewed 2-4 days after they had been transferred from the ICUs to the wards. Some participants had taken sedatives during their stay in the ICUs, and thus, they could not recall all experiences in the ICUs. However, the findings still provide important insights about what ICU older patients need, regardless of participants’ level of recall.

**Conclusion and Implications to Clinical Practice**

Results of this study showed that care needs of older patients in the ICUs were multidimensional, including physical, informational and psychosocial dimensions. The findings can assist nurses in understanding the interventions necessary to meet care needs of critically ill older patients. When critically ill, older patients often need advanced medications and highly
technical treatment. This study shows, however, that the critically ill older adults need more than these medical-technical care. They need more holistic care. The psychosocial and informational needs must be considered commensurate with the presenting physical needs. ICU nurses should conduct comprehensive assessment regarding older patients’ needs at the beginning and at various points in their ICU stay and match these needs with appropriate nursing interventions. Moreover, as the numbers of older patients admitted to the ICUs are growing, educational resources are needed to enable ICU staff to strengthen their knowledge and competence concerning care of older patients. By doing so, the overall care quality can be improved and care needs of older patients can be met.

**Contributions**

Study design: CWC, YMC; data collection and data analysis: CWC, YMC; manuscript preparation: CWC, YMC, CCS.

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