

# Critical care nurses' knowledge about the care of deceased adult patients in an intensive care unit

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## KEY WORDS

intensive care nurse, post-mortem care, nursing care, deceased patient

## ABSTRACT

### Objective

The purpose of this study was to identify knowledge deficits about the care of deceased patients among critical care nurses.

### Design

The research was conducted as a descriptive study in the adult intensive care units of a university hospital in Istanbul. The data were collected using a questionnaire.

### Setting

The study was conducted with nurses working in the medical and surgical intensive care units of a university hospital, including the coronary, neurosurgery, cardiovascular, post-anaesthesia and emergency intensive care units.

### Subjects

The subjects were 61 critical care nurses.

### Findings

The majority of nurse respondents (75.4%) did not have a certificate in intensive care nursing and 95.1% had not received education about the care of a deceased patient. There is no standard protocol at the hospital for deceased patient care. The majority of nurses stated they removed instruments, catheters, tubes, dressings from the body and cleaned drainage and secretions, but only 8.1% reported they dressed the patient in a clean gown and combed their hair. Of the nurse respondents, 24.5% did not provide emotional support to the individual's family.

### Conclusion

Nurses implemented appropriate clinical activities after death, however did not demonstrate appropriate support behaviours toward the patient's family or loved ones.

## INTRODUCTION

Human life begins with birth and ends with death, an inescapable process for all living beings (Babadag 1991).

Research from the United States of America found the mortality rate is approximately 50% for patients with cardiac or respiratory insufficiency; patients who have experienced trauma; patients who are haemodynamically unstable; and patients whose general condition has deteriorated and who are admitted to intensive care units (ICU) (Çelik 2004; Ciccarello 2003).

ICU nurses are expert individuals who are educated in the care and monitoring of ICU patients; who participate in ongoing education such as courses and seminars about the care of ICU patients; and who are by the patients' side 24 hours a day. In spite of this education, one of the most difficult duties for ICU nurses is providing care to patients they struggled to keep alive after they have died (Ciccarello 2003). Nurses may be prepared to face the death of patients in their ICU, but they still feel unprepared to give end of life care (Çelik 2004; Ciccarello 2003). Providing this type of care may also cause the nurse to experience feelings of guilt and inadequacy. During this period nurses have to share in the grief of patients' relatives as well as providing respectful and honourable post-death care to their patients (Marthaler 2005; Çelik 2004; Harvey 2001).

Nurses need to be aware of their own feelings and thoughts about death. Nurses often react to a patient's death by feeling inadequate, feeling they have failed or feel nervous, laugh or cry or have uncertain feelings when they touch a patient because of their culture, religious beliefs, previous experiences, or because the death was unexpected (Marthaler 2005; Sanazaro 2005; Çelik 2004; Brosche 2003; Birol et al 1997; Roper et al 1996). However ICU nurses have to keep all the emotions they are experiencing under control and carry out both their duty to care for the deceased patient's body before taking it to the morgue as well as helping the patient's family cope with the feelings they are

experiencing and supporting them in completing necessary administrative procedures, such as completing the death related section of discharge papers, discussing transplantation if appropriate, and having families sign for the patient's personal items (Marthaler 2005; Sanazaro 2005; Brosche 2003; Roark 2003; Roper et al 1996; Thompson et al 1994).

A literature review revealed that research has mainly focused on the nursing care of patients in the terminal stage of illness. There was only one study located that examined post-death care (Hill 1997); the remainder of the literature was about protocol development and in the form of review articles. The purpose of this study was to determine ICU nurses' knowledge about activities for patients after they have died.

## MATERIAL AND METHOD

### Design and sample

This research was conducted as a descriptive study with 61 nurses who worked in the adult neurosurgery, coronary, cardiovascular, surgical, post-anaesthesia, and emergency surgery ICUs of a university hospital in Istanbul, Turkey; who had previously given deceased patient care; and who willingly agreed to participate in the research. All ICU nurses were invited to participate in this study and 74% of these nurses volunteered.

### Data Collection and analysis

Data were collected using a questionnaire developed by the researchers from the literature. The questionnaire was pilot tested with ten ICU nurses and three academic nurse professionals and adjusted as a result of comments received. The nurses who completed the questionnaire for the pilot test were included in the sample but the academic nurse professionals were not. The final questionnaire was anonymous and self-administered to protect confidentiality.

The finalised questionnaire contained items relating to the nurses' demographic characteristics and nursing interventions related to the care of the individual who had died and the emotional support provided for the patient's family/loved ones. The

questionnaire was constructed to list care activities about nursing actions performed both before and after the family spent time with their deceased relative and nursing interventions performed to provide emotional support to the family. All the questions in the questionnaire were closed ended questions about the nursing care provided (eg “Do you remove tubes from the body: yes or no?”).

The questionnaire was given by the researchers to the ICU charge nurse or head nurse in the various ICUs, who were informed about the study goal and who were asked to give the forms to the nurse participants who worked in their ICUs. The charge nurses and head nurses were also asked to explain the purpose of the study to the nurses as they gave them the form for completion. The nurses were asked to complete the form during work hours and place it in the envelope provided to ensure confidentiality of their answers. After the questionnaires were completed they were collected by the researcher from the charge nurse or head nurse.

Data were entered in Microsoft Excel 2000 software. Methods of statistical analysis used included: frequency, standard deviation, percentage and Chi-square for all the items in the questionnaire.

### Ethical Approach

Permission to conduct the research was obtained from the hospital's Director of Nursing Services and each of the ICU head nurses after informing them about the study. The ICU nurses were informed about the purpose and content of the research. They gave their own verbal and written permission to participate. A sealed envelope was used to maintain the anonymity of their responses.

### FINDINGS

The mean age of the nurses was 28 years. More than half the nurses (54.1%) had a baccalaureate degree in nursing and 27.9% had worked as an ICU nurse for 1-3 years (mean of 59 months). The religious affiliation of all the nurses was Muslim (100%). Of the nurses participating in the research, 39.3% worked in the surgical ICU. The majority (75%) did

not have a certificate in ICU nursing and 95.1% had not received education about deceased patient care. All the nurses (15 nurses) had certificates from the ICU in which they worked in electrocardiography and cardiopulmonary resuscitation.

**Table 1: Nursing actions prior to the family spending time with their deceased relative (n=61)**

Nursing Interventions	n*	%**
Separate deceased person from other patients with curtain or screen	58	95.0
Remove all visible instruments and support systems	57	93.4
Remove tubes from the deceased patient's body	54	88.5
Cut the tubes remaining in the body 2.5 cm from the skin and cover with a dressing	14	22.9
Remove dirty catheters and dressings	58	95.0
Place the patient's body in supine position	51	83.6
Put a towel or small pillow under the deceased patient's head	10	16.3
Hold the eyelids closed for several minutes to assure closure	40	65.5
Close the eyelids with cotton thread	6	9.8
Ensures dentures in place before family spend time with deceased patient and removes them afterwards	4	6.5
Put a folded towel under the deceased patient's chin and ties it	41	67.2
Wipes away blood and drainage on the body and covers with a dressing	51	83.6
Put a clean gown on the deceased patient and combs their hair	5	8.1
Covers deceased patient with a clear sheet up to the shoulders and calls the family into the unit to spend time with their relative	37	60.6

\*More than one answer was given

\*\* Percentage was calculated according to n

The results demonstrated that 95% of the nurses, immediately after the death of a patient and before the family spent time with their deceased relative, closed the curtain or screen to separate the patient from other patients and removed 'dirty' catheters and dressings. Similarly the majority removed all visible life support system equipment (83.4%) and tubes (95%) from the patient's body, put the patient's body

into a supine position (83.6%), and cleaned the body, covering necessary areas with dressings (83.6%). There were very few nurses (6.5%-16.3%) who placed a towel or small pillow under the deceased patient's head, put a clean gown on the patient, combed the deceased patient's hair, put any dentures in place or closed the eyelids with a cotton tie (table 1). There was no statistically significant difference shown for post-death nursing care according to having an ICU certificate, length of employment in an ICU, or educational level.

**Table 2: Nursing interventions performed to provide emotional support to the family (n=61)**

Nursing Interventions	n*	%**
I would make it possible for family members to say goodbye who were not present at the moment of death	39	63.9
I would allow family members to participate in care of the deceased patient	7	11.4
I would definitely leave the family alone with the deceased patient when they came to the unit	24	39.3
I would rub the deceased individual's head, hold their hand and talk with them as I would a living person	2	3.2

\*More than one answer was given

\*\* Percentage was calculated according to n

When the nurses were asked whether or not they gave emotional support to the deceased patient's family, 24.5% stated they did not. Nurses who did provide emotional support primarily reported they provided an environment suitable for the family to say goodbye to the deceased and left them alone during this time (table 2). A statistically significant higher percentage of the nurses with an ICU certificate gave permission for the patients' family to participate in their care ( $p=0.008$ ). Length of employment in the ICU, educational level, or having received education on post-death patient care were not found to have a significant effect on the post-death care provided.

After the family had spent time with the deceased the most common nursing activities that were undertaken included tagging the deceased; giving the patient's belongings to the family and having them check the

contents; recording the death in the ICU notes and sending the deceased's body to the morgue (table 3). 'Remove clothing and wrap in a sheet' was stated by more nurses with an ICU certificate ( $p=0.001$ ) and by more nurses who had worked in the ICU for four to six years ( $p=0.01$ ) however as length of employment increased conducting this activity decreased. 'Label the shroud' was stated by more nurses who did not have an ICU certificate ( $p=0.03$ ) and by nurses who had worked in the ICU for four to six years ( $p=0.01$ ). There were no other statistically significant results for activities undertaken according to educational level; having an ICU certificate; having received education about post-death care; or length of employment in the ICU.

**Table 3: Nursing actions performed after the family spent time with their deceased relative (n=61)**

Nursing Interventions	n*	%**
Put tags with information about the deceased, their name and surname, time and date of death on the wrists, ankle, chin or toe	47	77.0
Remove clothing and wrap in a sheet	16	26.2
Label the shroud	36	59.0
Arrange for the deceased to be transported to the morgue	53	86.8
Document relevant sections of the discharge record in the unit	29	47.5
Document death of patient in ICU notes	46	75.4
Make necessary documentation in the morgue records	19	31.1
Check the deceased patient's belongings with the family and hand them over to the family	58	95.0

\*More than one answer was given

\*\* Percentage was calculated according to n

The nurses were asked about their knowledge of research into deceased patient care; the number of beds in the ICU; the number of nurses giving bedside care; and whether or not the hospital had a written protocol on post-death care. All the nurses responded that there was no written protocol and provided data which showed that the staffing was one nurse for every three patients. The mean number of beds was 14.3 ( $\pm 5.6$ ); mean number of nurses working day

shift was 5.3 ( $\pm 3.0$ ); and mean number of nurses working night shift was 4.03 ( $\pm 2.42$ ).

## DISCUSSION

This study showed that ICU nurses who are qualified to provide specialised care to patients also provide deceased patient care.

The literature shows that family members value the quality of care and respect shown to the deceased person than the care shown to them (Çelik 2004; Heyland et al 2003; Hill 1997). In a multi-centre prospective observational study conducted by Heyland et al (2003) it was also reported that families' satisfaction with the care that was given was related to the level of health care and respect shown to the patient and family members. The literature (Marthaler 2005; Çelik 2004; Roark 2003) recommends that post-death care be carried out as soon as possible following the person's death (within approximately four hours). Heyland et al (2003) also emphasised that care be given in a manner that provides privacy and shows respect to the deceased person; that the body be placed in the supine position with a small pillow placed under the head; that all catheters, tubes, 'dirty' dressings, instruments and support systems be removed from the body; or, if hospital policy is that tubes are not removed, they be cut off at the skin surface and covered with a clean dressing; that the body be washed and dried; that the eyes are closed; dentures replaced; the body placed in a clean gown; hair combed; and action taken to eliminate any unpleasant odours before inviting the deceased patients' family to see the deceased (Kazanowski 2006; Marthaler 2005; Harvey 2001). In this study as well, nearly all the nurses were careful to protect the privacy of the patient, and after placing the deceased's body in an appropriate position, they cleaned the body. However there were only a small percentage of nurses who stated they put a pillow under the deceased person's head; closed their eyes; put them in a clean gown; combed their hair; or replaced dentures.

In this study, 24.5% of the ICU nurses reported they were not able to support or show interest in a

deceased patient's family and loved ones, which is an important part of post-death care. Those nurses who provided emotional support stated they created an environment for the family members to say goodbye to the patient and tried to leave them alone. In the literature it has been emphasised that having the family see the deceased patient; saying goodbye to them; participating in their care activities; allowing them to touch the deceased patient's body; providing a quiet environment; listening to them verbalise their sadness and loss; not leaving them alone; and seeing nurses acknowledge the deceased person by speaking to them while undertaking post-death care, are all important activities. These interventions have a significant effect on reducing communication difficulties within the family of the deceased patient, and in their perception that health care personnel gave them and the deceased patient quality care (Marthaler 2005; Kirchhoff et al 2002; Harvey 2001). In this study, in contrast with the literature, only seven nurses (11.4%) allowed the family to participate in their care and only two nurses (3.2%) spoke to the deceased person while undertaking post-death care. In contrast to our study, in Hill's study (1997) a very high percentage of the nurses (94.6%) made it possible for the patient's family to participate in their care.

The post-death process in the ICU continues after the family or loved ones have seen the deceased patient by taking the body to the morgue and handing it over to the authorised person. This involves a range of activities being undertaken (see table 3) (Marthaler 2005; Roark 2003; Hill 1997). In this study, almost the only activity undertaken by the ICU nurses from all the procedures listed in the literature was to give the patient's belongings to the family. Because the hospital in which this study was conducted did not have written protocols, the number and percentage of nurses who undertook the other activities, particularly documentation, was small.

In addition, although in this study the nurses did not have a protocol to follow in carrying out deceased patient care activities, the overwhelming majority were baccalaureate degree nurses who had been

taught about deceased patient care during their nurses education, yet only 4.9% stated they had received formal education on this subject. These results suggest that perhaps the nurses did not remember the information they had been given during baccalaureate nursing education and learned about deceased patient care from their nursing co-workers and/or enculturation in the intensive care unit.

## CONCLUSION AND RECOMMENDATIONS

This study found the majority of the ICU nurses in the sample group implemented appropriate clinical activities after death, however did not demonstrate appropriate support behaviours toward the patient's family or loved ones.

Based on these results, to improve the quality of post-death care given by nurses, a standardised written protocol, particularly for use in ICUs, needs to be developed. In addition ongoing continuing education about the post-death process and nursing interventions needs to be provided.

## LIMITATIONS

The study was conducted with a small sample size. There is a need for a larger sample group to investigate the differences in deceased patient care in different ICUs and in different countries. It is also necessary to conduct the research in different category hospitals to be able to generalise the research results.

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