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The quality of intensive care unit nurse handover related to end of life: A descriptive comparative international study

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ABSTRACT

Background: Quality ICU end-of-life-care has been found to be related to good communication. Handover is one form of communication that can be problematic due to lost or omitted information. A first step in improving care is to measure and describe it.
Objective: The objective of this study was to describe the quality of ICU nurse handover related to end-of-life care and to compare the practices of different ICUs in three different countries.
Design: This was a descriptive comparative study.
Settings: The study was conducted in seven ICUs in three countries: Australia (1 unit), Israel (3 units) and the UK (3 units).
Participants: A convenience sample of 157 handovers was studied.
Methods: Handover quality was rated based on the ICU End-of-Life Handover tool, developed by the authors.
Results: The highest levels of handover quality were in the areas of goals of care and pain management while lowest levels were for legal issues (proxy and advanced directives) related to end of life. Significant differences were found between countries and units in the total handover score (country: $F(2,154) = 25.97$, $p = <.001$; unit: $F(6,150) = 58.24$, $p = <.001$), for the end of life subscale (country: $F(2, 154) = 28.23$, $p < .001$; unit: $F(6,150) = 25.25$, $p = <.001$), the family communication subscale (country: $F(2,154) = 15.04$, $p = <.001$; unit: $F(6,150) = 27.38$, $p = <.001$), the family needs subscale ($F(2,154) = 22.33$, $p = <.001$; unit: $F(6,150) = 42.45$, $p = <.001$) but only for units on the process subscale ($F(6,150) = 8.98$, $p = <.001$. The total handover score was higher if the oncoming RN did not know the patient

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($F(1,155) = 6.51, p = <.05$), if the patient was expected to die during the shift ($F(1,155) = 89.67$, $p = <.01$) and if the family were present ($F(1,155) = 25.81$, $p = <.01$).
Conclusions: Practices of end-of-life-handover communication vary greatly between units. However, room for improvement exists in all areas in all of the units studied. The total score was higher when quality of care might be deemed at greater risk (if the nurses did not know the patient or the patient was expected to die), indicating that nurses were exercising some form of discretionary decision making around handover communication; thus validating the measurement tool.

What is already known about the topic?

- Good communication is an important component of quality end-of-life ICU care.
- Handover is an important form of communication.
- Information can get lost or inaccurately transferred during handover.

What this paper adds

- All aspects of handover communication related to end of life were found to be in need of improvement in all of the units studied, irrelevant of location.
- Pain management and goals of care were the elements of shift handover related to end of life found to have the highest level of reporting while areas related to legal issues such as proxy determination and advanced directives were rarely reported.
- There is a large variation between unit practices related to end-of-life handover communication.

1. Background

Communication is associated with high quality end-of-life care (Curtis et al., 2012; Leung et al., 2012). Several types of communication related to end-of-life-care have been investigated in the intensive care unit (ICU), including communication between healthcare providers such as nurses and physicians and between healthcare providers and patients and their families (Truog et al., 2008). Handover is defined as the transfer of information, professional responsibility and accountability among healthcare providers (Australian Commission on Safety and Quality in Health Care, 2008). Handover has traditionally occurred at the beginning of each shift where the oncoming nurse receives information from the outgoing nurse. Despite technological changes, handover has survived as an important formal process of nursing communication (Spooner et al., 2013). Yet, there is little known about the quality of ICU nurse to nurse handover communication, especially associated with end-of-life care. Therefore the major objective of this study was to describe the quality of ICU nurse handover as related to end of life.

2. Review of the literature

End of life is a reality in the ICU. Approximately 14% of Australian patients (Moran and Soloman, 2013) and 14.9% of British patients admitted to the ICU died in the ICU (ICNARC, 2012). In 2010, 3397 out of a total of 39,590 deaths (8.6%) occurred in an ICU in Israel (Israel Ministry of Health, 2011). The exact percentage of Israeli patients admitted to the ICU who have died there has not been reported. Often a patient's death comes unexpectedly but it can also occur after considerable effort where treatments are considered to be futile and end-of-life decisions are made (Lautrette et al., 2007). Care under such circumstances has been called end-of-life-care and often consists of palliative care, defined as care aimed at increasing the quality of life of patients with life threatening illnesses and their families, by the prevention and treatment of pain and suffering through physical, psychosocial and spiritual support (WHO, 2014).

The quality of end-of-life care has been shown to be lacking in the ICU (Nelson et al., 2006a,b). Indicators have been designed to measure the quality of end-of-life care and include patient and family centred decision making; communication with patients and families; continuity of care; emotional and spiritual support for patients and families; symptom management; and identification of patient and family end of life treatment preferences and decision making surrogates (Nelson et al., 2006a,b). Many of these indicators apply to all ICU patients, regardless of whether they are expected to die in the near future. Most of these indicators should be communicated during handover because handover in the ICU involves the transfer of responsibility for unstable, unpredictable patients whose end-of-life issues might arise at any moment. A study of UK and Israeli ICU nurses (Endacott et al., 2010) found that communication was the key factor important in ensuring a 'good death' for a patient in ICU but documentation practices varied across individual units, with shift handover used as the main communication process.

Continuity of care relies on current information being passed during shift changes so that the oncoming shift can plan and implement care, thereby decreasing errors and omissions that might impact on effective and safe patient care (Scovell, 2010). Handover has several other functions including exchange of clinical information, a forum for briefing and debriefing, a discussion of opinions, the expression of feelings (e.g.: anxiety, stress, helplessness, frustration), peer support, imparting of social norms, demonstration of nursing skills (such as medical knowledge and tidiness), fostering of group cohesiveness and encouraging team building (Poletick and Holly, 2010).