Aging, Complexity, and Critical Illness

Critical illness and admission to an intensive care unit (ICU) pose significant challenges for older adult patients and their family caregivers. Post-ICU syndromes, such as cognitive impairment and functional decline, are a growing concern for critical care clinicians and scientists. These untoward effects of critical illness and treatment are not unique to older adults and are a risk for all patients experiencing critical illness; however, older adults have higher rates of these ICU conditions and poorer outcomes. Physiological reserves and comorbid chronic illnesses often place older adults in a situation of greater complexity. Family caregivers often bear the burden of the post-ICU syndromes. In fact, there is growing concern about the prolonged emotional and physical effects of critical illness episodes on family caregivers (Schmidt & Azoulay, 2012). Holistic care responses to the challenges of aging and complexity in critical illness must include applying family-centered care principles and integrating both restorative and palliative care into the ICU.

In this special issue of the Journal of Gerontological Nursing, a series of articles have been assembled that begin to unravel the complexity of care for these important clinical problems and provide evidence-based guidance for clinical practice to improve nursing care and patient function and recovery following critical illness. Critical care scientists have recently posited that the inflammation and oxidative stress during critical illness is a model of accelerated aging. One example is the rapid deterioration of muscle strength and muscle mass that occurs during critical illness (Nedergaard, Karsdal, Sun, & Henriksen, 2013). In the article, “The Study of Activity in Older ICU Patients: An Integrative Review” (pp. 12-25), Casey presents an integrative review of relevant literature on activity of older critically ill patients, including activity interventions conducted in this population. This area is ripe for research and practice improvements, particularly in activity measurement and discovery and evaluation of techniques to facilitate patient activity during critical illness. In addition to discovering ways to interrupt or prevent harmful deterioration during critical illness, investigation of these changes during critical illness may provide evidence useful in preserving cognitive and physical function in aging.

There is still much to learn about the effects of critical illness on the brain. Delirium is a complex, multifactorial process that is associated with mortality, prolonged hospitalizations, and cognitive decline, including the development of dementia. Mechanical ventilation during critical illness presents a unique challenge to the assessment and early identification of delirium because patients on mechanical ventilation are not able to speak. In the article,
“Symptom Communication During Critical Illness: The Impact of Age, Delirium, and Delirium Presentation,” (pp. 28-38) Tate et al. examine the delirium presentation and the influence of older age and delirium on symptom communication over a 2-day period among intubated ICU patients. These findings underscore the need to provide special attention and assistive techniques to facilitate symptom communication with patients who are delirious, and to recognize that older adults may experience different symptoms and symptoms differently than their younger counterparts during critical illness. Understanding and improving symptom communication has important implications for the quality of care provided to critically ill older adults.

This special issue presents the good news that there is hope for preventing and reducing delirium and ICU-acquired weakness. In the article, “Extending the ABCDE Bundle to the Post-Intensive Care Unit Setting,” (pp. 39-51), Balas et al. present the Awakening, Breathing, Coordination, Delirium monitoring, and Early mobility (ABCDE) bundle, an evidence-based quality improvement intervention focused on preserving and restoring cognitive and physical function during mechanical ventilation in the ICU. The authors present a compelling case for promoting and implementing the ABCDE bundle for patients after transition from ICU to post-ICU care, including step-down and subacute care environments, particularly long-term acute care hospitals, which are settings that serve a high proportion of older adults.

It is exciting and long overdue to see rehabilitative care move into acute and critical care settings. Although rehabilitative initiatives and interventions hold great promise in improving outcomes of acute critical illness for older adults, it is equally important to recognize and acknowledge that at least 34.5% of older adults who require mechanical ventilation during critical illness will not survive to discharge and another 30% or more will not survive beyond 6 months after discharge (Baldwin et al., 2013; Wunsch, Guerra, et al., 2010; Wunsch, Linde-Zwirble, et al., 2010). Acute and critical care delivery systems are still woefully inadequate at recognizing when critical illness events are precursors to death and intervening appropriately with supportive care and counseling. In the article, “Improving Care at End of Life in the Intensive Care Unit: A Proposal for Early Discussion of Goals of Care” (pp. 52-58), Seaman presents an ethical argument for implementing mandatory review of care goals 48 hours after admission to the ICU for patients at high risk of dying. This proposal addresses patient treatment preferences and family needs for information earlier than previous reports and offers important considerations for programmatic improvements to quality of care for older adults at end of life that can be facilitated and led by nurses.

Considerations for family-centered care at end-of-life in the ICU are further developed by Wiegand, Grant, Cheon, and Gergis (pp. 60-68), who address the needs of family members of older adults to be prepared for end of life decisions and care transitions in their article, “Family-Centered End-of-Life Care in the ICU”. To provide appropriate support to families of critically ill older adults, nurses must try to understand the oftentimes complex family configurations, cultural perspectives, and each member’s role. The authors present practical recommendations for preparing families of older adults for treatment decision making and what to expect when death is imminent.

The contributions in this special issue span the scope of care for critically ill older adults from survivorship concerns to care quality and end-of-life treatment decision making. The articles address improving care for critically ill older adults through the prevention of cognitive and functional decline, understanding and improving symptom communication, and facilitating end-of-life care transitions that are aligned with patient wishes. Taken together, these articles provide important new perspectives on restorative and responsive care for older adults during critical illness. This collection of articles contributes new knowledge and best practice recommendations for improving quality of care during critical illness and at end of life for older patients in the ICU.

REFERENCES

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