

Innovation: The Untapped Potential of Critical Care Nurses

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Innovation is defined as “the introduction of something new: or ‘a new idea, method, or device’” (Merriam-Webster, 2019). In critical care, innovation is often equated with technological advancements, integrative information systems, or biomarker research (Blanch, Maspons, & Palomar, 2013). In this context, the innovative potential of nursing may undergo unnoticed, and nurses may be viewed as merely adopters rather than sources of innovation (Li-Ying, Paunova, & Egerod, 2016). Nurses may even internalize the view that innovations are more likely to be generated outside of nursing. For example, a survey of UK nurses has shown that the majority of nurses may be unaware of their own innovative powers, as they view nursing research as less important compared to medical research (Ford, 2017). Lack of time, lack of motivation, and knowledge appear to be persistent barriers to nursing research and innovation, as well as to research implementation.

Over the past 20 to 30 years, great innovations in technology, pharmacotherapeutics, and care protocols have created the basis for a revolution in critical care. However, improvements in patients’ outcomes do not seem to match these great innovations. Part of the reason may be that as innovations increase the complexity of care, care delivery systems and healthcare professionals’ roles do not evolve at the same pace (Aspden, 2002). This is exactly why it is very important to tap into the innovative potential of nursing. Nurses as the largest group of healthcare professionals in critical care, can have a

holistic view not only of patients’ and families’ needs, but also of other professionals and of ways to improve healthcare delivery on a day-to-day basis. The time spent at the bedside, and around-the-clock contact with patients and their families, create a need to constantly improvise in order to tailor treatments to patients’ responses and to improve the experience of care and quality of life. However, nurses may often lack the empowerment, time, or even knowledge to perceive these daily “adjustments” of care as innovations. Although, nursing research has been well established, at least in most developed nations, a research culture in nursing is still lagging. For example, although academic preparation and lifelong learning are part of nursing standards worldwide, research roles are mostly segregated to the few nurses that hold research positions, most of whom may have academic, rather than clinical appointments. This, along with the need for constant presence at the bedside, creates insurmountable barriers for nursing innovation. Another barrier stems from the still mostly paternalistic view of patients. Although critical care nurses derive most of their insight from analyzing minute to minute patient responses and by listening to their perspectives and stories, these sources of knowledge have traditionally received less emphasis in healthcare research. Despite recent advances in patient-oriented care and patient engagement in their care, opportunities for patient and families’ input to actual research problems are very scarce. Patient engagement in critical care research, in itself, can be an area of nursing innovation.

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Limitations in nurses' roles and limited opportunities for interprofessional education, training, and research collaboration, due to outdated healthcare structures constitute another set of barriers in many countries. A U.S. Institute of Medicine (IOM, 2010) report, recognizing the barriers that prevent nurses from being able to "respond effectively to an evolving healthcare system, has emphasized that: 'Nurses should practice to the full extent of their education and training, [. . .] should achieve higher levels of education [. . .] that promotes seamless academic progression, [and] should be full partners, with physicians and other healthcare professionals, in redesigning healthcare.'" Specialty evidence-based education in critical care nursing is one of the key prerequisites to bring forth nursing innovators. A research-oriented unit culture, with opportunities to communicate problems and ideas is also necessary, as is active patient and family engagement in brainstorming. Similarly, a culture of interdisciplinarity is also essential. Ample evidence indicates that interdisciplinary collaboration accounts for far faster improvements in critically ill patients' outcomes compared to pharmacological or technological innovations alone (Donovan et al., 2018). Moreover, the importance of a healthy critical care working environment cannot be overemphasized, especially as accumulating evidence supports the relationship between healthy nurse work environments and patient outcomes (Ulrich, Lavandero, Woods, & Early, 2014).

In conclusion, critical care nurses appear to have a vast, but still untapped, potential to innovate and revolutionize critical care. To empower nurses to fulfil this potential, healthcare-wide efforts are needed to reconceptualize the administrative and workforce priorities with increased emphasis on the research contributions of nurses, patient and family engagement, and interdisciplinary collaboration.

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