



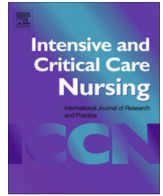
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Editorial

Critical care nursing workforce: Global imperatives, innovations and future-proofing – A call for papers



This editorial is a *Call for Papers* for a special issue dedicated to emerging critical care nursing workforce issues and challenges.

The world's population is ageing, and the number of persons aged 65 years or over projected to more than double (United Nations, 2019). Meeting the healthcare needs of the growing older population is likely a key concern for governments and health systems around the world (Allen, 2020). Additionally, non-communicable diseases such as cardiovascular disease, cancer and diabetes account for 71% of all global deaths (World Health Organization (World Health Organization., 2019). The 21st century has also seen a potentially fatal combination of newly-discovered diseases, such as SARS, MERS and most recently COVID-19 (Wang et al., 2020) and the re-emergence of infectious diseases once thought eradicated (World Health Organization, 2018).

These global challenges heighten the complexity of acute care provision needed. Great pressure is being placed on society and health care systems as a whole and critical care specifically. We need to adapt to changes in population demographics and emerging health threats. Increasing demand for health care services alongside current and projected shortage of skilled clinicians will likely exert pressure on health systems to find ways to be more future-focused (Allen, 2020). Hence, supporting, preparing and future-proofing the critical care nursing workforce has never been more important. Similarly, there is a need for more research that examines expectations and understandings associated with critical care nursing as a specialty practice, nomenclature, the range of roles and professional regulation.

Nurse turnover, recruitment and retention issues associated with appropriately skilled and qualified nurses are an issue common to many health systems, with demand exceeding supply. In the USA, critical care specialty areas saw a turnover rate of 18.2% in 2018, exceeding the national average when compared to other practice areas (NSI Nursing Solutions, 2019) and in the UK, there is a shortage of registered nurses across all specialties (Royal College of Nursing, 2017). Across the world, nursing staff shortages has potentially life-threatening consequences for patients (Aiken et al., 2018; Driscoll et al., 2018). Both staffing ratios and the impact of different skill mix needs investigating as does the impact of a more flexible workforce able to work across settings and respond to ever changing needs. Addressing nursing shortages may assist in the short term, but must be supported by concurrent initiatives designed to support well-being in the workforce. Working in critical care can be emotionally challenging and stressful. Prioritising strategies and evaluating initiatives that counter the emotional demands are critical (Highfield, 2019) to ensuring criti-

cal care nurses are able to sustain a response to current and emerging needs.

Critical care nurses also need specialist knowledge, technical and interpersonal skills to meet the needs of the critically ill, with commensurate recognition of their specialist role (Bloomer et al., 2019). An international survey of critical care nursing education, conducted in 2015, identified that formal critical care nursing education programs existed in only 70% of included countries, with wide variability between existing programs (Endacott et al., 2015). The survey also highlighted that lack of recognition for critical care as a speciality and lack of protection for the title, also impacted education programs (Endacott et al., 2015). More recently a review of specialist critical care nurse education identified the importance of collaborative education provision between clinical settings and recognised education providers, and for structures, outcomes and unit, organisational, and governmental policy to align with future expectations and current and emerging need (Gullick et al., 2019).

Rethinking models of critical care, who can do what and how best to utilise available staffing resources is suggested as one way of ensuring high-quality care can be sustained, without compromising staff well-being (Allen, 2020). Over the last decade we have seen an expansion of extended and advanced practice roles taken on by critical care nurses. Nurse-led critical care outreach and liaison services have been shown to be beneficial in preventing readmission to critical care and hospital mortality (So et al., 2019), with many elements of the critical care nurse's role in outreach aligning with expanded or advanced practice (McIntyre et al., 2019). Where advanced practice roles such as the Nurse Practitioner and Advanced Practice Nurse, were first introduced decades ago to address a physician shortage in primary care (Savrin, 2009), advanced practice nurses now exist in some critical care settings, enabling a more flexible response to changing needs (Comiskey et al., 2014). Clear evidence exists that there are no differences in patient outcomes between critical care units staffed by nurse practitioners compared to medical staff (Scherzer et al., 2017). However, the impact of critical care nurses taking on these roles on other aspects of nursing care merits further exploration.

Digital data is likely to become a significant source of information that can lead innovation (Bailly et al., 2018). Big data can be used to examine large unstructured data sets to uncover patterns and correlations to present data efficiently (Allen, 2020). This may be used with workforce data to help uncover areas of priority and the contribution of the critical care nurse to the critical care workforce and/or patient outcomes. Similarly, there may be scope

to explore and evaluate new technologies that can support and complement critical care nursing work. Creating new ways to monitor patient health and to alert the critical care nurse to changes in patient status (Allen, 2020), such as the use of eICU, which leverage large datasets to support management of the critically ill (Pollard et al., 2018) must be explored.

Intensive and Critical Care Nursing wish to highlight research that contributes to addressing or responding to the global workforce needs and challenges, through a special issue. This is a call for papers reporting research studies, systematic reviews, integrative reviews, case studies, audits and commentary on current and emerging critical care nursing workforce issues and challenges including but not limited to:

- Addressing population changes
- Pandemics, epidemics and disaster response
- Advanced practice roles in critical care
- Regulation and role/title clarification
- Evaluation of critical care nurse outreach services
- Workforce development and education
- Recruitment, retention and turnover
- Workforce well-being and support services
- Use of big data and technology to support critical care nurses
- Innovative models of care

The closing date for submissions for the Special Issue is 1st April 2021. Papers should be submitted by selecting the option *SI: Crit care nurse workforce* in the online submission system at <http://ees.elsevier.com/iccn/> where you will find instructions to guide the preparation of your manuscript. Papers will be subjected to the usual double-blind peer review and editorial processes. Given the multidisciplinary nature of critical care settings, papers from multidisciplinary teams of authors are welcomed, so long as the focus remains on nursing. We look forward to receiving a wide range of submissions thereby facilitating the sharing of developments, research and experience relating to workforce issues in intensive and critical care.

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