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## Editorial – Patient comfort during critical illness special issue

Anne-Sylvie Ramelet & Leanne M Aitken

Pain, anxiety, agitation and delirium have been associated with cognitive impairments, poor health-related quality of life, and mortality in both adults and children. A proactive approach to early, effective assessment is a pre-requisite for appropriate management of those symptoms and is a core element of nursing care of critically ill patients. As nurses are at the bedside 24/7, it is essential for them to show leadership in this area of practice that requires the input of the inter-disciplinary team to achieve high quality outcomes for the patient. This special issue is a demonstration of the growing body of science available to address the diverse challenges in assessment and care in this area.

The extent of problems related to pain, anxiety, agitation and delirium in critically ill patients is generally understood, although effective assessment and management of these symptoms remains a constant challenge in practice.<sup>1,2</sup> Various strategies have been proposed and used through a range of settings during the past decade, however the evidence underpinning many aspects of both assessment and management remains limited. The importance of improving care in this area has repeatedly been recognised by both patients and clinicians, and is reflected in the overwhelming evidence of poor pain relief, high prevalence of delirium, heavy sedation associated to prolonged intensive care unit (ICU) length of stay (LOS) and recovery, and poor psychological outcomes, including depression and post-traumatic stress disorder.

In this issue a number of methodological studies related to pain, agitation and delirium have been considered, with a focus on assessment and processes of care. Specifically, the challenges associated with assessment of sedation needs in both the adult and paediatric ICU patient<sup>3,4</sup> have been explored, as well as assessment of pain in brain injured adults.<sup>5</sup> Assessment of the symptoms of pain, agitation and delirium is a core component of assessment of every critically ill patient regardless of age or reason for critical illness. This is an aspect of care that is at the crux of multi-disciplinary care within the ICU.

Although widely recognised as best practice, effective interventions to keep a patient comfortable without compromising recovery have not yet been fully recognised. The role of pain, and the ongoing impact of effective pain management is highlighted by Patanwala and colleagues,<sup>6</sup> with pain scores in the last 24 hours in ICU being a strong predictor of pain during the transition period from ICU to the ward. There is a risk that effective pain management during the late stages of time in ICU is not seen as a priority as we prepare the patient for transfer to the general ward environment, but this study is a timely reminder of the importance of care across the continuum.

Finally, the influence of organisational factors on the incidence of delirium have been examined by Rood and colleagues<sup>7</sup> and importantly the perceived barriers and facilitators to implementing a delirium bundle have been described by Bannon and colleagues.<sup>8</sup>

The articles of this issue are providing new evidence to carry further research, such as rigorous and well-conducted studies testing interventions in this area. The importance of testing interventions to determine impact on outcomes has been emphasised in recent times with the publication of the results of the RESTORE study<sup>9</sup> where, despite widespread belief of the value of protocolised sedation, no improvement in many of the outcomes including duration of mechanical ventilation was found in a large paediatric population. Instead, the complex relationship between the related elements of wakefulness, pain and agitation was emphasised. In contrast, the beneficial effect of a multi-component program to reduce discomfort in critically ill adult patients was demonstrated in a

cluster randomised study conducted in France.<sup>10</sup> Replicating this study in other contexts of care is vital to determine generalisability.

We currently have a thorough understanding of the factors associated with many of the difficulties influencing patient comfort. In addition, we have made significant progress towards developing a robust selection of reliable and valid assessment instruments to monitor most elements of patient comfort. International practice guidelines are also available to guide care, although the level of evidence to support many elements of these guidelines is low. We also have some knowledge of the barriers and facilitators that affect implementation of best practice.

To improve patient care and patient outcomes in the future, there is an urgent need for additional studies testing a range of interventions in various care contexts to improve patient comfort; these interventions need to be both non-pharmacological and pharmacological in nature. Nurses, as the one group of professionals optimising patient comfort from minute-to-minute and hour-to-hour should be leading the inter-professional teams responsible for implementing current best practice as well as developing and testing new interventions to optimise patient comfort.

## References

1. Barr J, Fraser GL, Puntillo K, Ely EW, et al. Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit. *Crit Care Med*. 2013;41(1):263-306.
2. Harris J, Ramelet AS, van Dijk M, Pokorna P, et al. Clinical recommendations for pain, sedation, withdrawal and delirium assessment in critically ill infants and children: an ESPNIC position statement for healthcare professionals. *Intensive Care Med*. 2016;42(6):972-86.
3. Hetland B, Guttormson J, Tracy MF, Chlan L. "Sedation is Tricky": A qualitative content analysis of nurses' perceptions of sedation administration in mechanically ventilated ICU patients. *Australian Critical Care*. 2018; 31(3): 153-8.
4. Lebet RM, Asaro LA, Zuppa AF, Curley MAQ. Face and content validity of variables associated with the difficult-to-sedate child in the pediatric intensive care unit: A survey of pediatric critical care clinicians. *Australian Critical Care*. 2018; 31(3): 167-73.
5. Gélinas C, Puntillo KA, Boitor M, Bérubé M, Topolovec-Vranic J, Ramelet A-S, et al. Content validation of behaviors and autonomic responses for the assessment of pain in critically ill adults with a brain injury. *Australian Critical Care*. 2018; 31(3): 145-51
6. Patanwala A, Aljuhani O, Erstad B. A cross-sectional study of predictors of pain control during the transition from the surgical intensive care unit to surgical ward. *Australian Critical Care*. 2018; 31(3): 159-64.
7. Rood P, Huisman-de Waal G, Vermeulen H, Schoonhoven L, Pickkers P, van den Boogaard. Effect of organizational factors on the variation in incidence of delirium in ICU patients: a systematic review and meta regression analysis. *Australian Critical Care*. 2018; 31(3): 180-7.
8. Bannon L, McGaughey J, Clarke M, McAuley DF, Blackwood B. Designing a nurse-delivered delirium bundle: what ICU staff, survivors and their families think. *Australian Critical Care*. 2018; 31(3): 174-9.
9. Curley MA, Wypij D, Watson RS, Grant MJ, et al. Protocolized sedation vs usual care in pediatric patients mechanically ventilated for acute respiratory failure: a randomized clinical trial. *JAMA*. 2015;313(4):379-89.
10. Kalfon P, Baumstarck K, Estagnasie P, Geantot MA, et al. A tailored multicomponent program to reduce discomfort in critically ill patients: a cluster-randomized controlled trial. *Intensive Care Med*. 2017;43(12):1829-40.