

ICU Liberation: Implications for Nursing Practice

Cody Brainard GVSU

Background

- ICU Liberation: Bundle of strategies used with critical care patients to decrease hospital length of stay and the incidence of pain and delirium.
- Developed in 2013 following the Society of Critical Care Medicine's publication of the *Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult ICU Patients*.
- ABCDEF bundle: Analysis strategies for pain, delirium, sedation, breathing trials, early mobility, and family involvement.
- PAD bundle: Assessment and treatment of pain, agitation and delirium.
- Goal: Adequate pain control, early treatment/prevention of delirium, and decreased hospital length of stay.

PICO Statement

In the adult population that is admitted to the ICU, does implementation of ICU liberation strategies (ABCDEF/PAD bundle) help to decrease hospital length of stay, pain, and delirium?

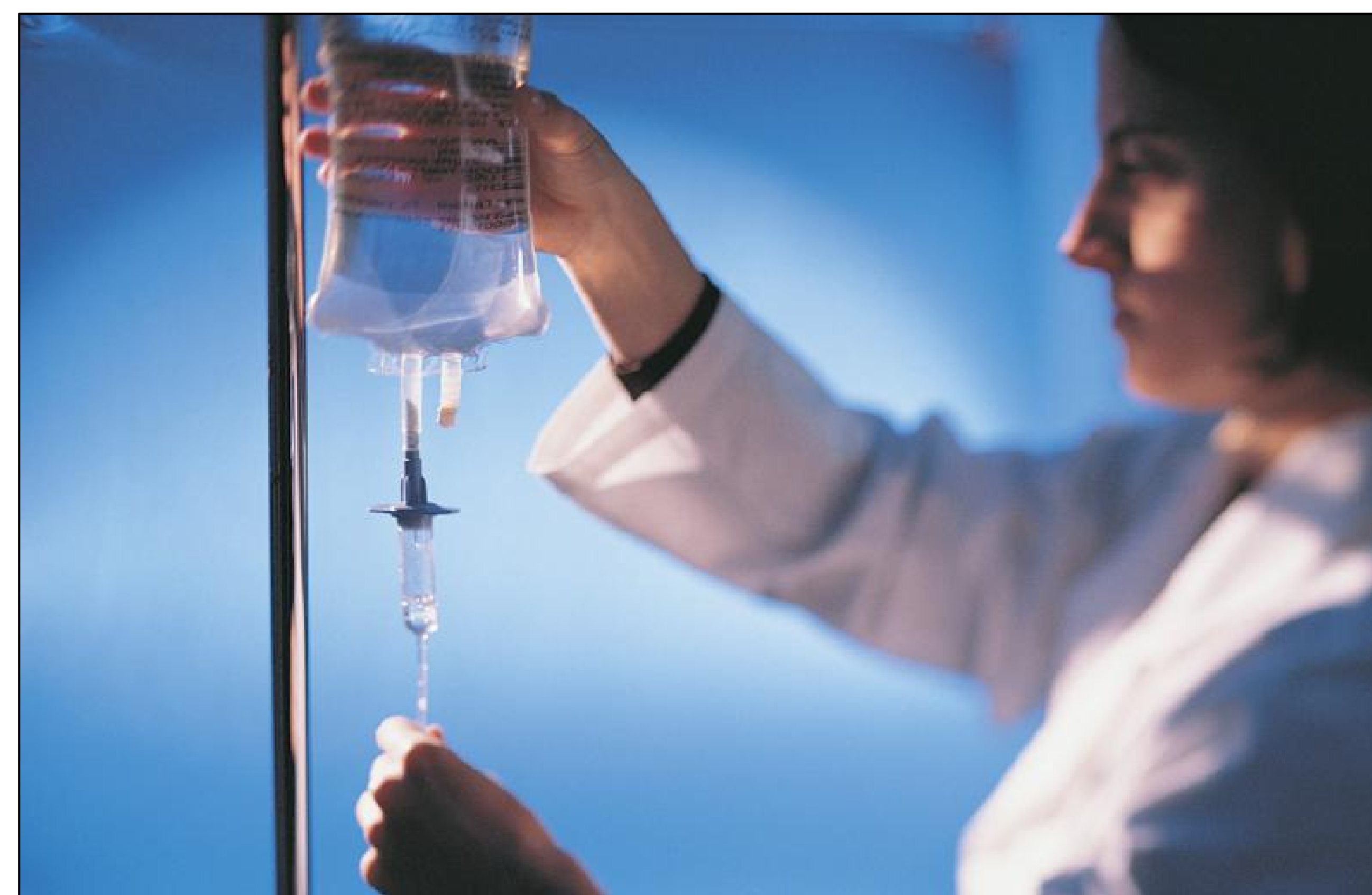
Methods & Design

- Literature Review - Studies from 2005-2017 conducted in North American ICUs.
- Search terms of "ICU liberation," "ICU pain control," "ICU delirium," "ICU sedation," "ICU mobility," and "ICU family."
- Search engines: CINAHL, PubMed, Cochrane Library, and Google Scholar.
- 15 articles met search criteria: 1 systematic review, 1 literature review, 7 randomized-controlled trials, 4 prospective cohort studies, 1 cross-sectional survey, and 1 comparative before-and-after trial.



Results

- Nursing-led sedation protocols decrease the length of hospital stay and incidence of reintubation in ventilated patients.
- Prompt assessment and treatment of delirium can decrease hospital length of stay and delirium incidence.
- The critical-care pain observation tool (CPOT) and the behavioral pain scale (BPS) are two tools not commonly used that help to assess pain.



Results

- Spontaneous breathing trials can decrease the time that patients spend on mechanical ventilation and decrease hospital length of stay.
- Early mobility in ICU patients is linked to decreased hospital length of stay and better pain control.
- Family involvement in the ICU helps to comfort family members and increase trust in those caring for the patient.

Nursing Implications

- Nurses should conduct comprehensive assessments of pain and delirium and implement treatment early to decrease hospital length of stay.
- Nurses need to advocate for sedation monitoring, early mobility and breathing trials to decrease hospital length of stay.

Conclusions

- Prompt treatment of pain and delirium, careful monitoring of sedation, and spontaneous breathing trials can all decrease hospital length of stay in patients in the ICU.
- More research is needed on the efficacy of the ABCDEF/PAD bundles in practice rather than the individual components.

Key References

- Gelinas, Celine. (2016). Pain assessment in the critically ill adult: Recent evidence and new trends. *Intensive and Critical Care Nursing*, 34, 1-11.
- Wesley Ely, E. (2016). The ABCDEF bundle: Science and philosophy of how ICU liberation serves patients and families. *Critical Care Medicine*, 45, 321-330.