Tools for measuring the pain of unconscious patients in critically illness: A literature review

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Background: The accurate assessment of pain in unconscious patients is difficult, with nurses often rely on a variety of methods to determine medication impact. Much of the evidence to date suggests that common use of pain assessments may not effectively measure the true extent of distress in patients who are unable to verbalize their level of discomfort.

Aim: This paper aims to review the evidence regarding pain assessment tools for patients unable to self-report and to establish whether the use of a tool can be recommended in practice.

Search strategy: In this review, papers published after 1990 that tested pain assessment tools for unconscious or sedated patients with intensive care are discussed. A search of electronic databases (Medline, CINAHL, Embase) combined with cross-referencing was performed. The search terms used in this paper were "pain", "instrument/questionnaire/scale/assessment/observation", "ventilated/respiration artificial", "unconsciousness/sedatives", and "critical care/intensive care/ICU".

Result: Thirteen of 55 potential papers were chosen for the final analysis in this review. Beside of vital signs, 4 different pain assessment tools were discussed. Only the Behavioural Pain Scale (BPS) and the Critical-Care Pain Observation Tool (CPOT) have been tested among the broadest range of adult patients. They were found to be reliable and valid tools. Research is needed to further demonstrate the reliability and validity among different critical care populations, such as Asian or African.

Conclusions: The implementation of the BPS and the CPOT can be recommended in intensive care units and may improve the management of pain among unconscious/sedated and ventilated patients by providing a systematic and consistent approach to pain assessment to guide interventions, but first requires further validation. Also, further researches are needed into the effects of pain assessment tools on pain management practices and patient outcomes.

Key Words:
Adult intensive care,
Pain assessment,
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