Designing a Multidimensional Pain Assessment Tool for Critically III Elderly Patients: An Agenda for Future Research

Sir,

Elderly patients make up approximately 50% of admissions to the Intensive Care Units (ICUs)^[1] and considering that most of the procedures in the ICU are painful, most of these patients experience moderate-to-severe pain.^[2] Given that the pain can be treated or at least diminished, its high prevalence in elderly patients may indicate that pain appears to be either underdiagnosed or undertreated in this population.^[3] In this regard, the lack of validated assessment tools has been repeatedly reported to be the reasons of undermanagement of pain. After the declaration of pain as the "fifth vital sign", many challenges associated with assessing and managing pain in critically ill elderly patients have been raised, which led to the production of several pain assessment tools.^[4] However, selecting and applying a valid and reliable tool for accurate and timely diagnosis of pain in critically ill elderly patients has remained as a challenging issue for clinicians.^[2,4] In addition, the optimal tool for assessing pain in nonverbally critical ill older patients who are ventilator dependent and unconsciousness is understudied. Even, most of the current pain assessment tools are not particularly designed to examine the pain of the ICU elderly patients and are subjected to misinterpretation and poor detection of pain.^[2]

Because recognizing pain in nonverbal critically ill elderly patients, in particular, ventilator-dependent ones, requires gathering data from many sources; therefore, traditional methods of pain assessment are not useful. In this respect, the observation for pain-related behaviors has been recommended. However, currently, limited validated pain behavior tools are available that seem to be appropriate for assessing pain in those patients. For example, the Abbey pain scale, the pain in advanced dementia tool, certified nurse assistant pain assessment tool, pain assessment in noncommunicative elderly persons, pain assessment checklist for seniors with limited ability to communicate, checklist of nonverbal pain indicators, DOLOPLUS-2, discomfort behavior scale, and Rotterdam Elderly Pain Observation scale are designed to measure pain behaviors in people with dementia or cognitively impaired older adults. In addition, elderly pain caring assessment 2 relies on caregiver familiarity with the patient to report changes in behavior.^[5] The behavioral pain scale (BPS) has been

validated for sedated, mechanically ventilated patients in trauma, surgical, general medical and mixed ICUs. The critical-care pain observation tool (CPOT) has been validated in cardiac surgery and in the general medical-surgical ICU for spontaneously-breathing patients who cannot communicate.^[6] However, physiological changes caused by pain are ignored in both BPS and CPOT scales.

Overall, considering the multidimensional nature of pain, relying on only one method, or tool is rarely useful for diagnosing the pain of elderly patients and can lead to suboptimal pain management. For this reason, a systematic, multidimensional approach to pain assessment based on the different sources of information may support the intensivists for accurate judgment regarding the presence of pain. However, currently, such a multidimensional tool is not available. Consequently, aiming to develop a more comprehensive and multidimensional pain assessment tool for nonverbal critically ill elderly patients, a new agenda for forming multidisciplinary guideline development committees as well as conducting instrument development approaches including mixed-methods research and Delphi method needed to be established.

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Conflicts of interest

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REFERENCES

- Fuchs L, Novack V, McLennan S, Celi LA, Baumfeld Y, Park S, *et al.* Trends in severity of illness on ICU admission and mortality among the elderly. PLoS One 2014;9:e93234.
- Diallo B, Kautz DD. Better pain management for elders in the Intensive Care Unit. Dimens Crit Care Nurs 2014;33:316-9.

- Reid MC, Eccleston C, Pillemer K. Management of chronic pain in older adults. BMJ 2015;350:h532.
- Horgas AL. Pain assessment in older adults. Nurs Clin North Am 2017;52:375-85.
- Herr K. Pain assessment strategies in older patients. J Pain 2011;12:S3-13.
- Azzam PN, Alam A. Pain in the ICU: A psychiatric perspective. J Intensive Care Med 2013;28:140-50.

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