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Editorial

Caring for critically ill patients with opioid use disorder: Phone a friend?

Pain is ubiquitous in the intensive care unit (ICU). Routinely performed procedures in the ICU such as, chest tube removal, drain tube removal, arterial line insertion, endotracheal suctioning, patient positioning, peripheral intravenous line insertion etc. all cause significant pain [1]. The Society of Critical Care Medicine's (SCCM) ABCDEF bundle speaks to the assessment and management of pain, and choice of analgesia and sedation in the ICU, as components of care. Adequate and appropriate treatment of pain is crucial to the well-being of critically ill patients, including their long- and short-term clinical outcomes. The SCCM pain, agitation and delirium (PAD) guidelines also recommend treating pain first followed by sedation if required, i.e. providing analgo-sedation [2]. While treating pain in the ICU is and should be a priority, most interventions used are based on an opioid based regimen. Therefore, opioids remain the main stay for pain management practices across ICU systems in the United States. One of the main concerns with the opioid-based treatment plan is that we may be creating narcotic addicts in the ICU as is reflected by the high incidence of new persistent opioid use amongst ICU survivors [3].

While unwarranted use of opioids in critically ill patients is a concern, the increase in ICU admissions of patients affected by opioid use disorder (OUD) as a consequence of the worsening opioid epidemic poses additional problems. ICU providers are tasked with not only avoiding excessive use of opioids, but also appropriately managing pain in opioid dependent and tolerant patients. The combination of central sensitization, tolerance, and opioid-induced hyperalgesia (OIH) makes pain management in such patients challenging. Managing analgesia and sedation creates a clinical conundrum wherein inappropriate treatment of pain can lead to opioid withdrawal, while overtreatment can prolong ICU length of stay (LOS) and duration of mechanical ventilation, at the same time increasing the risk of chronic opioid dependence. Further adding to the challenge is the ambiguity on continuing versus discontinuing the opioid agonist therapy (OAT) that these patients are routinely prescribed and the challenges associated with managing post-surgical pain or pain associated with routine ICU procedures. Protocols and guidelines for post-intensive care management of such patients are also not well established. While reviews exist to help ICU providers manage analgesia and sedation in opioid dependent critically ill patients [4,5], it is unclear if the providers have access to local resources that can help manage this rapidly growing and difficult to treat patient population. In this issue of the Journal of Critical Care Reichheld et al. make an attempt at identifying the availability of protocols and guidelines in ICUs for the management of the critically ill patient with opioid use disorder. This is certainly a step in the right direction. The authors should be lauded in their efforts to identify the deficits in the management of critically ill patients with OUD. The question that the authors pose is very relevant and highlights the importance of not only properly identifying these patients, but also ensuring availability of help to clinicians managing them. However, the use of a survey-based methodology to identify the problem, although easy, does have significant limitations.

Even though the authors claim a response rate of 49%, it is to be noted that the results represent the responses from 58 of the over 3000 acute care hospitals in the united states [6], thus diluting the impact of the findings. Further, the authors did not stratify ICUs based on patient population (surgical vs medical) as the management of pain and sedation is very different in post-surgical or trauma patients as compared to medical patients. The criteria for identification of respondents to fill the survey is very arbitrary. A research assistant identified the "ICU director" at his or her discretion. The director then identified the respondent as the "ICU clinician responsible for critical care guideline development", 86% of whom were registered nurses. While nurses are at the forefront of patient care in the ICU, and are an integral part of the medical decision making process, it is unclear if they are "responsible for critical care guideline development" especially with regard to medication usage. Perhaps, a pharmacist or a representative of the hospital pharmacy and therapeutics committee could provide a better perspective and might have been more suited to respond to the questionnaire. Certain questions in the survey such as those enquiring about institutional practice of continuing of medications such as buprenorphine are difficult to answer since there is usually not an "institutional protocol" for such continuations and it varies at a provider level.

Despite these limitations, the findings of this study bring up some very important points and highlight the lack of institutional resources to manage critically ill patients with OUD. Although most hospitals had institutional guidelines to manage sedation and analgesia in the general critically ill population, only 7% had guidelines to address the sedation needs in patients with OUD. Not only does this predispose this at-risk population to both inadequate as well as over-treatment of pain, but also increases the likelihood of in-hospital complications. The lack of guidelines and protocols also hampers the ability of ICU providers in providing appropriate care to these patients. The other concerning finding is that less than half of the hospitals included in the survey had outpatient resources available to longitudinally assess patients after hospital discharge and follow for outpatient addiction. Thus, increasing the likelihood of development of post-intensive care syndrome (PICS). Hence, it is essential that hospitals and institutions

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work towards adopting a multidisciplinary approach to formulating guidelines for in-hospital management as well as outpatient follow-up of ICU survivors with OUD and prevent the morbidity and mortality observed in this complex patient population.

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Declaration of Competing Interest

None.

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Kunal Karamchandani MD, FCCP
Department of Anesthesiology and Perioperative Medicine, Penn State Health Milton S. Hershey Medical Center, Hershey, PA, USA
Corresponding author at: Department of Anesthesiology and Perioperative Medicine, H187, Penn State Health Milton S. Hershey Medical Center, 500 University Dr., Hershey, PA 17033, USA.
E-mail address: kkaramchandani@pennstatehealth.psu.edu

Ashish K. Khanna MD, FCCP, FCCM
Department of Anesthesiology, Section on Critical Care Medicine, Wake Forest University School of Medicine, Wake Forest Baptist Health, Winston-Salem, NC, USA
Outcomes Research Consortium, Cleveland, OH, USA

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