

## Editorial

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# Time to Rewrite Assessment and Documentation of Acute Pain in the Emergency Setting

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As a subjective and a unique individual experience, acute pain is one of the most common chief complaints reported by a majority of patients who are admitted to the emergency department (ED), while its perception and expression have great variations between countries.

Acutely painful conditions are under evaluated and under treated in the ED, suggesting that ED staff need more education and training about the management of acute pain. One important step in relieving pain is to assess its presence and degree.<sup>1</sup> The effective management of acute pain in the ED requires appropriate assessment of the pain based on the patient's perception of pain using a validated pain scale. Additionally, reassessment of pain is essential to determine the effect of treatment.<sup>2</sup>

The International Association for the Study of Pain (IASP) has described pain as 'an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage'.

Within the last two decades, pain management policies of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) have become standard and the addition of pain as the "fifth" vital sign was noted in the context of initial assessment. Although, there seems to be a consensus among medical disciplines to address its importance, one cannot yet claim that all healthcare personnel behave within standards in every real life situations worldwide.

Pain is what the patient states it is. On the other hand, a myriad of psychological, sociocultural, temporal and situational variables affects how people perceive and express their pain. Age, sex, ethnicity, associated psychiatric problems and socio-economic status of the patient are some of the factors which affect the magnitude and quality of an individual expresses his/her complaints. Two decades ago, researchers pointed out that female patients tend to report the severity of pain higher than males did and therefore received more pain medications. Thus, the painful experience becomes a unique phenomenon for each patient, thereby necessitating the use of versatile tools of assessment in the clinical practice.

The assessment of pain in the acute situation involves the site, quality and severity of the discomfort. Although, some authors advocated the use of physiological parameters to evaluate the properties of pain, they are more useful to verify a clinical impression. Physiological clues such as tachycardia, hypertension or restlessness may help determine the requirement for pain management in intubated or excited/incoherent patients. Decreased tidal volume, vital capacity, and in turn, alveolar hypoventilation may result from abdominal and thoracic pain. Increased systemic vascular resistance and sympathetic tone resulting from pain may mask hypovolemia, thus may preclude adequate fluid resuscitation.

### PAIN SCORES AND DOCUMENTATION OF PAIN

One definition of measurement is 'the assignment of numbers to objects or events to represent

quantities of attributes according to rules'.<sup>3</sup> The most important principle is that clinicians should *somehow* assess their patients' pain levels, no matter which method or scale one uses to accomplish this task.

To date, findings demonstrated that even in the chaotic prehospital phase most acute care patients allow evaluation *via* a simple "zero-to-10 scale" reliably respecting their pain levels. The association between pain severity and treatment requirements can be intervened by many factors inherent in the patient and the disease. Patients, families, nurses, and physicians feel better about pain care when pain levels are assessed.<sup>4,5</sup> Supplemented with regular pain reassessments, the schedule of pain reassessment should be driven by patients' pain severity.

Conscious patients are able to express and quantify their pain depending on personal characteristics, educational background, age, sex and other factors. The visual analog scale (VAS) is the most widely used tool for estimating both severity of pain and to judge the extent of pain relief. The VAS is an easy-to-use instrument which does not warrant using a sophisticated device. It is also highly sensitive in detecting treatment effects, and its results can be analysed by parametric tests.

The numerical rating scale (NRS) is broadly validated tool across myriad patient types. NRS data are easily documented, intuitively interpretable, and meet regulatory requirements for pain assessment and documentation.

Verbal pain scores (VPSs) are tools that may discern those patients who are truly in pain but who may not express their discomfort, as well as influence the physician to inquire about the patient's pain.

Verbal rating scales (VRS) consist of a number of statements describing increasing pain intensities. Patients are told to choose the word which best describes their pain intensity. The pain intensity score is the number assigned to the descriptor chosen by the patient. The four-descriptor scale is widely used in clinical settings, is easy to administer, and has demonstrated validity and reliability.<sup>6</sup>

Brief Pain Inventory (BPI) is a self-administered, validated questionnaire available in many languages and was originally used to assess pain intensity and location as well as pain-related functional interference among a wide spectrum of patients.

Recent reports launch considerable aid derived from technological advances in the assessment and recording of pain. Kos et al conducted a cross-sectional observational study using smartphones and tablets to score statements assessing fatigue, pain, anxiety and quality of life (QoL) on an electronic visual analogue scale (eVAS).<sup>7</sup> They concluded that eVAS is reliable and useful for people with chronic diseases to register their complaints.

Arthur et al conducted a pilot project to determine the feasibility of the tablet computer-based automated pain tracker (APT) and to assess patient and nurse satisfaction with the device.<sup>8</sup> All of the subjects indicated the APT was easy to use, and 28 of 30 subjects (93%) thought the APT should be used more frequently in the ED.

"Pain cannot be treated if it cannot be assessed". The most important principle is that clinicians should somehow assess their patients' pain levels, no matter which method or scale one uses to accomplish this task. Evidence clearly demonstrates that physicians are unable to predict how much pain their patients are having.

Special scales developed and validated for patients with difficulty in communication are available, and ED physicians should have a plan for assessing pain in different case scenarios. Finally, ongoing research in the area of ED patient pain management should be conducted.

## REFERENCES

1. Lalloo C, Stinson JN. Assessment and treatment of pain in children and adolescents. *Best Pract Res Clin Rheumatol*. 2014; 28(2): 315-330. doi: [10.1016/j.berh.2014.05.003](https://doi.org/10.1016/j.berh.2014.05.003)
2. Gordon DB, Pellino T, Miaskowski C, et al. A 10-year review of quality improvement monitoring in pain management: Recommendations for standardized outcomes measures. *Pain Manage Nurs*. 2002; 3(4): 116-130. doi: [10.1053/jpmn.2002.127570](https://doi.org/10.1053/jpmn.2002.127570)
3. Chapman CR. Measurement of pain: Problems and issues. In: Bonica JJ, Albe-Fessard D, eds. *Advances in Pain Research and Therapy*. New York, USA: Raven Press; 1976: 345-353.
4. Thomas SH, Andruszkiewicz LM. Ongoing visual analog score display improves emergency department pain care. *J Emerg Med*.

2004; 26(4): 389-394.

5. Lozner AW, Reisner A, Shear ML, et al. Pain severity is the key to emergency department patients' preferred frequency of pain assessment. *Eur J Emerg Med.* 2010; 17(1): 30-32. doi: [10.1016/j.jemermed.2003.11.020](https://doi.org/10.1016/j.jemermed.2003.11.020)

6. Gracely RH, McGrath P, Dubner R. Ratio scales of sensory and affective verbal pain descriptors. *Pain.* 1978; 5: 5-18. doi: [10.1016/0304-3959\(78\)90020-9](https://doi.org/10.1016/0304-3959(78)90020-9)

7. Kos D, Raeymaekers J, Van Remoortel A, et al. Electronic visual analogue scales for pain, fatigue, anxiety and quality of life in people with multiple sclerosis using smartphone and tablet: A reliability and feasibility study. *Clin Rehabil.* 2017; 31(9): 1215-1225. doi: [10.1177/0269215517692641](https://doi.org/10.1177/0269215517692641)

8. Arthur AO, Whiteside S, Brown L, Minor C, Thomas SH. Patient use of tablet computers to facilitate emergency department pain assessment and documentation. *ISRN Emerg Med.* 2012; 2012: 254530. doi: [10.5402/2012/254530](https://doi.org/10.5402/2012/254530)