

Tools for evaluation of pain nursing essay

[Health & Medicine](#), [Nursing](#)



7. Pain scores

ASSESSMENT OF PAIN

Pain has long been recognised as a highly personal and subjective phenomenon unique to the individual. The most commonly recognised definition of pain is that of the International Association for the Study of Pain ' an unpleasant sensory and emotional experience associated with actual or potential damage or described in terms of such damage'

Acute pain is relatively straightforward to assess as, unlike chronic pain, it generally bears a predictable relationship to obvious tissue damage. Acute pain is relatively straightforward to assess as, unlike chronic pain, it generally bears a predictable relationship to obvious tissue damage. Because the level of postoperative pain tends to change rapidly throughout the postoperative course, especially early after surgery, a policy of regular assessment of pain using simple measurement tools is the best way to ensure that pain treatment can be appropriately titrated. Pain is considered as the " fifth vital sign" 30. Inadequate assessment and management of post-operative pain can have profound effects on the patient, causing raised levels of anxiety, sleep disturbances and mobilisation difficulties, restlessness, irritability, aggression, and perhaps most importantly, unnecessary levels of distress and suffering (Sjostrom et al2000, Macintyre and Ready 2002, Carr et al2005). Accurate assessment of post-operative pain is essential to ensure that pain is managed effectively. Acute pain is relatively straightforward to assess as, unlike chronic pain, it generally bears a predictable relationship to obvious tissue damage. Because the level of postoperative pain tends to change rapidly throughout the postoperative course, especially early after surgery, a policy of regular assessment of pain using simple measurement tools is the best way to ensure that pain

treatment can be appropriately titrated. Pain is considered as the "fifth vital sign" 30. Tools for Evaluation of Pain³⁰To assess the severity of pain and the success of treatment, some form of quantitation of pain is necessary. Many pain scoring systems are available. a) Categorical: A four or five point scale grading the pain as none, mild, moderate, severe and excruciating etc. This scale lacks sensitivity, but it has the advantage of simplicity. b) Numerical scale: This is an 11 point scale where "0" means no pain and "10" is the worst imaginable pain. c) Visual Analogue Scale (VAS): A 100 mm scale with no pain at one end and worst imaginable pain at the other, is commonly used. d) McGill Pain Questionnaire (MPQ): MPQ measures the sensory, affective, evaluative and other miscellaneous aspects of pain, thus measuring pain multi-dimensionally. The questionnaire contains about 20 aspects. 1 to 10 represents sensory aspects of pain, 11 to 15 represent affective aspect of pain, 16 represents evaluative aspect of pain, 17 to 20 other miscellaneous aspects of pain. Each subunit has 2 to 5 words under them, representing increasing degree of pain and numerical value. The sum of all points gives a rank value, which is termed the Pain Rating Index. e) Happy-sad face - A child or an illiterate person could use a set of faces to indicate the severity of his pain. This scale shows a child's face in different moods, the child is asked to select the facial expression that best suites the pain expression. This assesses the affective and fear component of pain.

Visual Analogue ScaleA Visual Analogue Scale (VAS) is a measurement instrument that tries to measure a characteristic or attitude that is believed to range across a continuum of values and cannot easily be directly measured. For example, the amount of pain that a patient feels ranges

across a continuum from none to an extreme amount of pain. From the patient's perspective this spectrum appears continuous \pm their pain does not take discrete jumps, as a categorization of none, mild, moderate and severe would suggest. It was to capture this idea of an underlying continuum that the VAS was devised. VAS is usually a horizontal line, 100 mm in length, anchored by word descriptors at each end. The patient marks on the line the point that they feel represents their perception of their current state. The VAS score is determined by measuring in millimetres from the left handend of the line to the point that the patient marks. As such an assessment is clearly highly subjective, these scales are of most value when looking at change within individuals, and are of less value for comparing across a group of individuals at one time point.

SEDATION Virtually every patient admitted into the intensive care unit (ICU) is administered sedation therapy. The precise control of the depth of sedation is often not well managed. Patients are frequently over or under-sedated with, as a result of this lack of control, an accompanying increase in morbidity, mortality and economic cost. The effective management of pain, anxiety and sleep (hypnosis) are the major aims of a sedation therapy regimen. The effective management of pain is essential in the proper management of sedation, and results in improved patient satisfaction, a faster recovery with reduced complications [10]. This has to be the priority when assessing a patient's sedation requirements. Adequate analgesia may reduce the necessity for other sedative therapy.

Sedation Scoring Systems.

A sedation scoring system should be an integral component of any sedation protocol. The four most validated scoring systems include: The Ramsay

Sedation Scale; The Sedation Agitation Scale; The Motor Activity Assessment Scale and for the pediatric population: The Comfort Scale [19].

The Ramsay Sedation Scale

The Ramsay Sedation Scale (RSS, Table), was the first scale to be defined and was designed as a test of rousability. The RSS scores sedation at six different levels, according to how rousable the patient is. It is an intuitively obvious scale and therefore lends itself to universal use, not only in the ICU, but wherever sedative drugs or narcotics are given. It can be added to the pain score and be considered the sixth vital sign.

Ramsay Sedation Scale

- 1 Patient is anxious and agitated or restless, or both
- 2 Patient is co-operative, oriented, and tranquil
- 3 Patient responds to commands only
- 4 Patient exhibits brisk response to light glabellar tap or loud auditory stimulus
- 5 Patient exhibits a sluggish response to light glabellar tap or loud auditory stimulus
- 6 Patient exhibits no response

The RSS defines the conscious state from a level 1: the patient is anxious, agitated or restless, through the continuum of sedation to a level 6: the patient is completely unresponsive. Therefore when an assessment is to be made, the first decision to be made is to note if the patient is awake. If the patient is awake: are they anxious, agitated or restless (RSS 1) or are they calm, co-operative and communicative (RSS 2)? If the patient is asleep then a test of reusability needs to be made. If the patient responds quickly to a voice command, this is a RSS 3. If the response is slow then the patient is assigned a level 4. If the patient does not respond a stronger stimulus is

applied. A louder auditory stimulus or a glabellar (between the eyebrows) tap is enacted. A brisk response to this test of rousability places the patient at a RSS 4. A slow or sluggish response categorizes the patient to a RSS 5. No response at all places the patient at a level 6. The rousability stimulus was specifically designed not to be a painful test and not to startle the patient. In fact it was planned that a sleeping patient would not be roused to a fully awakened state, so that the sleep pattern would not be disturbed. A disadvantage of the RSS is that it relies on the ability of the patient to respond, therefore the patient who has received neuromuscular blocking drugs cannot be assessed in this manner. Also at a level 1 score, there is no further definition of the degree of agitation, and there are occasions when this may be important to record. The Sedation-Agitation Scale does take this into consideration [20]. At the deep end of the scale, a RSS 6, there is no further information as to whether the patient is in a light plane of general anesthesia or deep coma. This assessment can be made from monitoring the compressed spectral array signal from an electroencephalogram, A bispectral index score of 61. 7 correlates well with a RSS of 6 [21]. Ramsay sedation score

Score	Response
1	Anxious , agitated or restless or both
2	Cooperative, oriented, tranquil
3	Responding to commands only
4	Brisk response to light glabellar tap
5	Sluggish response to light glabellar tap
6	No response to light glabellar tap