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### Adult pain assessment and management: at a glance

#### Written by

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#### This article will:

- Provide an introduction into some of the various classifications of pain
- Raise awareness of the skills required to assess and manage an individual's pain
- Explore some of the tools used to assist with the assessment of pain
- Introduce some of the management strategies used to manage pain
- Examine some of the barriers to effective pain assessment and management

#### Why do healthcare professionals need to learn how to assess and manage pain?

For healthcare professionals, one of the most common patient problems they will encounter is pain and whilst this is universally experienced, effective assessment and management is sometimes difficult to achieve, as pain is also extremely complex. Therefore, when a patient states they are in pain it is every healthcare professionals duty to listen to what they say, believe that pain is what they say it is, observe for supporting information using appropriate and varied assessment approaches, and act as soon as possible by utilising suitable management strategies. The holistic assessment and management of pain is important, as pain involves the mind as well as the body, and is activated by a variety of stimuli, including biological, physical, and psychological (Boore, Cook and Shepherd, 2016). For some patients, the pain they experience can be short-lived and easy to treat, but for others, it can cause significant issues in relation to their overall health and wellbeing (Flasar and Perry, 2015). Mears (2018) declares that mismanaged pain can affect an individual's mobility, sleep pattern, nutritional and hydration status and can increase their risk of developing depression or becoming socially withdrawn. As

nurses are the frontline force in healthcare settings, they play a vital role in the treatment of individuals in pain. This article will, therefore, examine and explore some of the holistic nursing assessment and management strategies that can be used by healthcare professionals.

#### Classifications of pain

However, before we delve into the assessment process, it is necessary to provide some background information on the various types of pain that can be experienced, as well as how these are manifested. Being in possession of this information will not only serve to improve knowledge levels, but it will also ultimately help to inform management decisions, as Boore, Cook and Shepherd (2016) state it is the first step in the assessment process.

There are several classifications of pain (see figure 1), some overlap and patients may present with one or more.

- Acute: Pain that is of short duration (less than three months) and is reversible.
- Chronic: Pain that is persistent and has been experienced for more than three months.
- Nociceptive: Pain resulting from stimulation of pain receptors by heat, cold, stretch,
  vibration or chemicals.
- Neuropathic: Pain related to sensory abnormalities that can result from damage to the nerves (nerve infection) or neurological dysfunction (a disease in the somatosensory nervous system).
- Inflammation: Stimulation of nociceptive processes by chemicals released as part of the inflammatory process.
- Somatic: Nociceptive processes activated in skin, bones, joints, connective tissues and muscles.
- Visceral: Nociceptive processes activated in organs (i.e. stomach, kidneys, gallbladder).

• Referred: Pain that is felt a distance from the site of origin.

(Colvin and Carty, 2012; Law and Rudall, 2013; Kettyle, 2015; Boore, Cook and Shepherd, 2016; Cunningham, 2017; Mears, 2018).

#### Assessment

Individuals react to pain in varying ways, for some, pain is seen as something that should be endured, while for others it can be a debilitating problem, which is impeding their ability to function. Therefore, in order to ensure an effective and individually tailored holistic management plan is developed, it is important to understand how the pain is uniquely affecting the individuals, from a biopsychosocial perspective (Flasar and Perry, 2015). In order to do this, healthcare professionals use a range of tools, such as the skills of observation (the art of noticing), questioning techniques, active listening, measurement and interpretation. No one skill is superior; rather it is the culmination of information gathered via the various methods, that enables a healthcare professional to determine if a patient is in pain, and how this pain is affecting them physically, psychologically, socially, and culturally (Cunningham, 2017) (see figure 2).

One of the first skills that can be utilised is to visually observe the patient, and examine body language, facial expressions, and behaviours, as these provide information about how a person is feeling. For example, an individual in pain may be quiet, withdrawn or very vocal, angry, and irritable. They may display facial grimacing and teeth clenching or exhibit negative body language, guarding and an altered gait. However, there may be times when an individual may not be able to show behavioural signs of pain, such as when a patient is unconscious. Therefore, physiological response to noxious stimuli can be observed through the measurement of vital observations, such as hypertension, tachycardia, and tachypnoea. Whilst these observations are routinely used within perioperative and critical care areas, these can be present in the absence

of pain; consequently, these must be used in conjunction with other assessment strategies (Law and Rudall, 2013).

#### **Assessment tools**

Whilst vital observations and behavioural manifestations may indicate that a patient is in pain, questioning, measurement and interpretation skills will assist with determining the intensity, severity, and effect of the pain on the patient's wellbeing and quality of life. This process can be aided with the use of specifically designed tools, which act as prompts for healthcare professionals and facilitate the assessment of one or more dimensions.

Unidimensional tools: Visual Analogue Scale (VAS), Numerical Rating Scale (NRS), Verbal Rating Scale (VRS) can be quick, easy to use, regularly repeated and do not require complex language. These are limited in terms of the information gained, as examining one specific aspect is not sufficient for adequate and holistic pain management (Mears, 2018). However, for individuals who are unable to communicate or where language barriers exist, unidimensional tools, such as the Wong-baker FACES tool can be very useful (Kettyle, 2015). The Wong-baker FACES which was originally created for children has been successfully integrated into the use of older people and is beneficial in facilitating an individual's ability to communicate if they are experiencing pain.

**Multidimensional tools:** Ask for greater information and measure the quality of pain via affective, evaluative and sensory means. The McGill Pain Questionnaire (MPQ) is one example, and this is often used to assess individuals who are experiencing chronic pain. However, due to its higher levels of complexity healthcare professionals can sometimes find this tool more difficult to use, especially if unfamiliar with it. The Abbey Pain scale is another

multidimensional tool that has proven to be beneficial for assessing pain in older adults who are unable to articulate their needs.

**Mnemonics:** OPQRST and SOCRATES are just two examples of mnemonic aids, which can be useful and require no equipment as they use mental assessment processes only.

However, regardless of which tool or mnemonic is used, as pain presentations are often unique pain assessment will not be successful if the healthcare professional fails to ascertain and interpret the signs and symptoms, uses the tools inappropriately, and does not apply a personcentred approach to the overall assessment process, i.e. using the wrong tool for the wrong patient.

#### **Management strategies**

The primary goal for all patients is to pre-empt and prevent pain from occurring in the first instance; however, if pain cannot be avoided, optimal analgesic management is vital. The word analgesia 'to be without feeling of pain' is derived from the Greek language, and in terms of pain management can relate to medication and alternative interventions (Law and Rudall, 2013). Hence, pain management plans should incorporate a multi-modal approach in order to successfully and holistically treat patients' pain (Flasar and Perry, 2014). Boore, Cook and Shepherd (2016) state that this is an effective way to manage pain, but stress that the decisions about which management strategies to use, also need to take into consideration the context of the clinical situation, the patient's level of acuity, the environment and physical space, and the availability of resources.

#### **Pharmacological**

One very effective strategy that healthcare professionals have within their management arsenal is the use of pharmacological treatments, and the choice depends on whether the pain is nociceptive, neuropathic, inflammatory or of mixed origin. There are three main categories,

opioids, non-opioids/non-steroidal anti-inflammatories, and adjuvants/co-analgesics (see figure 3). The most efficient pharmacological regime, for moderate to severe pain (i.e. cancer-related pain) often incorporates a combined approach, by administrating a specific drug in conjunction with adjuvants or co-analgesics (see figure 4).

#### Non-pharmacological

Pharmacological treatments are not the only strategy at healthcare professionals' disposal, and true holistic management cannot be achieved without the incorporation of other non-pharmacological therapies. Some of these interventions are long-standing, are engrained in some traditional medical practices and when used correctly, can enhance patients' feelings of empowerment and involvement (Flasar and Perry, 2015). However, due to limited resources, funding, space, time, knowledge of use, and personal beliefs, some therapies are not fully utilised or embraced (Cullen and MacPherson, 2012).

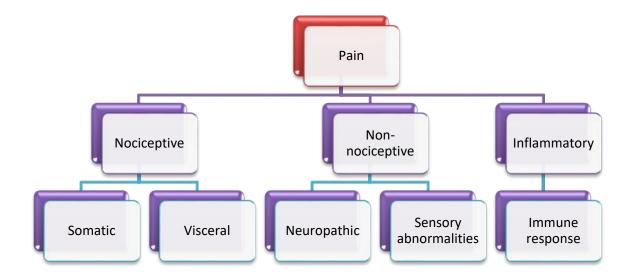
These can be placed into three main groups, (see figure 5), and the choice of which to use, will depend upon patients' preferences and existing coping mechanisms. The following strategies have been highlighted as they align with the fundamental core values of care and compassion, and require very little in terms of resources or time.

- **Distraction:** This can take various forms, i.e. talking to the patient about their specific hobbies. This basic skill often requires no equipment, can be done anywhere and is a useful way of taking the patient's mind off their pain.
- **Imagery / meditation:** This management technique takes distraction therapy one-step further by utilising a more structured approach.
- Therapeutic touch and massage: For centuries, the therapeutic placing of hands has proven to be a useful skill, and has beneficial physiological (stimulation of A-beta fibres which restrict pain pathways) and psychological properties (Kettyle, 2015).

- **Environment**: Sound, lighting and the temperature of the patient's immediate environment have been shown to heighten or reduce perceptions of pain.
- **Body positioning and comfort**: This can be used to help patients cope with the pain levels they are experiencing and in some instances can reduce the pain associated with nociceptive and inflammatory pain signals.
- Thermoregulation: For some types of pain, it has been shown that the use of heat or cold packs can help reduce pain experiences. However, care needs to be taken if these treatments are to be used on postoperative sites and areas with skin contraindications.
- **Electrostimulation:** This technique is non-invasive and uses pulsed electrical currents to stimulate A-beta fibres, which inhibit the transmission of nociceptive signals in the pain pathway (Johnson, 2012).

To summarise, successful pain assessment and management can only be achieved if healthcare professionals adopt a holistic and multimodal approach, which incorporates the use of personcentred assessment processes, compassionate communication and a variety of management strategies, that are chosen in partnership with the patient.

Figure 1 - Types of pain



(Cunningham, 2017)

Figure 2 – Example of assessment domains

# Physical appearance

- •Facial expressions
- Postering
- Guarding
- •Reduced movement
- Abnormal gait
- Body language

# **Physical impact**

- Bowel habits
- •Insominia
- Fatigue
- Vital signs

### Pain characteristics

- •Location
- Duration
- Intensity
- •Characteriscs
- Precipitating or aggravating factors

### **Emotional / Behavioural**

- Depression
- Anger
- Irritability
- Vocalisations

# **Quality of life**

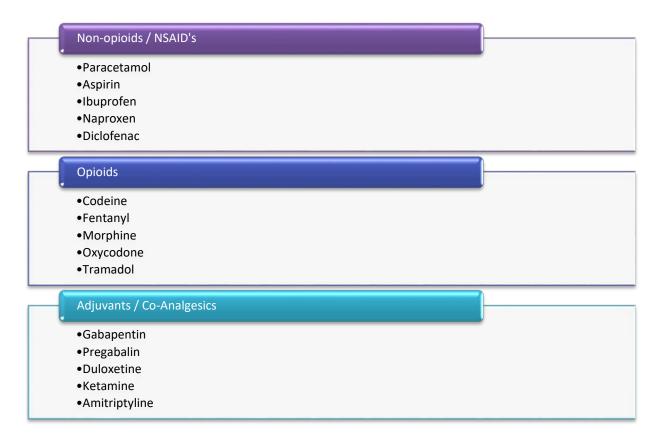
- Social activities
- Relationships
- •Work
- •Cultural impact
- Religion

### Past experiences

- Coping stratagies
- Medications
- Expectations

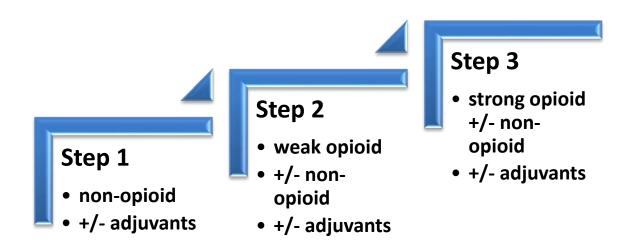
(Kettyle, 2015; Cunningham, 2017)

Figure 3 – Classifications of pharmacological analgesics (examples)



(Smith and Muralidharan, 2014)

Figure 4 – Analgesic Ladder



(World Health Organisation, 2018)

Figure 5 – Example non-pharmacological management strategies

#### Psychological / Physical Alternative **Emotional** Spirtual Heat and cold Acupuncture Relaxation • Excercise Acupressure Information Massage Electrostimulation Body position / • Herbs Breathing comfort • Music Reflexology Art therapy Distraction • Biofield therapies • Rest (i.e.raki) Imagery • Cognitive Behavioural Therapy • Yoga • Tai chi

(Cunningham, 2017)

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