

The problem of pain

Learning objectives

After reading this chapter, the participant should be able to

- describe the problems associated with pain management
- differentiate between acute, chronic or persistent pain, and malignant or cancer pain
- discuss the importance of using national guidelines for pain management in practice

The basic concepts of pain management are presented in this chapter. It also discusses the widespread nature of pain and how the different types of pain are defined. The last sections of the chapter review the use of national guidelines, position statements, and practice standards for pain management.

Pain assessment and treatment options are discussed in later chapters.

The prevalence of pain

Pain has no boundaries and can affect anyone, no matter what age or gender. Pain infiltrates everyday living and can significantly reduce the quality of life for those who are suffering. Since pain is such a universal condition, knowing how to assess and manage pain is vital for all healthcare professionals.

Knowing how to manage pain effectively and using evidence-based techniques will provide nurses with confidence when dealing with patients who are in pain.

Chapter One

With the increasing emphasis on using evidence to support nursing practice, there are many practices that have been examined and found to be lacking. Taking a hard look at “the way we always did things” may show that newer techniques are better. For example, pain medications for postoperative patients used to be given via the intramuscular (IM) route. Current practice guidelines (APS 2003) indicate that this route is not effective for pain relief, both because of the irregular absorption of pain medication and because scarring can occur at the site of injection. Today most patients who receive postoperative pain relief are given medication via the IV route. Nursing practice can evolve when evidence-based guidelines are used.

Pain as a healthcare problem

The problem of pain is significant. Pain is the most common reason that patients make appointments to see their physician (APS 1999), accounting for approximately 40 million physician visits annually (Pain Advocacy 2004). The estimated cost of pain, related to absenteeism and decreased productivity, is calculated to reach billions of dollars annually (Roper Starch Worldwide 2002). More than 73 million surgeries take place annually, with 75% of these patients experiencing pain after surgery (Apfelbaum 2003).

These statistics point to the need for adequate pain management for patients, and the U.S. Congress has designated 2000 to 2010 as the Decade of Pain Control and Research, yet pain is still being undertreated. Nurses are in a powerful position for affecting change in the pain management situation. Nurses are advocates for patient care, are becoming more educated about how to manage pain, and are working toward improving pain management for patients.

Definitions of pain

Pain is most commonly defined as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” (Mersky 1979 in APS 2003). This definition clearly describes the elements of the pain experience:

- The unpleasant sensation
- The emotional component
- The realization that pain can be present without tissue damage

A more patient-focused definition states that “pain is whatever the person experiencing it says is occurring whenever the experiencing person says it does” (McCaffery 1968). This definition highlights the subjective nature of pain, in addition to its focus on the patient.

There are several different ways to classify pain, the most common being acute pain, chronic—often now called persistent—pain, and malignant or cancer pain. Each of the three conditions has a slightly different set of criteria. Additionally, pain from nerve damage is a special type of pain that is chronic in nature but can also be present in patients with cancer.

Acute pain

Acute pain usually has a short duration and an identifiable cause, such as trauma, surgery, or injury (APS 2003, ASPMN 2002). It is a signal to the body that something is wrong, and the patient expects to get better from this type of pain. Patients who are experiencing acute pain may have increased vital signs, such as elevated blood pressure or pulse (ASPMN 2002). However, chronic pain patients who are experiencing acute pain may not have these physiologic changes. This variability means nurses should not rely solely on changes in vital signs to determine if pain is present.

If acute pain continues untreated or is undertreated, it may lead to the development of chronic pain conditions, such as complex regional pain syndrome (CRPS), that are difficult to treat (D’Arcy 2006). Today, the recommendation is to treat acute pain aggressively, to limit the effect on the individual and to minimize the potential for the development of a more difficult to treat chronic pain syndrome (Acute Pain Management 2005, D’Arcy 2006).

Chapter One

The following are important elements of acute pain:

- Short duration
- Patient expects to recover
- May have increases in vital signs, unless the patient has an underlying chronic pain condition
- Untreated or undertreated acute pain may lead to disabling chronic pain syndromes, such as CRPS

Chronic or persistent pain

Chronic or persistent pain, as opposed to acute pain, is pain that lasts beyond the normal healing period of three to six months (ASPMN 2002). Additionally, there may be no easily identifiable cause (Acute Pain Management 2005). A patient who develops chronic pain—such as low back pain from an injury, or a painful condition such as diabetic neuropathy—also may develop depression (D’Arcy 2006). Changes in vital signs may not be present, as the patient’s body has learned to cope with the stress of continued pain. For a patient with chronic pain—no matter what the cause—the changes in lifestyle, decreased self-esteem, and financial burdens can exacerbate the pain and affect relationships.

The following are important elements of chronic pain:

- Pain that lasts beyond the normal healing period.
- Does not need tissue damage to exist. Physical damage may not be evident on x-rays or radiologic scans such as MRIs and CT scans.
- Depression is common.

- Vital sign changes may not be evident.
- Affects all areas of the patient's life.

Cancer or malignant pain

Patients who are diagnosed with cancer may fear the pain they experience is associated with disease progression (NCCN 2000, APS 2005). Cancer pain can be the result of tumor growth, metastases, or cancer-related therapies such as radiation or chemotherapy. Cancer pain can be both acute and chronic in nature. For 20–75% of adult cancer patients, pain is present at the time of diagnosis. For adult patients with advanced disease or end-stage disease, pain may be present in 23–100% of all cases. Sixty-two percent of pediatric patients have pain at diagnosis, while 62–90% have pain at the end of life (APS 2005).

This overwhelming incidence of pain with cancer should suggest aggressive pain management. However, evidence suggests that even pain from cancer is being undertreated (AHCPR 1994, APS 2005). The National Comprehensive Cancer Network (NCCN) states that cancer pain could be well controlled for most patients if adequate assessment and pain management techniques were employed (NCCN 2000).

Adequate treatment for pain is especially important for this group of patients. Cancer patients fear the cancer diagnosis the most and then fear the pain that may follow. Almost all cancer patients have heard about or seen someone die in pain from cancer. The idea that they may die the same way frightens them and makes the pain even worse. Providing cancer patients with effective pain management provides the best quality of life and means that the thing the patients fear most has been overcome.

Chapter One

The following are important elements of cancer-related pain:

- Cancer pain can be the result of tumor growth, metastases, or the result of cancer treatment
- At some time in the illness trajectory most cancer patients will experience pain
- For up to 90% of all cancer patients, adequate pain control could be provided with present pain management methods (AHCPR 1994)
- Cancer pain should be controlled aggressively to give the patient the best quality of life possible
- Cancer patients may have combinations of acute, persistent, or neuropathic pain

Neuropathic pain

Neuropathic pain is the result of nerve damage (Staats et al 2002) and can be from damage to the central nervous system, such as post stroke pain, or the peripheral nervous system, such as postherpetic neuropathy (PHN) (ASPMN 2002). Patients with neuropathic pain will often describe the pain as burning, tingling, pins and needles, painful numbness, or shooting.

There are several different causes of neuropathic pain:

- Neuropathy from diseases or injury such as diabetes, postherpetic neuralgia, or CRPS
- Neuropathic pain syndromes as result of nerve entrapment or surgical damage, post thoracotomy pain syndrome, post mastectomy pain syndrome, phantom limb pain, and post hysterectomy pain syndrome
- Treatment-related neuropathic pain, such as chemotherapy-related neuropathies that develop with the continued use of vinca alkaloid chemotherapeutic agents

- Centrally originating pain, such as post stroke pain or spinal injury pain found in quadriplegics or paraplegics

The one similarity with all these pain syndromes is the high degree of difficulty in managing pain. Neuropathic pain is a pain that becomes self-promoting and continues to provide pain stimulus; therefore, patients with neuropathic pain syndromes suffer continually. They may also develop conditions such as allodynia or hyperalgesia, making the syndrome much more difficult to treat.



Notes on pain

Allodynia: Perception of pain caused by normally non-painful stimulus, such as light touch.

Hyperalgesia: Increased sensation of pain in response to a normally painful stimulus.

(Staats 2004)

Treating neuropathic pain requires the use of multiple medications, such as opioids, antidepressants, or antiseizure medications (Staats et al 2002). Since neuropathic pain is so difficult to treat, nurses should be supportive of patients with neuropathic pain syndromes, help them understand the pain, and educate patients about how to deal with these difficult-to-treat pain conditions.



Pain tip

Patients who either complain of pain as burning, have increased sensitivity to light touch, or report painful tingling or numbness are experiencing neuropathic pain, which requires special treatment and medications.

National guidelines for pain management

Due to the widespread nature of pain and the damage it can do both physically, psychologically, and emotionally, efforts have been taken to help define the best practices for treating pain. The first efforts to set standards of practice for pain management were undertaken by the Agency for Health Care Policy and Research (AHCPR) in 1992. This body had panels of experts in the field develop pain guidelines for acute pain, cancer pain, and low back pain (AHCPR 1992, 1994).

As the work became too burdensome, the AHCPR turned over the process of guideline development in pain management to the American Pain Society (APS). This group continued to use panels of experts to develop guidelines for managing pain in specific settings and diseases. Some of the guidelines that have been developed include the following:

- Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain, 5th ed. (2003)
- Guideline for the Management of Acute and Chronic Pain in Sickle-Cell Disease (1999)
- Guideline for the Management of Pain in Osteoarthritis, Rheumatoid Arthritis, and Juvenile Chronic Arthritis (2002)
- Guideline for the Management of Fibromyalgia Syndrome Pain in Adults and Children (2005)
- Guideline for the Management of Cancer Pain in Adults and Children (2005)
- Pain Control in the Primary Care Setting (2006)
- Low Back Pain Guidelines (in development; expected to be released in 2007)
- Opioid Use (in development)



Pain tip

Information on these guidelines is available at www.ampainsoc.org.

In addition to the APS, many national specialty organizations have developed guidelines for pain management in their patient populations. For example, the American Geriatrics Society (elderly patients), the American Pediatric Society (infants and children), and the NCCN (cancer patients), all have disease-specific pain guidelines. Information on how to access these guidelines can be found in the practice exercises at the end of this chapter. One of the strongest national guidelines to date has been the standards developed by The Joint Commission (formerly known as the Joint Commission on Accreditation of Healthcare Organizations or JCAHO). These standards guide the practice of pain management in all hospitals that the regulatory body surveys, and hospitals must comply with the requirements of The Joint Commission Pain Management Standards to maintain accreditation.

Which recommendation should you use?

When determining how to use the recommendations for pain management in different populations and with different diseases, it is helpful to understand the strength of the different recommendations. Often the terms “standard,” “consensus statement,” or “guideline” are used interchangeably, but there are significant differences, as shown in the following definitions. When deciding on an intervention for pain management, use the one that has the highest level of support.

1. **Guidelines:** Systematically developed statements using an analysis of current research that can help practitioners make patient care decisions about appropriate healthcare for specific clinical circumstances (Berry et al 2003). Recommendations for practice are made using an evidence rating scale from poor support to high level support for treatment options. Examples of guidelines are the APS Pain Management Guidelines for sickle cell disease or arthritis.

Chapter One

2. **Standards:** Criteria established by authority or general consent as a rule for the measure of quality, value, or extent. Standards can be used to provide accreditation, and establish expectations on how pain should be managed in organizations. Examples of standards are those issued by The Joint Commission and by the Commission on Accreditation of Rehabilitation Facilities (CARF).
3. **Consensus statements and position papers:** Expression of opinion or positions—usually prepared by societies, organizations, or academies—to reflect the findings of the society. The formulation of these documents includes expert opinion, available scientific evidence, and prevailing opinion (Berry et al 2003). An example of a position statement includes the American Society of Pain Management Nurses (ASPMN) position statement on treating pain in patients with addictive disease.

The recommendations that have the strongest effect on pain management are standards, since they set out specific requirements that must be met for accreditation. Guidelines use a wide variety of resources and include a statement about the strength of evidence for recommendations for determining patient care. Position statements reflect the findings of a specific body of practitioners for a select indication. One important distinction to keep in mind is the difference between the legal use of standard of care (as determined by the practitioners in a specialty area) versus the standard using the criteria for accreditation.

Differences and similarities of standards, guidelines, and position statements

Similarities

1. Often multidisciplinary
2. Compliance is considered voluntary
3. Can be used to develop expected levels of performance
4. Can provide education for clinicians and the healthcare community at large

Differences

1. Standards are seen as authoritative, guidelines as recommendations
2. Audiences differ
3. The degree of clinical certainty can vary depending on the available scientific evidence

(Adapted from Berry et al 2003)

When to use a standard, guideline, or consensus statement is determined by the clinical needs of the patients. If the patient is in a hospital, The Joint Commission standard would be used. If a nurse wanted to know how to manage a specific type of pain, such as from sickle cell disease, a guideline would be the best option. Nurses working with patients who have an addictive disease would find the ASPMN position statement helpful.

The role of nursing in pain management

Nurses play a role in every aspect of pain management:

- Nurses are key to assessing pain
- Nurses have a holistic approach and determine what the overall effect of the pain is for that individual
- Nurses advocate for patients and expect that easing pain is a part of their professional responsibility

Chapter One

For nurses, seeing patients suffer is intolerable. Most nurses use every bit of knowledge and experience to help patients achieve an acceptable level of pain control. Perhaps more importantly, nurses continue to educate themselves about pain management and the latest techniques and medications. Using their special talents, nurses use non-pharmacologic methods for pain relief and try to empower patients to help control their pain.

Using evidence-based nursing to treat pain is important because it

- gives the nurse confidence in the intervention
- provides the most current information on medications and pain relief techniques
- can improve patient outcomes
- contributes to compliance with The Joint Commission requirements for pain management
- encourages high-quality nursing practice

(Adapted from Beyea & Slattery 2006)

Because nursing is such an integral part of successful pain management, it is critical that nurses take the time to look at the evidence for the various techniques and interventions. Using the methods that have the most research support allows the nurse to provide options for pain control that have the best chance for success. The following chapters present the latest research that can help all nurses better manage pain in their patients.

Case study: Mrs. Jones

Mrs. Jones, age 72, comes in to the emergency room complaining about ankle pain. She says she hurt her ankle when she tripped over the step to her house as she came back in from gardening. The ankle is red, swollen, and painful to the touch. She tells you the pain is sharp and rates it at 5/10 (moderate level pain) when she tries to walk and at 2–3/10 (mild pain) when she is resting. It hurts more when she tries to put her weight on it. She tried some over-the-counter medication for pain that helped only a little. She tells you she has had arthritis for many years and is almost always in pain.

Questions

1. What type of pain does Mrs. Jones have with her ankle?

Acute.

2. Do you think she has more than one type of pain?

Yes; she has chronic pain from the arthritis and acute pain from the injury.

3. Is there any indication that neuropathic pain is present? Does the patient have allodynia or hyperalgesia?

No.

4. Do you think Mrs. Jones will have elevated vital signs?

Mostly likely she will have some physiologic indication since she is having acute pain.

For the chronic arthritis pain her vital signs would not be a good indication of pain.

5. Is Mrs. Jones at risk for exacerbating her chronic pain condition if the pain continues?

Yes. If the pain continues to be undertreated or untreated, the patient is at risk of developing a more difficult to treat pain condition such as CRPS.

6. Since Mrs. Jones is elderly, do you think the pain should be treated conservatively or more aggressively?

The pain should be treated aggressively to avoid developing another chronic pain condition.

Practice exercises

1. Log on to the Cochrane Collaboration Web site at *www.cochrane.org* and search the database for pain management topics. Read some of the reviews, such as the one on low back pain. Was the information useful? Did you learn something you did not know about low back pain?
2. Search some of the organization Web sites listed below and determine what types of pain management information they provide. Which of the sites would be most useful in your practice?
 1. American Pain Society (APS): *www.ampainsoc.org*
 2. The American Academy of Pain Medicine (AAPM): *www.painmed.org*
 3. American Society of Addiction Medicine (ASAM): *www.asam.org*
 4. Pain and Policies Study Group at the University of Wisconsin Comprehensive Cancer Center: *www.painpolicy.wisc.edu*
 5. American Society for Pain Management Nursing: *www.aspmn.org*
 6. American Geriatric Society: *www.americangeriatrics.org*
 7. American Chronic Pain Association: *www.theacpa.org*
 8. American Pediatric Society/Society for Pediatric Research: *www.aps-spr.org*