Chapter 18

Pain Management, Comfort, Rest, and Sleep

The Meaning of Comfort

- One of the greatest challenges for the nurse is to provide comfort to the patient
- Promoting physical and psychological comfort is a vital part of the role of a nurse
- Comfort
  - To give strength and hope, cheer, and ease the grief or trouble of another

The Meaning of Comfort (Cont.)

- The lack of comfort can be the result of many factors and can take many forms, including
  - Anxiety
  - Constipation
  - Constricting edema
  - Depression
  - Diaphoresis
  - Diarrhea
  - Distention
  - Dry mouth
  - Dyspnea
  - Fatigue
  - Fear
  - Flatus
  - Grief
  - Headache
  - Hopelessness
## The Meaning of Comfort (Cont.)

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<thead>
<tr>
<th>Condition</th>
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## Nature of Pain

- A complex, abstract, personal experience
- An unpleasant sensation caused by noxious stimulation of the sensory nerve endings
- Serves as a warning to the body because it often occurs where there is actual or potential tissue damage
- May be a cardinal sign of inflammation
- Valuable in the diagnosis of many disorders and conditions
- Can occur when there is no tissue damage, such as the pain of grief or the pain of migraine headaches

## Nature of Pain (Cont.)

- Pain is subjective
- The interpretation and significance of the pain depend on the individual’s learned experiences and involve psychosocial and cultural factors
- Only the person who is bearing the pain is an expert about that pain
- A patient with pain does not always know how to report the pain to health professionals
- The nurse has a major role in helping the patient by conducting nursing pain assessments
Definitions of Pain

- "Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage"
- International Association for the Study of Pain (IASP) and the American Pain Society (APS)

Types of Pain

- Mild or severe
- Chronic or acute
- Intermittent or intractable
- Burning, dull, or sharp
- Precisely or poorly localized
- Referred

Types of Pain (Cont.)

- Acute and chronic pain
  - Acute pain
    - Intense and of short duration
    - Usually lasts less than 6 months
    - Generally provides a warning to the individual of actual or potential tissue damage
    - Creates an autonomic response that originates within the sympathetic nervous system
    - Floods the body with epinephrine—"fight or flight" response
Types of Pain (Cont.)

- Acute and chronic pain
  - Chronic pain
    - Pain lasting longer than 6 months
    - Can be continuous or intermittent and may be as intense as acute
    - Does not serve as a warning sign of tissue damage; may be due to damage that has already occurred
    - Patient may develop chronic low self-esteem, change in social identity, changes in role and social interaction, fatigue, sleep disturbance, and depression

Theories of Pain Transmission

- Gate control theory
  - Theory suggests that pain impulses can be regulated or even blocked by gating mechanisms located along the central nervous system
  - The proposed location of gates are in the dorsal horn of the spinal cord
  - Pain and other sensations of skin and muscle travel the same pathways through the large nerves in the spinal cord
  - If cutaneous stimuli other than pain are transmitted, the “gate” through which the pain impulse must travel is temporarily blocked by the stimuli

Theories of Pain Transmission (Cont.)

- Gate control theory
  - The brain cannot acknowledge the pain while it is interpreting the other stimuli
  - A bombardment of sensory impulses, such as those from the pressure of a back rub, the heat of a warm compress, or the cold from ice applications will close the gates to painful stimuli
  - Some patients can be distracted by removing the sensation of pain from the center of attention
  - Auditory or visual stimuli can distract patients and help make pain more tolerable
  - Gating mechanisms can also be altered by thoughts, feelings, and memories
Theories of Pain Transmission (Cont.)

- Endorphins
- The body contains a natural supply of morphine-like substances called endorphins
- Stress and pain activate endorphins
- Analgesia results when certain endorphins attach to opioid receptor sites in the brain and prevent the release of neurotransmitters, thereby inhibiting the transmission of pain impulses

Theories of Pain Transmission (Cont.)

- Endorphins
- People who have less pain than others from a similar injury have higher endorphin levels
- Pain relief measures, such as transcutaneous electric nerve stimulation, acupuncture, and placebos, are believed to cause the release of endorphins

Controlling Pain

- Requirements of the Joint Commission for pain control
  - Under the new standards of the Joint Commission (TJC), health care providers are expected to be knowledgeable about pain assessment and management, and facilities are expected to develop policies and procedures supporting the appropriate use of analgesics and other pain control therapies
Controlling Pain (Cont.)

- Requirements of the Joint Commission for pain control
- Key concepts
  - Patients have the right to appropriate assessment
  - Patients will be treated for pain or referred for treatment
  - Pain is to be assessed and regularly reassessed
  - Patients will be taught the importance of effective pain management
  - Patients will be taught that pain management is a part of treatment
  - Patients will be involved in making care decisions

Controlling Pain (Cont.)

- Making pain the fifth vital sign
  - Making pain a vital sign—along with pulse, temperature, blood pressure, and respirations—would ensure that pain is monitored on a regular basis
  - Use of a pain-rating scale allows patients to clearly articulate their pain and makes them more likely to receive proper treatment
  - Scale of 0 to 10, in which 0 is no pain and 10 is the worst pain imaginable
Controlling Pain (Cont.)

• Making pain the fifth vital sign
  ➢ Appropriate pain management will typically bring about quicker recoveries, shorter hospital stays, fewer readmissions, and improved quality of life
  ➢ Unrelieved pain has harmful physical effects as well as psychological effects

Controlling Pain (Cont.)

• Noninvasive pain relief techniques
  ➢ Transcutaneous electric nerve stimulation
    • Provides a continuous, mild electric current to the skin via electrodes to block pain impulses
  ➢ Distraction
  ➢ Relaxation
  ➢ Guided imagery
  ➢ Hypnosis
  ➢ Biofeedback

Controlling Pain (Cont.)

• Invasive approaches to pain
  ➢ Nerve blocks
  ➢ Epidural analgesics
  ➢ Neurosurgical procedures
  ➢ Acupuncture
Controlling Pain (Cont.)

- Medication for pain management
  - Nonopioids
    - Acetaminophen and nonsteroidal antiinflammatory drugs (aspirin, ibuprofen, and naproxen sodium)
    - Most widely available and frequently used analgesic group
    - Used primarily for mild to moderate pain
  - Opioids
    - Morphine, meperidine (Demerol), and codeine
    - Act on higher centers of the brain to modify perception and reaction to pain
    - Manage moderate to severe acute pain
    - Tolerance and physiologic dependence are unusual with short-term postoperative use, and psychological dependence and addiction are extremely unlikely after taking opiates for acute pain

Controlling Pain (Cont.)

- Pain mechanisms affected by each analgesic group
  - Nonopioids
    - Exert analgesic effects through the inhibition of prostaglandin production
  - Opioids
    - Relieve pain mainly by action in the CNS, binding to opioid receptor sites in the brain and spinal cord
  - Adjuvant analgesics
    - Composed of diverse classes of drugs that relieve pain via a variety of mechanisms
Controlling Pain (Cont.)

- Tolerance and addiction
  - Opioids can delay gastric emptying, slow bowel motility, and decrease peristalsis
  - Opioids may also reduce secretions from the colonic mucosa; result is slow-moving, hard stool that is difficult to pass
  - Gastrointestinal dysfunction can result in ileus, fecal impaction, and obstruction
  - A preventive approach, regular assessment, and aggressive management are required

Controlling Pain (Cont.)

- Administration routes for analgesics
  - Intravenous (IV)
    - Route of choice for opioid analgesics after major surgery
    - Bolus and continuous infusion
  - Intramuscular (IM)
    - Unreliably absorbed
    - Painful and traumatic
    - May cause fibrosis of muscle and soft tissue

Controlling Pain (Cont.)

- Administration routes for analgesics
  - Oral
    - Optimal route, especially for chronic pain
    - Convenient, flexible, and relatively steady blood levels
    - Appropriate to use as soon as the patient can tolerate oral intake
    - Mainstay of pain management for ambulatory surgical patients
Controlling Pain (Cont.)

- Administration routes for analgesics
  - Patient-controlled analgesia (PCA)
    - This drug delivery system allows patients to administer pain medications whenever needed
    - Analgesia is more effective when the patient, rather than the nurse or provider, is in control
    - Patient must be alert, oriented, and able to follow simple directions

Controlling Pain (Cont.)

- Administration routes for analgesics
  - Epidural analgesia
    - Insertion of an epidural catheter and the infusion of opiates into the epidural space
    - Medication diffuses slowly from the epidural space across the dura and arachnoid membranes into the cerebrospinal fluid
    - May be 10 times as much as a dose that would be injected directly into the cerebrospinal fluid
    - Side effects: urinary retention, postural hypotension, pruritus, nausea/vomiting, respiratory depression

Question 1

A nurse is assessing a patient in pain. What word might the nurse use when documenting the pattern of a patient’s pain?

1. Tenderness
2. Moderate
3. Phantom
4. Episode
Question 2

When caring for patients in pain, it is important for the nurse to consider that patients:
1. are able to describe the qualities of their pain.
2. will request pain medicine.
3. need to know that the nurse believes what they say about their pain.
4. will demonstrate the vital signs that are congruent with the intensity of pain.

Controlling Pain (Cont.)

- Responsibility of nurse in pain control
  - Pain management is a challenge that every nurse must face, regardless of the practice setting
  - The nurse’s role in pain management is probably more important than that of any other member of the health care team
  - The nurse should advocate for the patient by clarifying concerns, answering questions, supplying all the information the patient needs to make decisions about care, and supporting the patient’s decisions

Controlling Pain (Cont.)

- Nursing assessment of pain
- Collection of subjective data
  - Characteristics and description
    - Assess site, severity, duration, and location of pain
    - Ask the patient what relieves the pain, what causes the pain to be worse, and what does not relieve the pain
    - Identify usual coping mechanisms and the patient’s, family’s, and friends’ expectations of appropriate behavior when in pain
Controlling Pain (Cont.)

- Nursing assessment of pain
- Collection of objective data
  - Tachycardia
  - Increased rate and depth of respirations
  - Diaphoresis
  - Increase systolic or diastolic blood pressure
  - Pallor
  - Dilated pupils
  - Increased muscle tension
  - Possibly nausea or weakness

Controlling Pain (Cont.)

- Nursing assessment of pain
- Collection of objective data
  - Changes in facial expressions—frowning or gritting teeth
  - Clenched fists
  - Withdrawal
  - Crying, moaning, or tossing in bed
  - Fetal position
  - Clutching at the affected body part
  - Pacing

Controlling Pain (Cont.)

- Guidelines for individualizing pain therapy
  - Use different types of pain relief measures
  - Provide pain relief measures before pain becomes severe
  - Use measures the patient believes are effective
  - Consider the patient’s ability or willingness to participate in pain relief measures
  - Choose pain relief measures appropriate for the severity of the pain as reflected by the patient’s behavior
Guidelines for individualizing pain therapy

- If a therapy is ineffective at first, encourage the patient to try it again before abandoning it
- Keep an open mind about what may relieve pain
- Keep trying
- Protect the patient

Nursing interventions

The following measures can be performed by the nurse to assist in pain control.

- Tighten wrinkled bed linens
- Reposition drainage tubes or other objects on which patient is lying
- Place warm blankets for coldness
- Loosen constricting bandages
- Change moist dressings
- Check tape to prevent pulling on skin
- Position patient in anatomic alignment
- Check temperature of hot or cold applications, including bath water

Lift, not pull, patient up in bed; handle gently

Position patient correctly on bedpan

Avoid exposing skin or mucous membranes to irritants

Prevent urinary retention by ensuring patency of Foley catheter

Prevent constipation by encouraging appropriate fluid intake, diet, and exercise and by administering prescribed stool softeners
Sleep and Rest

- A patient at rest feels mentally relaxed, free from worry, and physically calm, free from physical or mental exertion
- Sleep is a state of rest that occurs for a sustained period
- The reduced consciousness during sleep provides time for repair and recovery of body systems for the next period of wakefulness
- Sleep restores a person’s energy and feeling of well-being

Sleep cycle

- Two phases
  - Rapid eye movement (REM)
  - Non-rapid eye movement (NREM)
- NREM is further divided into four stages through which a sleeper progresses during a typical sleeping cycle

Sleep and Rest (Cont.)

- Sleep cycle
  - NREM sleep
    - Stage 1
      - Lightest level of sleep
      - Lasts a few minutes
      - Decreased physiologic activity beginning with a gradual fall in vital signs and metabolism
      - Person easily aroused by sensory stimuli such as noise
      - If person awakes, feels as though daydreaming has occurred
      - Reduction in autonomic activities
Sleep and Rest (Cont.)

- Sleep cycle
  - NREM sleep
    - Stage 2
      - Period of sound sleep
      - Relaxation progresses
      - Arousal still easy
      - Lasts 10-20 minutes
      - Body functions still slowing

Sleep and Rest (Cont.)

- Sleep cycle
  - NREM sleep
    - Stage 3
      - Initial stages of deep sleep
      - Sleeper difficult to arouse and rarely moves
      - Muscles completely relaxed
      - Vital signs decline but remain regular
      - Lasts 15-30 minutes
      - Hormonal response includes secretion of growth hormone

Sleep and Rest (Cont.)

- Sleep cycle
  - NREM sleep
    - Stage 4
      - Deepest stage of sleep
      - Very difficult to arouse sleeper
      - If sleep loss has occurred, sleeper will spend most of the night in this stage
      - Restores and rests the body
      - Vital signs significantly lower
      - Lasts approximately 15-30 minutes
      - Possible sleepwalking and enuresis
      - Hormonal response continues
Sleep and Rest (Cont.)

• Sleep cycle
  ➢ REM sleep
    • Stage of vivid, full-color dreaming
    • First occurs approximately 90 minutes after sleep has begun; thereafter occurs at end of each NREM cycle
    • Typified by autonomic response of rapidly moving eyes, fluctuating heart and respiratory rates, and increased fluctuating blood pressure
    • Loss of skeletal muscle tone
    • Responsible for mental restoration
    • Stage in which sleeper is most difficult to arouse

Sleep and Rest (Cont.)

• Sleep cycle
• Sleep deprivation
  ➢ Deprivation involves decreases in the amount, quality, and consistency of sleep
  ➢ When sleep is interrupted or fragmented, changes in the normal sequence of sleep stages occur, and cycles cannot be completed

Sleep and Rest (Cont.)

• Sleep cycle
• Sleep deprivation
  ➢ Physiologic signs and symptoms
    • Hand tremors
    • Decreased reflexes
    • Slowed response time
    • Reduction in word memory
    • Decrease in reasoning and judgment
    • Cardiac dysrhythmias
Sleep and Rest (Cont.)

- Sleep cycle
- Sleep deprivation
  - Psychologic signs and symptoms
    - Mood swings
    - Disorientation
    - Irritability
    - Decreased motivation
    - Fatigue
    - Sleepiness
    - Hyperexcitability

Sleep and Rest (Cont.)

- Sleep cycle
- Promoting rest and sleep
  - Determine the patient’s usual rest and sleep patterns, decide whether they are sufficient, and note why the patient is not getting sufficient rest
  - A plan should be developed to provide for more rest
    - Limit interruptions during the night
    - Provide a quiet environment with a comfortable room temperature
    - Limit the number of visitors and duration of visits
    - Carry out all procedures within a given time frame

Sleep and Rest (Cont.)

- Sleep cycle
- Promoting rest and sleep
  - Preparing the patient for sleep
    - Wash the patient's back
    - Gently massage the back
    - Change the linens
    - Make certain the patient is warm enough
    - Offer a caffeine-free beverage such as milk
    - Change soiled dressings
    - Have the patient void
    - Environmental stimuli should be decreased by dimming the lights and decreasing the noise level
Nursing Diagnoses

- Pain, acute or chronic
- Activity intolerance
- Anxiety
- Body image, disturbed
- Caregiver role strain
- Coping, ineffective and/or disabled family
- Disuse syndrome, risk for
- Family processes, interrupted
- Fatigue
- Fear

Question 3

A nurse is caring for patients receiving a variety of interventions for pain management. Which pain relief method has the shortest duration of action?

1. Patient controlled analgesia
2. Intramuscular sedatives
3. Intravenous narcotics
4. Regional anesthesia

Question 4

A patient is having difficulty sleeping and may be experiencing shortened non–rapid eye movement (NREM) sleep. What patient assessment supports this conclusion?

1. Decreased pain tolerance
2. Excessive sleepiness
3. Confusion
4. Irritability
Question 5

Which concept associated with rest and sleep must the nurse consider when planning nursing care?

1. Metabolic rates increase during rest.
2. Energy demands increase with age.
3. Sleep requirements increase during stress.
4. Catabolic hormones increase during sleep.