

## **Pain, Comfort, Sleep, and Rest NCLEX Review**

Pain, which is commonly referred to as the “fifth vital sign,” is an unpleasant emotional or sensory experience initiated by potential or actual tissue damage. It is a subjective experience, and therefore its presence and characteristics are whatever the client says they are. Nurses must understand the factors that influence pain, the proper method for performing a comprehensive assessment of pain, and independent and dependent nursing interventions that can help to relieve clients’ pain.

### **A. Types**

#### 1. Nociceptive.

- Results from stimulation of pain receptors at the site of trauma, ischemia, or inflammation.
- Involves visceral pain (i.e., from internal organs) and somatic pain (i.e., from skin, connective tissue, muscles, and bones).
- Commonly described as aching, pounding, dull, or gnawing.

#### 2. Neuropathic.

- Results from repeated transmission of pain signals from a site of injury that affected nerve cells.
- Associated with chronic problems, such as phantom limb sensation, brain attack, and diabetes.
- Commonly described as burning, numbness, or “pins and needles.”

### **B. Pain threshold**

1. Pain threshold is the smallest stimulus that is needed to establish a perception of pain within a person.

2. Varies from person to person but usually does not vary within a person.

### **C. Pain tolerance**

1. Pain tolerance is the maximal amount of pain a person is willing to endure before seeking relief.
2. Varies from person to person and within a person, depending on the situation.

### **D. Factors that influence pain perception**

#### 1. Emotions.

- Influenced by previous pain experiences.
- Common emotions that may increase pain perception include anxiety, fear, anger, depression, helplessness, and hopelessness.

2. Fatigue: Decreases a person's coping abilities, which increases pain intensity.

3. Ethnic and cultural values.

- Behavior and beliefs related to pain are commonly learned through interaction with members of the family and social groups; however, people are individuals and may not reflect the values of their ethnic or cultural group.
- May influence communication of pain (e.g., demonstrative, or silent endurance), extent of family involvement, and intensity of pain willing to be tolerated before seeking relief.

4. Extent of physical and emotional support.

- Supportive family, friends, and health team members may help to decrease perception of and increase tolerance to pain.
- Lack of empathy may increase intensity of pain.

5. Environment.

- A strange environment, such as a hospital or long-term care facility, has noises, odors, lights, and activity that can increase anxiety, which may increase pain intensity.
- A familiar environment, such as one's home and bed, may decrease the intensity of pain.

6. Spirituality or religious beliefs.

- Pain and suffering may be perceived as penance for one's wrongdoings or an avenue to salvation.
- Prayers and religious rituals may offer comfort and hope.

7. Multiplicity of stressors: Intensity of pain increases as the number of issues impacting on an individual's ability to adapt increase.

8. Developmental level: Age and experiential background influence pain perception and physical and behavioral responses to pain.

## **E. Nursing care for clients who are in pain**

1. Accept the client's perception of pain because it is a subjective symptom that is what the client says it is; validate the presence of pain.

2. Be nonjudgmental; do not impose own attitudes, beliefs, or expectations onto a client.

3. Assess characteristics of pain.

- Onset.
  - Ask, "When did the pain start?"
  - Abrupt or gradual onset.
- Origin and location.
  - Ask, "Where do you feel the pain?"
  - Identify the origin and location of pain

- Use anatomical landmarks.

## Referred Pain Sites:

- Quality.
  - Ask, “What does the pain feel like?” and “Is this pain different from the pain that you have been experiencing all along?”
- - Possible descriptions include burning, stabbing, throbbing, crushing, pressure, sharp, dull, and achy.
  - Allow the client to describe the pain without offering descriptive words.
  - Is helpful in diagnosing illness because there are commonalities in perceptions of pain, such as with myocardial infarction (crushing); intestinal infections (cramping); urinary tract infection (burning); and arthritis (aching).
- Intensity.
  - Ask, “How severe is the pain?”
  - Use a quantitative pain scale to provide objectivity and consistency in assessments.
    - For individuals aged 12 years and older, use a numerical pain scale.
    - For children of different ages, use the Wong-Baker FACES Pain Scale.
    - For infants and children from birth to 3 years, cognitively impaired clients, and those who are unable to use other scales, use the FLACC Pain Scale
- Duration.
  - Ask “How long does the pain last?”
  - Seconds, minutes, hours, or days.
  - Identify characteristic associated with acute versus chronic pain.
- Pattern.
  - Ask, “Is there a pattern to the pain?”
  - Continuous or intermittent, frequency, predictable occurrences, and time of day it occurs.
- Precipitating factors.
  - Ask, “What initiates or increases the pain?”
  - Can be helpful in diagnosing the cause and/or location of pain.
    - Bending, lifting, and coughing: Vertebral pain.
    - Lying flat: Heartburn.
    - Valsalva maneuver: Hemorrhoids.
    - Deep breaths: Pancreatitis, fractured ribs.
- Relieving factors.
  - Ask, “What helps to diminish or eliminate the pain?”
  - Examples may include immobility, repositioning, eating or eliminating specific foods,

analgesics, application of heat or cold, and repetitive behaviors, such as rocking, rubbing, and pacing.

- Behavioral effects.
  - Identify what behavioral indicators of pain are being exhibited.
  - Vocalizations (e.g., moaning, grunting, and crying); body movements (e.g., restlessness, muscle tension, wringing the hands, guarding, and holding or rubbing a part of the body); social interactions (e.g., withdrawal, avoiding conversation, and reduced attention span); facial expressions (e.g., wrinkled forehead, tightly closed eyes, grimacing, clenched teeth, and open mouth associated with crying).

4. Provide emotional support and answer questions the client has to relieve anxiety and fears.

5. Use distraction techniques, such as soft music, television, conversation, and play appropriate to the client's developmental level.

6. Alter irritating stimuli, such as by limiting noise in the environment, closing curtains or doors, dimming environmental lights, and adjusting room temperature.

7. Teach the client to use relaxation techniques, such as diaphragmatic breathing, guided imagery, and progressive muscle relaxation.

8. Provide cutaneous stimulation, such as back rubs, warm or cold applications, and transcutaneous electrical nerve stimulation (TENS), that uses the gate-control theory of pain to limit pain; except for a back rub, these interventions require a prescription.

## **F. Nursing care for clients receiving medications for pain**

1. Ensure that the five rights of medication administration are met.

- Right drug: The World Health Organization (WHO) three-step analgesic ladder. Although the ladder focuses on pain associated with cancer, it can be applied to pain from any cause.
  - Nonopioids: acetaminophen (Tylenol); NSAIDs, such as aspirin and ibuprofen (Advil, Motrin, Aleve).
  - Opioids: codeine, hydrocodone (Hycodan), oxycodone (OxyContin), hydromorphone (Dilaudid), and fentanyl (Duragesic).
  - Adjuvant analgesics.
    - Medications given to manage mild pain or concurrently with nonopioid or opioid analgesics to limit escalating doses of the nonopioid or opioid medication.
    - Examples include anticonvulsants, antidepressants, psychostimulants, muscle relaxants, neuroleptics, and corticosteroids.
- Right dose.
  - Computed by weight for infants and children.
  - Lower doses given to older adults due to decreased metabolism and elimination.
  - Higher doses may be given for intractable pain.
- Right route: Although analgesics can be given by any route, the intravenous route provides

the most rapid relief from pain, and the transdermal route provides the most prolonged relief from pain.

- Right time.
  - Administer at time prescribed to maintain a continuous therapeutic blood level.
  - Administer prn medications before pain becomes too intense because doing so helps them to be more effective than when they are administered when the pain is at the high end of a pain scale.

2. Maintain patient-controlled analgesia (PCA) to eliminate highs and lows in the intensity of pain and manage pain at a consistent level that is tolerable.

- Teach the client that the pump will deliver a basic dose (basal dose) of analgesic periodically and that compressing the trigger will deliver an extra dose as needed up to a certain point (lockout). A lockout prevents the delivery of excessive doses when the trigger is pushed prematurely.
- Ensure that the flow rate is set at the prescribed rate.
- Monitor the catheter insertion site, such as the peripheral vein or epidural space (Fig. 15.6), for integrity of the line; ensure that the catheter and tubing are not compressed or dislodged.
- Monitor the number of times the client uses the trigger in an attempt to relieve pain; excessive attempts to administer a bolus dose may occur when the basal rate is inadequate.

3. Correct misconceptions regarding tolerance as well as physical and psychological dependence.

4. Consult with the primary health-care provider regarding measures to prevent constipation, such as adequate dietary fiber intake, intake of 2 to 3 L of fluid daily, out-of-bed activities, and a stool softener if the client is receiving an opioid.

5. Evaluate the client's response to interventions, such as the extent of pain relief; decrease in vital signs, particularly respirations; and presence of constipation if an opioid is given.

6. Notify the primary health-care provider if pain is not relieved or the respiratory rate is 10 or fewer breaths/minute; modify the plan as prescribed.

## II. Concepts Related to Comfort

Comfort exists when an individual experiences a feeling of well-being and a sense of being strengthened. It involves being at ease, content, and rising above discomforts when they cannot be lessened. Comfort is more complex than just achieving a state of relief from discomfort or pain and requires a comprehensive plan of care to promote comfort. Although comfort measures are defined by and are unique to an individual, some common nursing interventions provide comfort related to physical, environment, sociocultural, and psychospiritual contexts. Clients expect nurses to help them achieve comfort and nurses should meet these expectations.

### A. Dimensions of comfort—Kolcaba

1. Relief: Discomfort or pain is lessened.
2. Ease: Absence of discomforts and feeling content.
3. Transcendence: Rising above discomforts when they cannot be lessened.

## **B. Contexts in which comfort needs occur and related nursing care**

### 1. Physical.

- Relates to homeostasis, bodily sensations, and basic physiological needs.
- Nursing care.
  - Administer prescribed medications.
  - Assist the client to maintain regular bowel functioning.
  - Assist the client to maintain regular urinary elimination.
  - Monitor and maintain fluid, electrolyte, and acid-base balance.
  - Ensure adequate oxygenation.
  - Provide hygiene, such as bathing, grooming, and oral care.
  - Ensure clean, smooth, dry linens.
  - Turn and position the client.
  - Maintain tissue integrity.
  - Manage physical discomforts such as pain, nausea, vomiting, and dyspnea.
  - Provide a back rub.

### 2. Environmental.

- Relates to that which is outside the body, such as surroundings, location, and ambiance.
- Nursing care.
  - Limit noxious noise in the environment.
  - Adjust room temperature to the client's preference.
  - Modify light in room to the client's preference.
  - Arrange furniture so that the client has a window view if desired and possible.
  - Transport the client to other surroundings if desired and able, such as to a lounge on the unit, coffee shop, or outside patio.
  - Provide environmental stimuli desired by the client, such as music.

### 3. Sociocultural.

- Relates to family and societal interpersonal relationships, family traditions, rituals, and cultural customs.
- Nursing care.
  - Be nonjudgmental and provide an attitude of caring.
  - Ensure continuity of care, such as sharing a written plan of care, assigning consistent caregivers, and performing thorough change-of-shift reports.
  - Provide the client with information and teaching; include family members when appropriate.
  - Enhance support of family and friends by encouraging staying with the client, involving family in direct care if desired by the client, and ensuring liberal visiting hours if desired and beneficial to the client.
  - Support cultural customs, such as involving the person who is viewed as the decision maker in the family, supporting the ability to wear culturally appropriate

clothing or head coverings, and assigning a specific gender nurse, depending on the client's culture.

#### 4. Psychospiritual.

- Relates to personal awareness of self, self-esteem, personal meanings in one's life, sexuality, and a relationship to a higher being or force.
  - View each client as a unique individual.
  - Use communication techniques, especially active listening.
  - Support self-esteem, such as by treating the client with respect, providing for privacy, ensuring confidentiality, and meeting client needs as they arise.
  - Promote independence, such as involving the client in planning and providing choices.
  - Increase relaxation to relieve anxiety, such as by encouraging activities, such as imagery, progressive muscle relaxation, and breathing techniques.
  - Provide emotional support and instill hope.
  - Accommodate the client's desired religious practices, such as by contacting a spiritual advisor and arranging for religious practices such as distribution of Holy Communion or religious sacraments.

### III. Concepts Related to Rest and Sleep

Rest is a state when the body's physical and emotional energy expenditure is limited. Sleep is a cyclical physiological process characterized by decreased perception and motor activity.

Rest and sleep are universal needs of all humans and are essential for physiological and psychological health. The amount of rest and sleep required by healthy individuals may vary, but all individuals with health problems usually require an increased need for rest and sleep (restorative sleep). Nurses must understand the basic concepts related to rest and sleep, particularly sleep cycles, to provide appropriate nursing care to clients.

#### A. Rest

1. Is a state when the body's physical and emotional energy expenditure is limited.
2. While resting, the individual is calm, relaxed, alert, and at ease physically and emotionally.
3. Promotes relaxation, conserves energy, and reduces physical and emotional stress; after an episode, the individual should feel refreshed.
4. May involve activities viewed by the individual as relaxing, such as praying, listening to music, watching television, reading, and engaging in needlework.
5. Although beneficial, rest is not as restorative as sleep because it does not filter external stimuli by altering the level of consciousness.

#### B. Sleep

1. Is a cyclical physiological process characterized by decreased perception and motor activity.
2. While sleeping, the individual exhibits minimal physical activity; has varied levels of

consciousness; lacks awareness of the environment but responds selectively to external stimuli; and has varied physiological responses, depending on the stage of sleep.

3. Conserves energy, prevents fatigue, allows physiological processes (e.g., such as metabolism, vital signs) to slow down, and promotes physiological functioning, such as by boosting the immune system, stimulating protein synthesis for tissue repair, and increasing red blood cell production; after an episode of sleep, an individual should feel refreshed, rejuvenated, and satisfied with the amount of sleep achieved.
4. Promotes emotional functioning, such as by restoring balance among parts of the nervous system and reducing brain activity in areas that control emotions, decision making, and interpersonal communication.
5. Amount needed varies by age and other individual factors, such as lifestyle, environment, and illness.
  1. Newborns: Need 16 to 20 hours a day.
  2. Adults: May need only 7 to 8 hours a day.
6. Sleep states/cycles.
  1. Sleep is preceded by a 10- to 30-minute period when an individual begins to feel sleepy.
  2. Sleep involves two stages: Non-rapid eye movement (NREM), which has four phases, and rapid eye movement (REM).
  3. Once asleep, an individual usually has four or five complete sleep cycles per night, lasting 90 to 100 minutes each; with successive cycles, NREM stage 1 is excluded, NREM stages 3 and 4 shorten, and the REM stage lengthens.
  4. Amount of time in each cycle varies over the life span; infants and children spend more time in stages 3 and 4 than do older adults.

## C. Nursing care to promote effective rest and sleep

### 1. Teach client to engage in restful activities

- Encourage client to identify preferred restful activities.
- Encourage client to set a routine for restful activities (e.g., after work, after dinner).
- Teach client that engaging in restful activities releases “feel good” hormones (e.g., serotonin, prolactin, and oxytocin) and lowers stress hormones (e.g., cortisol).
- Provide a back rub to reduce muscle tension, heart rate, and blood pressure; human touch also releases serotonin.

### 2. Teach clients that sleep hygiene involves activities that control all behavioral and environmental factors that precede sleep or interfere with sleep.

- Identify personal activity and sleep patterns.
- Engage participation in activity and exercise during the day to reduce stress and deplete energy.
- Avoid daytime naps unless they are less than 30-minute naps (power naps) to prevent insomnia at night.
- Avoid physical exertion for 1 to 2 hours before bedtime to limit stimulation before attempting sleep.
- Avoid heavy and spicy meals for 2 to 3 hours before bedtime to reduce the risk of

gastrointestinal (GI) distress and esophageal reflux.

- Avoid nicotine and caffeine-containing foods and beverages, such as coffee, tea, colas, and chocolate, for 4 hours before bedtime to limit the stimulating effects of these products (half-life of nicotine is 1 to 2 hours).
- Avoid alcohol for 4 hours before bedtime to limit the need to void during the night because of alcohol's diuretic effect and to limit early awakening.
- Consume products containing sleep-promoting constituents: Small snack of carbohydrates and protein, such as cheese and crackers; carbohydrates limit the sensation of hunger while protein reduces the sugar boost of the carbohydrate.
- Establish a daily bedtime routine, such as reading, taking a warm bath, listening to music, performing specific hygiene practices, and choosing a consistent time to go to bed and arise.
- Control the environment, such as by turning off lights, limiting environmental noise, setting a preferred environmental temperature, and using "white noise," such as sounds of raindrops or wind, to limit stimuli that may delay or interrupt sleep.
- Perform relaxation techniques, such as imagery, diaphragmatic breathing, and progressive muscle relaxation, to reduce muscle tension and promote relaxation.
- Get out of bed if not asleep within 30 minutes and return to bed when sleepy to establish an expectation that sleep should follow when in bed; use the bed only for sleeping and sexual activity.
- Avoid consistent use of medication for sleep to prevent physical or emotional dependence.

## IV. Sleep Deprivation

Sleep deprivation refers to a situation in which a person experiences extended periods of time without sustained, natural, recurring states of unconsciousness. It results from deprivation of REM sleep, NREM sleep, or both. Nurses should understand the problems associated with sleep deprivation, the clinical manifestations of sleep deprivation, and the nursing care that can promote sleep.

### A. Factors that contribute to sleep deprivation

1. Conditions that interfere with the ability to go to sleep, remain asleep, or return to sleep, such as insomnia, restless leg syndrome, sleep apnea, and sensory overload.
2. Illnesses that interfere with sleeping, such as fever, pain, and dyspnea.
3. Situations impacting the sleep-wake cycle, such as rapid change in time zones (jet lag), rotating shift work, multiple interruptions by health-care providers during sleep, and environmental lights and noise that interfere with sleeping (e.g., intensive care unit [ICU] psychosis).

### B. Assessment of clients for physiological manifestations of sleep deprivation

1. Drooping eyelids (ptosis).
2. Slowed response time.
3. Depressed reflexes.
4. Decreased fine motor skills.
5. Slowed reasoning and judgment.

6. Decreased auditory and visual alertness.
7. Cardiac dysrhythmias.

### **C. Assessment of clients for psychological manifestations of sleep deprivation 1**

1. Excessive sleepiness.
2. Irritability, agitation, and hyperactivity.
3. Decreased motivation, apathy, and withdrawal.
4. Increased sensitivity to pain.
5. Confusion and disorientation.

### **D. Nursing care for clients experiencing sleep deprivation**

## **V. Sleep Disorders and Related Nursing Care**

The most common disorders that impact sleep are classified as dyssomnias or parasomnias. Dyssomnias are sleep disorders related to abnormal physiological mechanisms that regulate sleep and wakefulness. Parasomnias are sleep disorders characterized by patterns of abnormal behaviors that intrude on sleep or occur at the threshold between waking and sleeping. There are commonalities of nursing care to promote sleep in clients with these sleep disorders. However, each sleep disorder has unique characteristics that require specific nursing interventions. Nurses should be knowledgeable about these sleep disorders and their specific treatments as well as have a comprehensive repertoire of strategies to assist clients to improve their ability to achieve restorative sleep.

### **A. Commonalities of nursing care for clients experiencing sleep disorders**

1. Assess clients at risk for sleep disorders.
2. Validate the client's and significant other's frustration and anxiety regarding the problem and physical and emotional consequences.
3. Have the client keep a sleep/activity/dietary diary.
4. Teach sleep hygiene practices.
5. Encourage specific interventions appropriate for the disorder.
6. Document assessments, nursing interventions, and client responses.

### **B. Dyssomnias and specific nursing care**

#### 1. Insomnia.

- Insomnia is the inability to fall asleep, remain asleep, or go back to sleep, resulting in an insufficient quantity or quality of sleep.
- May be transient (lasting less than a month) or chronic (lasting longer than a month).
- Characterized by awakening without feeling refreshed and excessive daytime sleepiness.
- Specific nursing care.
  - Assess for risk factors, including female gender, advanced age, anxiety, substance misuse, caffeine intake, inadequate sleep hygiene, and use of medications, such as amphetamines, bronchodilators, decongestants, and beta-adrenergic blockers.

- Support the use of short-term prescribed sedatives-hypnotics to help prevent chronic insomnia.

## 2. Restless leg syndrome.

- Restless leg syndrome is characterized by uncontrollable movements of the legs when resting or just before onset of sleep.
- Caused by a central nervous system (CNS) disorder.
- Characterized by unpleasant sensations in the legs, such as tingling, itching, creeping, and crawling.
- Specific nursing care.
  - Assess for risk factors, including a family member with the disorder, advanced age, low levels of iron, and use of certain antidepressants, such as sertraline (Zoloft), a selective serotonin reuptake inhibitor (SSRI).
  - Teach the client to avoid stimulants, such as caffeine.
  - Teach self-care measures, such as walking, massage, stretching, and application of heat or cold to the legs.
  - Support the use of prescribed neuroleptic agents, vibration, or acupuncture; clonazepam (Klonopin) may be prescribed.

## 3. Sleep apnea.

- Sleep apnea is periodic interruption of breathing when sleeping.
- Lasts from 10 seconds to 2 minutes and may occur 50 to 600 times a night.
- Types.
  - Obstructive sleep apnea (OSA).
    - Caused by airway obstruction due to tongue, tonsils, adenoids, deviated septum, or collapse of soft palate.
    - Characterized by struggling to breathe with snoring, gasping, and snorting sounds; client usually is not aware of awakening.
    - Treatment directed at cause.
  - Central sleep apnea (CSA).
    - Caused by dysfunction of central respiratory control.
    - Attempts to breathe cease; client usually is aware of awakening.
    - Presently has no effective treatment.
- Characterized by excessive daytime sleepiness, fatigue, morning headache, irritability, and difficulty concentrating.
- Causes physiological problems if untreated, such as dysrhythmias, hypertension, heart failure, brain attack, and impotence.
- Causes emotional problems if untreated, such as mood swings, personality changes, and depression.
- Specific nursing care.
  - Assess for risk factors, including male gender, age older than 40, and overweight; enlarged tonsils; deviated septum; and associated physical and emotional conditions.
  - Obtain the sleeping partner's report about the client's behavior when sleeping, such as snoring, snorting, and gasps, alternating with periods of silence and flailing of the arms and legs during apneic episodes.
  - Encourage diagnostic testing while sleeping, such as electrocardiography, arterial

oxygen saturation, electroencephalography, and oral and nasal air flow.

- Specific nursing care for clients with OSA.
  - Encourage consistent nighttime use of continuous positive airway pressure (CPAP) to maintain an open airway if prescribed.
  - Encourage weight loss and avoidance of alcohol and smoking, if applicable.
  - Provide perioperative care for procedures, such as tonsillectomy, repair of deviated septum, or laser removal of excess tissue of the platelet and pharynx.

#### 4. Narcolepsy.

- Narcolepsy is a sudden uncontrollable urge to sleep during the day, lasting seconds to 30 minutes.
- Thought to be caused by a genetic defect of the CNS in which REM sleep cannot be controlled.
- Characterized by slurred speech, abrupt bilateral loss of muscle tone (cataplexy), and abruptly falling asleep (sleep attack, sleep episode).
- Associated with client reports of sleeping well at night; weakness of the knees or inability to move during onset of sleep attack or when waking up (sleep paralysis); vivid, bizarre dreams while falling asleep that last 1 to 15 minutes; and awakening from sleep episodes refreshed.
- Specific nursing care.
  - Assess for risk factors, including onset between 15 and 30 years of age and a family member with the disorder.
  - Determine whether the client sleeps well at night to distinguish between narcolepsy and sleep deprivation; sleep attacks caused by sleep deprivation resolve with sufficient sleep.
  - Teach avoidance of shift work, which usually is not tolerated, and passive activities, such as watching television or reading that precipitate sleep.
  - Encourage several naps a day at consistent times to decrease sleepiness.
  - Recommend avoidance of activities that may result in injury during a sleep attack, such as driving a car and using machinery.
  - Encourage intake of prescribed medications, including CNS stimulants, such as amphetamines, methylphenidate (Ritalin), or modafinil (Provigil), and antidepressants, such as monoamine inhibitors and serotonergic.

### C. Parasomnias and specific nursing care

#### 1. Bruxism.

- Bruxism is repetitive clenching and grinding of teeth; episode lasts 4 to 5 seconds.
- Occurs usually during stage 2 NREM sleep.
- May erode tooth enamel, loosen teeth, and cause jaw pain.
- May become a habit after the initial cause resolves.
- Specific nursing care.
  - Assess for risk factors, including increased stress, abnormal bite, and GI disturbances.
  - Encourage use of relaxation techniques as part of the bedtime routine.
  - Encourage the use of a prescribed mouth guard over the teeth when sleeping.

## 2. Somnambulism (sleepwalking).

- Somnambulism is episodic walking around while asleep with minimal awareness of surroundings; episode lasts 3 minutes or longer.
- Occurs during stage 3 or 4 NREM sleep, 1 to 2 hours after falling asleep.
- Clients may have glassy eyes, look through other people as if they do not exist, or perform activities, such as making coffee or dusting furniture.
- Clients report no awareness or memory of the episode.
- Specific nursing care.
  - Assess for risk factors: More common in children but can occur in adults.
  - Encourage the use of safety devices, such as bed and house alarms that alert others when the person exits the bed or leaves the house.

## 3. Nightmare disorder.

- Nightmare disorder is characterized by repeated episodes of frightening dreams that result in awakening; clients commonly report that the dreams jeopardize their personal safety.
- Occurs during REM sleep and may occur every 90 to 110 minutes.
- Characterized by increased vital signs, diaphoresis, and difficulty falling back to sleep for fear of having another nightmare.
- Specific nursing care.
  - Assess for risk factors.
    - Occurs most commonly in children 3 to 5 years of age but can occur in older children and adults.
    - Is associated with stress; traumatic events; anxiety; guilt; insecurity; depression; fever; medication use, such as stimulants, antidepressants, and antihypertensives; and emotional problems, such as post-traumatic stress disorder, borderline personality, and dissociative disorder.
  - Encourage the client to engage in activities to limit stress, such as daily exercise, relaxation techniques, yoga, and self-hypnosis.
  - Support taking or discontinuing medications as prescribed.
  - Teach significant others to provide emotional support.

## 4. Sleep terrors (night terrors).

- Sleep terrors are repeated episodes of abrupt awakening along with a panicky scream.
- Occurs during stage 4 NREM sleep and lasts from 10 to 30 minutes.
- Characterized by crying or screaming in fear, thrashing about, and resisting attempts at consolation; appearing awake but not being awake; being difficult to awaken; and reporting no awareness or memory of the episode.
- Specific nursing care.
  - Assess for risk factors: Most common in children.
  - Teach significant others that attempts to hold or comfort may be resisted.
  - Remain physically close to provide emotional support and maintain safety.

## 5. Nocturnal enuresis (bed wetting).

- Nocturnal enuresis is repeated episodes of involuntary urination when sleeping after toilet training is well established.

- Occurs when arousing from stages 3 and 4 NREM sleep, 1 to 2 hours after falling asleep.
- Client may or may not awaken during the episode.
- Has multifactorial causes, including hormonal, bladder, and sleep problems; genetics; and medical conditions, such as small bladder, diabetes mellitus, and urinary tract infection.
- May limit social activities, such as sleepovers and camp; precipitate social exclusion by peers; or cause anger and frustration in significant others.
- Specific nursing care.
  - Assess for clients at risk: More common in males than in females; clients with a family member who has or had the disorder; and clients with developmental delays or medical problems associated with the disorder.
  - Teach the client to reduce the volume of urine in the bladder at night by limiting fluid intake after 6 p.m. and voiding before going to bed and to decrease bladder irritability by eliminating caffeine in the diet.
  - Support the use of behavior modification strategies.
    - Rewards for waking up dry.
    - Positive imagery, such as thinking about waking up dry.
    - Use of a bedwetting alarm if prescribed; an alarm is activated when the sleeper begins to wet the bed which awakens the sleeper who should attempt to stop the urinary stream and use a toilet to void; its use is controversial.
  - Teach parents to be nonjudgmental when episodes occur and have a nonchalant demeanor when changing soiled linens and bedclothes.
  - Teach the client about the disorder and provide emotional support to increase self-esteem and limit embarrassment, shame, and guilt.

## **VI. Medications That Promote Rest and Sleep and Related Nursing Care**

Many independent and dependent nursing interventions may be inadequate to promote rest or achieve restorative sleep. Medications, such as anxiolytics, sedatives, and hypnotics, may be prescribed. Clients may self-prescribe over the counter medications, such as antihistamines, dietary supplements, and herbs, to promote sleep. Nurses should know the mechanisms of action, therapeutic and nontherapeutic effects, and nursing care related to the common medications that are specifically designed to address client needs in relation to rest, and sleep.

### **A. Anxiolytics, sedatives, and hypnotics: Reduce anxiety and promote rest and sleep**

### **B. Over the counter (OTC) products used to promote sleep**

#### 1. Types of products.

- Antihistamines: diphenhydramine (Benadryl).
- Dietary supplements: melatonin.
- Herbs: kava, valerian, chamomile, passion flower, and lemon balm.

#### 2. Nursing care.

- Advise the client that self-medicating with OTC products can be dangerous.
  - Products may potentiate, diminish, or interact with other medications being taken.

- Products may be habit forming, promoting physical or emotional dependence.
- Products such as dietary supplements and herbs are not regulated by the U.S. Food and Drug Administration.
- Encourage the client to discuss the desire to use these products with the primary health-care provider.

## **VII. Strategies to Decrease Pain and Promote Comfort, Rest, and Sleep**

Specific interventions can be used to decrease mild to moderate pain and promote comfort, rest, and sleep by closing the gate for painful stimuli and using emotions and the conscious mind to interfere with the interpretation and perception of pain. The gate-control theory of pain is involved with relaxation techniques that stimulate cutaneous tissues (e.g., back rub). Positive thoughts and emotions (e.g., guided imagery) stimulate the release of endorphins that also are thought to have an effect on closing the gate to painful stimuli. In addition, techniques that require the mind to focus on issues other than the pain (e.g., distraction, progressive muscle relaxation, and breathing techniques) help to interfere with the interpretation and perception of pain because the brain can process only a certain amount of information at one time. These techniques are included within the role of the nurse and do not require a primary health-care provider's prescription.

### **A. Guided imagery**

1. Use of auditory suggestions, from a nurse or from an internal dialog, that have the client picture in the mind places or situations that stimulate emotions that promote relaxation.

2. Nursing care.

- Have the client assume a position of comfort with the eyes closed; maintain a quiet environment.
- Speak in a soft, slow manner.
- Make suggestions that use a variety of senses in relation to the image selected by the client, such as, "Hear the waves lapping on the shore," "Smell the roses in the garden," "Savor the taste of the food you are eating," and "Feel the wind blowing through your hair."

### **B. Distraction**

1. Focusing on something else other than the pain.

2. Nursing care.

- Carry on a conversation with the client.
- Suggest the use of distraction techniques.
  - Visual: Reading, watching television.
  - Tactile: Taking a warm bath, petting an animal, cuddling with a significant other.
  - Auditory: Listening to music or books on tape, an infant listening to a heartbeat or soothing whispering from a parent.
  - Intellectual: Completing crossword or Sudoku puzzles, playing card games alone,

such as solitaire, or playing more complex games with another person.

## C. Breathing techniques

1. Inhalation and exhalation of air to maximize lung expansion or require the mind to focus on the pattern of breathing rather than discomfort or pain.

2. May be as simple as diaphragmatic breathing, which utilizes the diaphragm, rather than thoracic muscles, to achieve maximal expansion of the lungs on inhalation and promote muscle relaxation.

3. May involve complex patterns that alternate depths and rates of breaths to distract a person from an uncomfortable or painful experience; can be used by a woman during labor and birth.

4. Nursing care.

- Have the client assume a position of comfort with the hands positioned over the upper abdomen; maintain a quiet environment.
- Instruction for the client.
  - Inhale slowly through the nose while counting to the number 4; the client should first feel the abdomen expand and then the chest.
  - Hold the breath at the height of inhalation while counting to the number 4.
  - Exhale gently and smoothly while counting to the number 8; the client should feel the abdomen move toward the middle of the body.
  - Repeat steps 1 through 4.

## D. Progressive muscle relaxation

1. Tensing and relaxing muscles in the body in a sequential pattern to reduce muscle tension and engage the mind in an activity.

2. Nursing care.

- Have the client assume a position of comfort with the eyes closed; maintain a quiet environment.
- Encourage the client to engage in diaphragmatic breathing throughout the procedure.
- Begin the sequence of tensing and relaxing muscles with the facial muscles and progress toward the toes.
- Instruct the client to breathe in through the nose while tensing a group of muscles; hold the tension for 15 seconds and then relax the muscles while breathing out.
- Instruct the client to rest for several seconds and then progress to another group of muscles.

## E. Back rub

1. Therapeutic effects.

- Relieves muscle tension.
- Promotes physical and emotional relaxation.
- Facilitates induction of sleep.

- Limits transmission of pain impulses via the gate-control theory of pain.
- Increases circulation to the skin (friction causes heat that promotes dilation of capillaries).

## 2. Contraindications.

- Personal preference not to receive a back rub; always ask a client's desire for and permission to perform a back rub.
- Rib fractures and vertebral disorders.
- Impaired tissue integrity, such as burns, pressure ulcers, and open wounds.
- Within 48 hours of an acute neurological (e.g., brain attack) or cardiac (e.g., myocardial infarction, cardiac surgery) problem; client may not tolerate the stimulation of a back rub.

## 3. Types of back rub strokes.

- Effleurage: Long, smooth strokes with gentle pressure that slide over the skin from the small of the back to the shoulders; promotes relaxation and circulation to the skin.
- Friction: Continuous, small, circular movements on either side of the vertebrae from the shoulders to the small of the back and then from the small of the back to the shoulders; promotes circulation to the skin.
- Pétrissage: Kneading of the skin and muscles; promotes circulation to the skin and reduces muscle stiffness and spasms.
- Tapotement: Gentle, rhythmic tapping over tense muscles; reduces muscle tension.
- Feathering: Long, soft, fingertip strokes from the shoulders to the small of the back; soothing stroke that signals the end of the back rub.

## 4. Nursing care.

- Identify whether the client has any contraindications to a back rub to prevent injury.
- Assess the client's desire for a back rub.
- Wash hands to limit the transfer of microorganisms.
- Raise the bed to a working height and lower the side rails to prevent reaching and straining of own back and legs.
- Close the door, pull the curtain, and drape the client, exposing just the back, to provide privacy and emotional comfort.
- Place the client in a side-lying or prone position.
- Warm the lotion to promote comfort and dilation of the capillaries.
- Place the lotion on own hands first to prevent startling the client.
- Massage using a variety of strokes for 3 to 5 minutes ending with feathering; variety provides several therapeutic effects.
- Reposition the client and cover with bed linen.
- Document the back rub and the client's response in the client's clinical record.

## F. Aromatherapy

1. Use of natural essential oils extracted from parts of plants to enhance mood, cognition, psychological or physical well-being.
2. Effective via two mechanisms: Olfactory system influences the limbic system of the brain and the direct pharmacological effects of essential oils.
3. These oils are used through topical application, massage, inhalation, or water immersion to

promote a desired response; specific oils precipitate specific human responses.

4. Use is controversial. Risk of adverse effects versus benefit makes their use uncertain; some oils are highly toxic particularly if taken internally; can be hazardous to pregnant and lactating women.

## **G. Acupressure**

1. Application of physical pressure to acupressure points along invisible lines of energy flow (meridian system) in the body with the aim of cleaning blockages to restore health and balance in the body.
2. Has its roots in traditional Chinese medicine; vital energy flows along at least 14 meridians that connect organs with other parts of the body.
3. Thought to enhance or unblock energy flow thereby improving well-being; belief that blocked energy along a meridian can cause ailments that can precipitate disease.
4. Thought to decrease human responses such as nausea, vomiting, lower back pain, and tension headaches to name a few.
5. Should not be used instead of western medical care. Should be avoided: when pregnant because some pressure points stimulate uterine contraction; over areas with burns, infection, inflammation, contagious disease of the skin, and varicose veins, when client has active cancer or high or low blood pressure.