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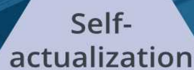

Esteem

Social belonging

Safety needs

Physiological needs

BASIC HUMAN NEEDS

UU No 28 tahun 2014 tentang Hak Cipta

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Hak Cipta sebagaimana dimaksud dalam Pasal 3 huruf a merupakan hak eksklusif yang terdiri atas hak moral dan hak ekonomi.

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Cerdas, Bahagia, Mulia, Lintas Generasi.

BASIC HUMAN NEEDS

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PREFACE

Humans are biopsychosocial creatures where they have the need to fulfill his life. Human beings have certain basic needs. We must have food, water, air, and shelter to survive. If any one of these basic needs is not met, then humans cannot survive. This topic will study aspects of basic human needs including the theory of basic human needs according to Maslow. Human basic need will discuss physiological need and psychosocial need. Physiological need such as: the need for oxygenation, the need for nutrition, the need for electrolyte fluids and acid-base balance, the need for urinary and fecal elimination, the need for activity and exercise, the need for sleep, the need for comfort and safety, the need for hygiene, the need for sexuality. Psychosocial needs such as spirituality need, loss grieving, and death. In this study, students will learn the concept of human basic need, identify the problem related to human basic need, and how to give nursing care for patients who have the problem of basic needs. This topic relates to previous studies about anatomy and physiology, psychology, so students have to review that topic to facilitate their study. Competencies after studying this book, students are expected to have an overview of basic human needs and efforts to provide nursing care so that students are ready to practice in a real clinical setting.

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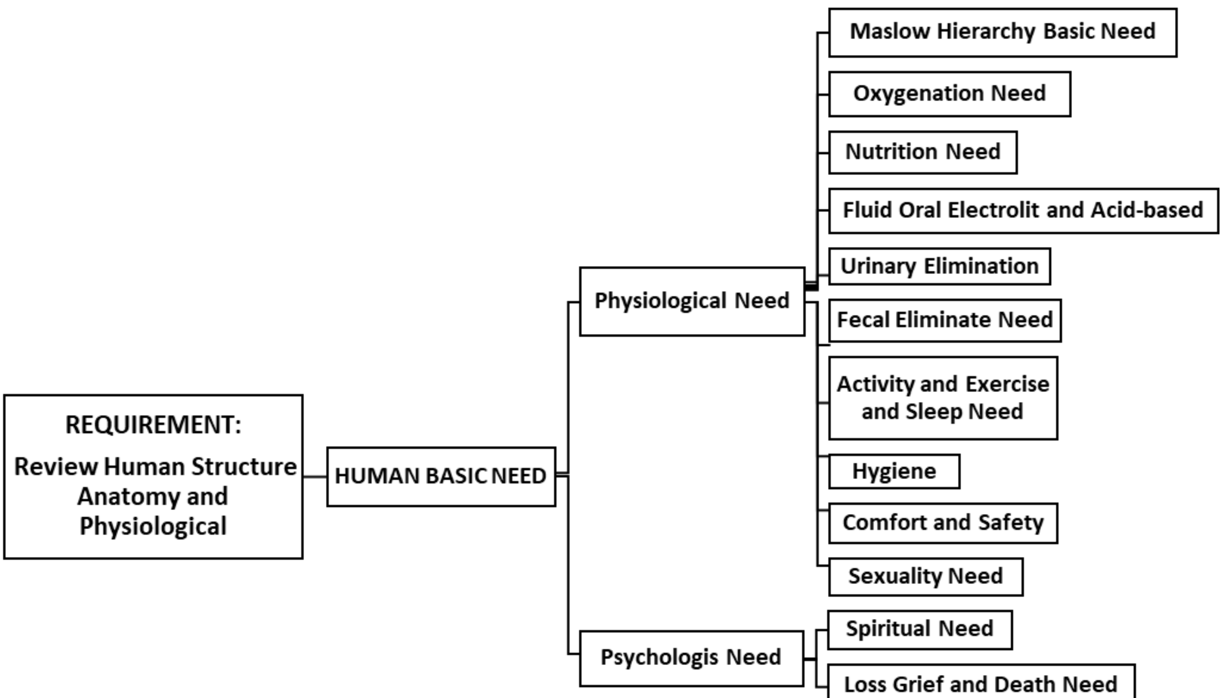
EPITOME OF TOPIC



CHAPTER 1

MASLOW'S BASIC HUMAN NEED

LEARNING OBJECTIVES

After completing this chapter student should be able to:

1. Explain the basic human need theory
2. Analyzed Maslow's five categories of basic human need
3. Explain contributing factors in the fulfillment of basic human need

A. Concept of Basic Human Needs

Maybe you have ever felt thirsty, hungry, sleepy, tired. What are the consequences if we feel that way? of course, will definitely interfere with our lives and if it continues it will cause us to get sick. Because the need to eat, drink, rest, and hygiene are essential needs or basic needs that must be met so we as nurses must understand these needs and provide nursing care both as promotion, prevention, curation, and rehabilitation efforts.

Human basic needs are defined as the drivers of people's actions or the wants of people for living a healthy and stable life. The basic hierarchy of needs process is one of the major approaches to understanding the basic needs of human beings at the different stages of their lives. Human basic is the requirements people need for attaining a level of functioning that fulfills the given ethical origin of good human life. These needs are vital components to producing normal human behavior (Bhasin, 2022).

Basic needs are categorized into several types. One of them is physiological needs (such as oxygen, fluids, nutrition, elimination, etc.) as the most essential human needs. Failure to fulfill basic human needs leads to unbalanced conditions thus particular assistances are required to achieve these needs. It emphasizes the important role of nurses in the health care system in which one of the goals of nursing care is to help clients meet their basic needs. The types of basic human needs within the scope of nursing care are holistic, including biological, psychological, social, and spiritual needs.

B. Maslow's Hierarchy of Basic Human Needs

Abraham Maslow is well renowned for proposing the Hierarchy of Needs Theory in 1943. This theory is a classical depiction of human motivation. This theory is based on the assumption that there is a hierarchy of five needs within each individual. Maslow's hierarchy of needs is often portrayed in the shape of a pyramid, with the largest, most fundamental needs at the bottom, and the need for self-actualization and transcendence at the top. In other words, the idea is that individuals' most basic needs must be met before they become motivated to achieve higher-level needs.

These five needs are as follows:

1) Physiological needs

Physiological needs are the base of the hierarchy. These needs are the biological component for human survival. According to Maslow's hierarchy of needs, physiological needs are factored into internal motivation. According to Maslow's theory, humans are compelled to satisfy physiological needs first to pursue higher levels of intrinsic satisfaction.

These physiological needs must be met for the human body to remain in homeostasis. Air, for example, is a physiological need; a human being requires air more urgently than higher-level needs, such as a sense of social belonging. Physiological needs are critical to meet the very basic essentials of life. This allows for cravings such as hunger and thirst to be satisfied and not disrupt the regulation of the body. Physiological needs include:

- Air
- Heat
- Clothes
- Hygiene
- Light
- Water
- Urination
- Food
- Excretion
- Shelter
- Sleep

2) Safety needs.

Once a person's physiological needs are satisfied, their safety needs take precedence and dominate behavior. In the absence of physical safety–due to war, natural disaster, family violence, childhood abuse, etc. and/or in the absence of economic safety (due to an economic crisis and lack of work opportunities) these safety needs manifest themselves in ways such as a preference for job security, grievance procedures for protecting the individual from unilateral authority, savings accounts, insurance policies, disability accommodations, etc. This is why the goal of consistently meeting the need for safety is to have stability in one's life,

stability brings back the concept of homeostasis for humans which our bodies need. Safety needs include:

- Health
- Personal security
- Emotional security
- Financial security

3) Love and social belonging needs

After physiological and safety needs are fulfilled, the third level of human needs is interpersonal and involves feelings of belongingness. According to Maslow, humans possess an effective need for a sense of belonging and acceptance among social groups, regardless of whether these groups are large or small; being a part of a group is crucial, regardless if it is work, sports, friends or family. The sense of belongingness is “being comfortable with and connection to others that results from receiving acceptance, respect, and love. The parent(s) is stressed about providing for their children, and they are also likely to spend less time at home because they are working more to make more money and provide for their family. Social belonging needs include: Family, Friendship, Intimacy, Trust, Acceptance receiving and giving love and affection.

4) Esteem needs

Esteem is the respect, and admiration of a person, but also self-respect and respect from others. Most people need stable esteem, meaning that which is soundly based on real capacity or achievement. Maslow noted two versions of esteem needs. The “lower” version of esteem is the need for respect from others and may include a need for status, recognition, fame, prestige, and attention. The “higher”

version of esteem is the need for self-respect, and can include a need for strength, competence, mastery, self-confidence, independence, and freedom.

Esteem comes from day-to-day experiences, that provide a learning opportunity that allows us to discover ourselves. This is incredibly important for children, which is why giving them the opportunity to discover they are competent and capable learners is crucial. To boost this, adults must provide opportunities for children to have successful and positive experiences to give children a greater sense of self. Adults, especially parents and educators must create and ensure an environment for children that is supportive and provides them with opportunities that helps children see themselves as respectable, capable individuals. It can also be found that Maslow indicated that the need for respect or reputation is most important for children and precedes real self-esteem or dignity, which reflects the two aspects of esteem: for oneself and others.

5) Self-actualization

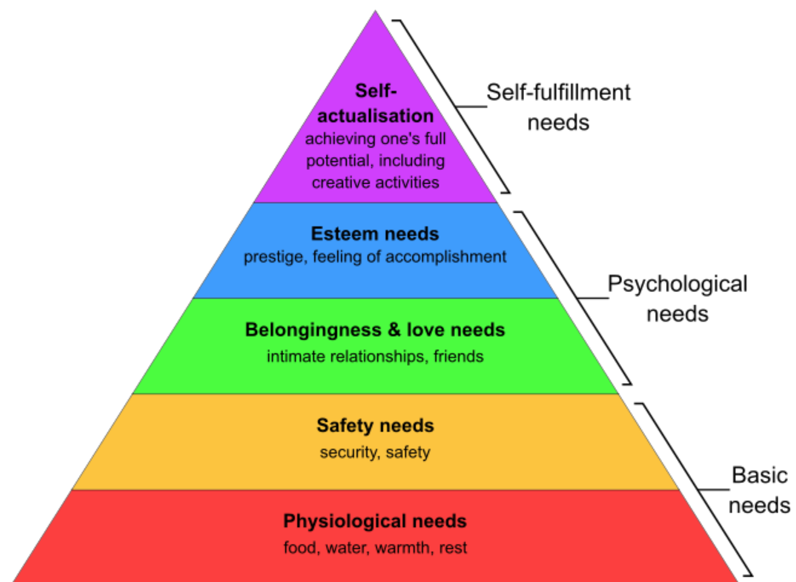
What a man can be, he must be. This quotation forms the basis of the perceived need for self-actualization. Maslow describes this as the desire to accomplish everything that one can, to become the most that one can be. People may have a strong, particular desire to become an ideal parent, succeed athletically, or create paintings, pictures, or inventions. To understand this level of need, a person must not only succeed in the previous needs but master them. Self-actualization can be described as a value-based system when discussing its role in motivation. Self-actualization is understood as the goal or explicit motive, and the previous stages in Maslow's hierarchy fall in line to become the step-by-step process by

which self-actualization is achievable; an explicit motive is the objective of a reward-based system that is used to intrinsically drive the completion of certain values or goals. Individuals who are motivated to pursue this goal seek and understand how their needs, relationships, and sense of self are expressed through their behavior. Self-actualization needs include:

- Partner acquisition
- Parenting
- Utilizing and developing talents and abilities
- Pursuing goals

Maslow's hierarchy of needs is often represented as a pyramid, with the more basic needs at the bottom (see Figure 1).

Figure 1. Maslow's Hierarchy of Needs



Source: Fundamental of Nursing: Concepts, Process and Practice. (2022)

C. Contributing Factors in the Fulfillment of Basic Human Need

Several factors that affect the level of fulfillment of basic needs in humans are as follows:

1. Illness
2. Meaningful relationships
3. Self-concept
4. Developmental stage
5. Family structure in understanding the concept of basic human needs, there are several practices/activities that are required, one of which is the introduction of medical Factors

SUMMARY:

Maslow's hierarchy of needs is a theory by Abraham Maslow, which puts forward that people are motivated by five basic categories of needs: physiological, safety, love, esteem, and self-actualization. Human beings are motivated by a hierarchy of needs.

Needs are organized in a hierarchy of prepotency in which more basic needs must be more or less met (rather than all or none) before higher needs.

The order of needs is not rigid but may be flexible based on external circumstances or individual differences.

REVIEW QUESTIONS

1. Lowest of Maslow Hierarchy of needs theory is:
    A. Esteem Needs
    B. Safety Needs
    C. Self-Actualization Needs
    D. Physiological Needs
2. The Highest of Maslow Hierarchy of needs theory is:
    A. Esteem Needs
    B. Safety Needs
    C. Self-Actualization Needs
    D. Physiological Needs
3. Discuss in a group needs of each level in Maslow's hierarchy!
4. List factors contributing human basic need.!
5. According to Abraham Maslow, what the most important need must be fulfilled first?

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CHAPTER 2.

CONCEPT OF OXYGENATION NEED

LEARNING OBJECTIVES:

After completing this chapter student should be able to:

1. Review the structure and function of the respiratory system.
2. Describe the physiological processes of ventilation, perfusion, and exchange of respiratory gases.
3. Describe how to assess for the risk factors affecting a patient's oxygenation.
4. Identify common manifestation of impaired respiration function.
5. Describe nursing care interventions used to promote oxygenation.

A. Review Anatomy and Physiology of Respiration

Oxygen is a basic human need. Oxygen, a clear, odorless gas that constitutes approximately 21% of the air we breathe, is necessary for proper functioning of all living cells. The absence of oxygen can lead to cellular, tissue, and organism death. Do you still remember the lesson of anatomy and physiology of respiratory system? Before study oxygenation we needed to study the structure of the respiratory organs as the main organs in expiration and inspiration. Respiration is the exchange of oxygen and carbon dioxide during cellular metabolism. The airways of the lung transfer oxygen from the atmosphere to the alveoli, where the oxygen is exchanged for carbon dioxide (CO2). Through the

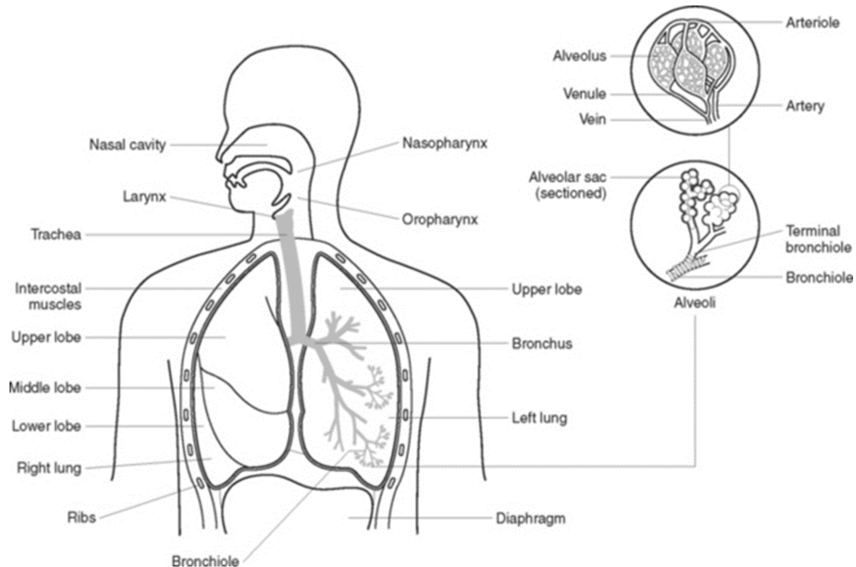
alveolar capillary membrane, oxygen transfers to the blood, and CO_2 transfers from the blood to the alveoli. There are three steps in the process of oxygenation: ventilation, perfusion, and diffusion.

Ventilation is the process of moving gases into and out of the lungs with air flowing into the lungs during inhalation (inspiration) and out of the lungs during exhalation (expiration). **Perfusion** relates to the ability of the cardiovascular system to pump oxygenated blood to the tissues and return deoxygenated blood to the lungs.

Diffusion is responsible for moving the respiratory gases from one area to another by concentration gradients. Conditions or diseases that change the structure and function of the pulmonary system alter respiration. Some of these conditions include chronic obstructive pulmonary disease (COPD), asthma, lung cancer, and cystic fibrosis.

The respiratory system (Figure 1) is divided structurally into the upper respiratory system and the lower respiratory system. The mouth, nose, pharynx, and larynx compose the upper respiratory system. The lower respiratory system includes the trachea and lungs, with the bronchi, bronchioles, alveoli, pulmonary capillary network, and pleural membranes. See Figure 1 below and review the structure and function of respiratory tract.

Figure 2. Structure and Function of Respiratory Tract



Source: Fundamental of Nursing: Concepts, Process and Practice. (2022)

The process of breathing involves:

a. Lung compliance

Lung compliance is the expansibility or stretch ability of lung tissue, plays a significant role in the ease of ventilation. At birth, the fluid-filled lungs are stiff and resistant to expansion, much as a new balloon is difficult to inflate. With each subsequent breath, the alveoli become more compliant and easier to inflate, just as a balloon becomes easier to inflate after several tries. Lung compliance tends to decrease with aging, making it more difficult to expand alveoli and increasing the risk for atelectasis, or collapse of a portion of the lung.

b. Lung recoil

Lung recoil is the continual tendency of the lungs to collapse away from the chest wall. Just as lung compliance is necessary for normal inspiration, lung recoil is necessary for normal expiration. The surface tension of fluid lining the alveoli

has the greatest effect on recoil. Surfactant, a lipoprotein produced by specialized alveolar cells, reduces the surface tension of alveolar fluid. Without surfactant, lung expansion is exceedingly difficult and the lungs collapse. Premature infants whose lungs are not yet capable of producing adequate surfactant often develop respiratory distress syndrome

B. Alterations in Respiratory Function

1) **Hypoxia.**
   Hypoxia is a condition of insufficient oxygen anywhere in the body or reduce It can be related to any parts of ventilation, diffusion of gases or transport of gases by the blood. Clinical manifestation of hypoxia: rapid pulse/Tachycardia, dyspnea, and restlessness, flaring of nares, sub sternal or intercostal retractions, cyanosis.
2) **Hypoxemia**.
   Hypoxemia refers to reduce oxygen in the blood and characterized by a low Partial pressure of oxygen in arterial blood or low hemoglobin saturation.
3) **Hypoventilation.**
   Inadequate alveolar ventilation. May occur because of the diseases of the respiratory muscle or anesthesia. As a result, carbon dioxide often accumulates in the blood, a condition called **hypercarbia (hypercapnia**). Hypoventilation can lead to hypoxia.
4) **Cyanosis.**
   A bluish, discoloration of the skin, nail beds and mucous membrane due to reduced hemoglobin-oxygen saturation. Cyanosis may be present in hypoxemia condition. The patient with hypo toxic usually appears, tired and drawn, sitting position leaning forward slightly to permit greater expansion of thoracic cavity. Chronic

hypoxia patient often appears fatigued and lethargic. **Clubbing finger** common occur in chronic hypoxia, the base of the nail becomes swollen and the finger increase in size.

C. Normal and Abnormal Breathing Patterns

1) **Eupnea**

Normal respiration is quiet, rhythmic and effortless. (12–20 x/minute)

2) **Tachypnea**

Rapid respiratory rate (> 20 X/minute)

3) **Bradypnea**

An abnormal slow respiratory rate (<12/minute)

4) **Apnea**

Cessation of breathing (stop breathing)

5) **Orthopnea**

Inability to breathe except patient in upright or standing position.

6) **Dyspnea**

Difficult or uncomfortable breathing. Patient with dyspnea often appears anxious and may experience shortness of breath (SOB), a felling being unable to get enough air (breathlessness)

D. Factors Affecting Respiratory Function

Factors that influence oxygenation include

1) **Age**

Developmental factor are important influences on respiratory function. At birth lungs gradually expand with each subsequent breath and reaching full inflation by 2 weeks of age. Aging process become affect that is

decrease respiratory system of elders, and occurs changes in respiratory system.

2) **Environment**
   Heat, cold and air pollution affect oxygenation. Healthy people exposed to air pollution such as smog or second smoke may experience stinging of the eyes, headache, dizziness, coughing and choking. People who have history of lung disease will experience difficulty of respiratory in a polluted environment.

3) **Lifestyle**
   Physical exercise or activity increases the rate and depth of respirations and supply oxygen in the body. Certain occupation predisposes an individual to lung disease, for example silicosis, asbestosis and organic dust disease in farmer agricultural employees who work with moldy day.

4) **Health Status**
   In healthy person, respiratory system can provide sufficient oxygen to meet body's need. In contrast disease of respiratory adversely affect the oxygenation of the blood.

5) **Medications**
   A variety of medication can decrease the rate and depth of respiration. The most common medications are benzodiazepine, flurazepam, midazolam, barbiturate group, meperidine.

6) **Stress**
   Stress and stressor both psychological and physiologic can affect oxygenation. Some people may have hyperventilated in respond to stress, and experience falls in PO2 and PCO2.

E. Nursing Care Patient with Oxygenation Impaired

1) Nursing Assessment

Nursing History:

a) Current respiratory problems:
   - Have you noticed any changes in your breathing pattern? Such as: Shortness of breath (SOB), difficulty breathing, need to be in upright position to breathe, or rapid and shallow breathing. If so, which of your activities might cause these symptoms to occur?

b) History of respiratory disease:
   - Have you had colds, allergies, asthma, tuberculosis, bronchitis, pneumonia, or emphysema? How frequently have these occurred? How long did they last? And how were they treated?
   - Have you been exposed to any pollutants?
   - Do you smoke? If so, how much?
   - How often and how much do you cough? Is it productive, that is, accompanied by sputum, or nonproductive, that is, dry?

c) Past health history.
   Familial risk factors such as a family history of lung cancer or cardiovascular disease, Diabetes, hypertension, heart disease and other infection diseases.

2) Physical Assessment

To assessing a client's oxygenation status. The nurse uses four physical examination techniques:

- **Inspection**: variations shape of the chest, (barrel chest, funnel chest)
- **Palpation**: tenderness, respiratory excursion, tactile

fremitus

- **Percussion**: normal or abnormal vibration
- **Auscultation**: observes the rate, depth, rhythm, and quality of respirations, normal and abnormal breath sounds.

3) **Nursing Diagnosis Related to Oxygen Need**

Based upon your assessment findings, you develop nursing diagnoses for patients with oxygenation problems. Examples of nursing diagnoses for clients with oxygenation problems (NANDA, 2021) include:

- Ineffective Airway Clearance
- Ineffective breathing pattern
- Impaired gas exchange
- Activity intolerance

4) **Planning**

Planning The overall outcomes or goals for a client with oxygenation problems are to:

- Maintain a patent airway.
- Improve comfort and ease of breathing.
- Maintain or improve pulmonary ventilation and oxygenation.
- Improve the ability to participate in physical activities.
- Prevent risks associated with oxygenation problems such as skin and tissue breakdown, syncope, acid–base imbalances, and feelings of hopelessness and social isolation.

5) **Implementing**

Nursing interventions for client with oxygenation need include:

a) **Giving semi fowler and high position**

The semi-fowler’s or high fowler’s position allows maximum chest expansion in clients with dyspnea.

b) **Deep breathing and coughing**

The nurse can facilitate respiratory functioning by encouraging deep breathing exercises and coughing to remove secretions from the airway. Breathing exercise commonly using abdominal (diaphragmatic) and pursed-lip breathing. Abdominal breathing permits deep full breath with little effort. Pursed-lip breathing create a resistance to the air flowing out of the lungs.

c) **Chest physiotherapy**

Chest physiotherapy includes percussion and vibration. Percussion or clapping is forceful striking of the skin with cupped hand to dislodge tenacious secretions from bronchial walls. Vibrations are a series vigorous hands that are placed flat against the client's chest wall produce quivering. Vibrations are used after percussion to increase the turbulence of the exhaled air and thus loosen the secretions.

d) **Postural drainage**

Postural drainage is the drainage by gravity of secretions from various lung segments. Commonly the lower lobes require drainage because the upper lobes drain by gravity. The sequence Postural Drainage includes: positioning, percussion, vibrations and removal secretions by coughing or suction.

e) **Oxygen therapy**

- **Nasal Cannula (nasal prongs)** is the most common an inexpensive device used to administer oxygen. (Figure 3). Nasal Cannula delivers low concentrations of oxygen (24-45 %) at flow rates 2 to 6 liters per minute.

- **Facemasks** cover the client's nose and mouth. Simple face mask (Figure 4) delivers oxygen concentration from 40 % to 60 % at liter flow from 5 to 8 liters per minute.

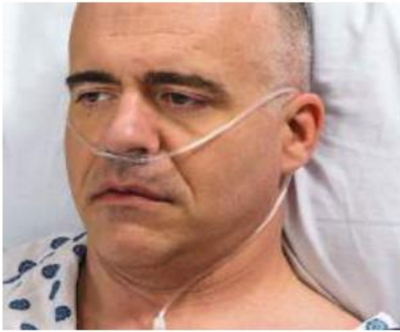


Figure 3. Nasal Cannule

Figure 4. Simple Face Mask

Figure 5. Flow Meter to Adjust Oxygen Flow
Source from: Fundamental of Nursing: Concepts, Process and Practice. (2022)

SUMMARY

As the main basic need, the role of nurses is very important to provide the best care patient with oxygen need. This topic content concept of oxygenation, problems related to oxygenation and the role of nurses in providing care. Besides understanding the concept of oxygen, students also learn nursing care of patient with oxygen need from assessment, diagnose, planning and implementation.

REVIEW QUESTION

Scenario 1: You are preparing to assess patient with respiratory problem.

Question number 1 until 3 based on scenario 1:

1. What would be important questions to ask this patient when gathering health history?
2. How many techniques conduct in physical assessment of lung?
3. What is your expected physical assessment?

Scenario 2: Data collected show that patient experience SOB

Question number 4 and 5 based on scenario 2.

4. What is the nursing diagnosis?
5. What is your planning to release patient problem?

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CHAPTER 3.

CONCEPT OF NUTRITION NEED

LEARNING OBJECTIVES

After completing this chapter student should be able to:

1. Review anatomy physiology of digestive system
2. Describe normal digestion, absorption, and metabolism of carbohydrates, proteins and lipids
3. Identify factors influencing nutrition
4. Describe nursing interventions to promote optimal nutrition.

A. Review Anatomy and Physiology of Digestive System

1) Structure and Function Digestive System

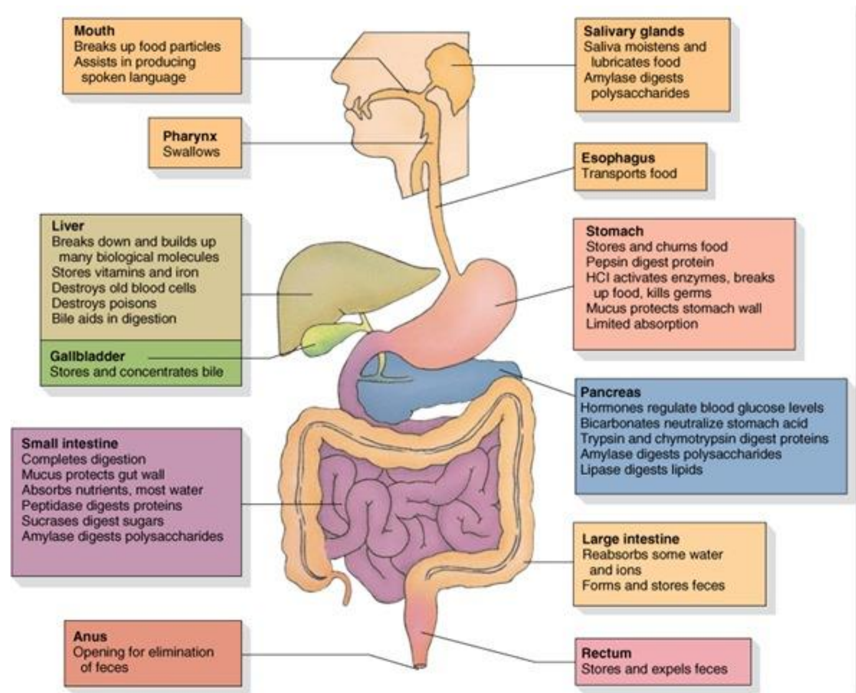
The digestive system breaks down food and then absorbs nutrients into the bloodstream via the small intestine and large intestine. Because good health depends on good nutrition, any disorder affecting the functioning of the digestive system can significantly impact overall health and well-being and increase the risk of chronic health condition. The gastrointestinal system (also referred to as the digestive system) is responsible for several functions, including digestion, absorption, and immune response.

Digestion begins in the upper gastrointestinal tract at the mouth, where chewing of food occurs, called mastication. Mastication results in mechanical digestion when food is broken down into small chunks and swallowed. Masticated food is formed into a bolus as it moves toward the

pharynx in the back of the throat and then into the esophagus. Coordinated muscle movements in the esophagus called peristalsis move the food bolus into the stomach where it is mixed with acidic gastric juices and further broken down into chyme through a chemical digestion process. As chyme is moved out of the stomach and into the duodenum of the small intestine, it is mixed with bile from the gallbladder and pancreatic enzymes from the pancreas for further digestion.

Absorption is a second gastrointestinal function. After chyme enters the small intestine, it comes into contact with tiny fingerlike projections along the inside of the intestine called villi. Villi increase the surface area of the small intestine and allow nutrients, such as protein, carbohydrates, fat, vitamins, and minerals, to absorb through the intestinal wall and into the bloodstream. Absorption of nutrients is essential for metabolism to occur because nutrients fuel bodily functions and create energy. Peristalsis moves leftover liquid from the small intestine into the large intestine, where additional water and minerals are absorbed. Waste products are condensed into feces and excreted from the body through the anus. See this picture below.

Figure 6. Structure and Function of Digestive System



Source: https://www.biologyexams4u.com/2014/03/functions-of-different-parts-of-human.html

B. Nutrition and Nutrient

Have you ever felt hungry? How does it feel? Our body requires fuel to provide energy for cellular metabolism and repair, organ function, growth, and body movement. Nutrition is the sum of all the interactions between an organism and the food it consumes. In other words, nutrition is what an individual eats and how the body uses it. Nutrients are the elements necessary for the normal function of numerous body processes. We meet energy needs through the intake of a variety of nutrients such as: carbohydrates, proteins, fats, water, vitamins, and minerals. The body's most basic nutrient

need is water. Because every cell requires a continuous supply of fuel, the most important nutritional need, after water, is for nutrients that provide fuel, or energy. The energy-providing nutrients are carbohydrates, fats, and proteins. Carbohydrates, fats, protein, minerals, vitamins, and water are referred to as **macronutrients**, because they are needed in large amounts. **Micronutrients** are those vitamins and minerals that are required in small amounts to metabolize the energy-providing nutrients. Functions of nutrient in human body can be seen in Table 1.

Table 1. Functions of Nutrients

Protein	Necessary for tissue formation, cell reparation, and hormone and enzyme production. It is essential for building strong muscles and a healthy immune system.
Carbohydrates	Provide a ready source of energy for the body and provide structural constituents for the formation of cells.
Fat	Provides stored energy for the body, functions as structural components of cells and also as signaling molecules for proper cellular communication. It provides insulation to vital organs and works to maintain body temperature.
Vitamins	Regulate body processes and promote normal body-system functions.
Minerals	Regulate body processes, are necessary for proper cellular function, and comprise body tissue.
Water	Transports essential nutrients to all body parts, transports waste products for disposal, and aids with body temperature maintenance.

C. Factors Affecting Nutritional Status

Now that we have discussed basic nutritional concepts and dietary guidelines, let's discuss factors that can affect a person's nutritional status. Many things that can cause altered nutrition, such as physiological factors, cultural and religious beliefs, economic resources, drug and nutrient disorders, surgery, altered metabolic states, alcohol and drug abuse, and psychological states.

1) Physiological Factors

Nutritional intake is affected by several physiological factors. Appetite is controlled by the hypothalamus, a tiny gland deep within the brain that triggers feelings of hunger or fullness depending on hormone and neural signals being sent and received. Hunger causes a feeling of emptiness in the abdomen and is often accompanied by audible noises coming from the abdomen as the stomach contracts due to emptiness. Hunger can cause feelings of discomfort, nausea, and tiredness.

Poor dentition or poor oral care has a negative effect on appetite, so adequate oral care is crucial for patients prior to eating. Additionally, the condition of a patient's teeth and gums, the fit of dentures, and gastrointestinal function also play an important role in nutrition. Loose teeth, swollen gums, or poor-fitting dentures can make eating difficult.

Difficulty swallowing, called **dysphagia**, can make it dangerous for the patient to swallow food because it can result in pneumonia from aspiration of food into the lungs. Special soft diets or enteral or parenteral nutrition are typically prescribed for patients with dysphagia. Nurses collaborate with speech therapists when assessing and managing dysphagia.

2) **Cultural and Religious Beliefs**

Cultural and religious beliefs often influence food selection and food intake. It is important for nurses to conduct a thorough patient assessment, including food preferences, to ensure adequate nutritional intake during hospitalization. The nurse should not assume a particular diet based on a patient's culture or religion, but instead should determine their individual preferences through the assessment interview.

3) **Drug and Nutrient Interactions**

Some prescription drugs affect nutrient absorption. For example, some medications such as proton pump inhibitors (omeprazole) alter the pH of stomach acid, resulting in poor absorption of nutrients. Other medications, such as opioids, often decrease a person's appetite or cause nausea, resulting in decreased calorie and nutrient intake.

4) **Surgery**

Surgery can affect a patient's nutritional status due to several factors. Food and drink are typically withheld for a period of time prior to surgery to prevent aspiration of fluid into the lungs during anesthesia. Anesthesia and pain medication used during surgery slow peristalsis, and it often takes time to return to normal. Slow peristalsis can cause nausea, vomiting, and constipation. Until the patient is able to pass gas and bowel sounds return, the patient is typically ordered to have nothing by mouth/fasting (NPO/No Per Oral)). If a patient experiences prolonged NPO status, such as after significant abdominal surgery, intravenous fluids and nutrition may be required.

5) **Altered Metabolic States**

Metabolic demands impact nutrient intake. In conditions where metabolic demands are increased, such as during growth spurts in childhood or adolescence, nutritional intake should be increased. Disease states, such as cancer, hyperthyroidism, and AIDS, can increase metabolism and require an increased amount of nutrients. However, cancer treatment, such as radiation and chemotherapy, often causes nausea, vomiting, and decreased appetite, making it difficult for patients to obtain adequate nutrients at a time when they are needed in high amounts due to increased metabolic demand.

Other diseases like diabetes mellitus cause complications with nutrient absorption due to insulin. Insulin is necessary for the metabolism of fats, proteins, and carbohydrates, but in patients with diabetes mellitus, insulin production is insufficient or their body is not able to effectively use circulating insulin. This lack of insulin can result in impaired nutrient metabolism.

6) **Alcohol and Drug Abuse**

Alcohol and drug abuse can affect nutritional status. Alcohol is calorie-dense and nutrient-poor. With alcohol use, the consumption of water, food, and other nutrients often decreases as patients “drink their calories.” This may result in decreased protein intake and body protein deficiency. Nutrient digestion and absorption can also decrease with alcohol consumption if the stomach lining becomes eroded or scarred. This can cause deficiencies of hemoglobin, hematocrit, albumin, folate, thiamine, vitamin B12, and vitamin C, as well as decreased calcium, magnesium, and phosphorus levels.

Drug abuse of stimulants, such as methamphetamine and cocaine abuse, causes an increased metabolic rate and decreased appetite and contributes to weight loss and malnourishment.

7) Psychological State

Various psychological states have a direct effect on appetite and a patient's desire to eat. Acute and chronic stress stimulates the hypothalamus and increases production of glucocorticoids and glucose. This can increase the person's appetite, causing increased calorie intake, fat storage, and subsequent weight gain. When a person feels stressed, their food choices are often nutrient-poor and calorie-dense, which further increases weight gain and nutrient deficiencies. In other individuals, the stress response causes loss of appetite, weight loss, and nutrient deficiencies.

Depression can cause loss of appetite or overeating. Many people eat calorie-dense "comfort foods" as a coping mechanism. Additionally, many antidepressants can cause weight gain as a side effect.

D. Altered Nutrition

Due to some conditions, we can experience nutritional disorders. This situation requires attention from the health care provider so that there are no more severe complications. Due to many conditions our body can fall in condition inadequate nutrition. It is associated with weight loss, generalized weakness, altered functional abilities, delayed wound healing, increased susceptibility to infection, decreased immune competence, impaired pulmonary function, and prolonged length of hospitalization. Below is condition related disorder in nutrition:

a) **Protein-Calorie Malnutrition (PCM)**

Long deficiency in caloric intake is call Protein-Caloric Malnutrition (PCM). Characteristics of PCM are depressed visceral proteins (e.g., albumin), weight loss, and visible muscle and fat wasting. Commonly in children and we call **Stunting.**

b) **Malnutrition**

Malnutrition is commonly defined as the lack of necessary or appropriate food substances.

c) **Excess Body Weight/Overweight**

Excess body weight/Overweight when the BMI (Body Mass Index) increases 25 and 29.9 kg>m2 and obese when the BMI is greater than 30 kg>m2. You can measure BMI with the formula below.

E. Determine the Patient's Body Mass Index (BMI)

BMI is determined by combining two anthropometric variables: Weight in kilograms (kg) and Height in square meters (m^2). A high BMI can indicate too much fat on the body, while a low BMI can indicate too little fat on the body. The higher an individual's BMI, the greater their chances of developing certain serious conditions, such as heart disease, high blood pressure, and diabetes. A very low BMI can signify various health problems, including anemia, decreased immune function, and bone loss (Padilla et al., 2021).

BMI is calculated the same way for people of all ages. However, BMI is interpreted differently for adults and children. The formula **BMI = kg/m2,** where kg is a person's weight in kilograms and m2 is their height in meters squared.

Table 2. Body Mass Index (BMI)

BMI	Weight Status
Below 18.5	Underweight
18.5–24.9	Normal
25.0–29.9	Overweight
30.0 and above	Obese

Source from: Fundamental of Nursing: Concepts, Process and Practice. (2022)

F. Nursing Care Patient with Nutrition Need

1) Assessment

Nutritional assessment is to identify clients at risk for malnutrition and clients with poor nutritional status.

a. Nursing History
- Complain: nausea, vomitus
- Dietary history: client's usual eating patterns and habits, food preference, anallergies and intolerance, frequency, types and quantities of food consumed and social, economic, ethnic and religious influencing nutritions.
- Difficulty eating (impaired chewing and swallowing)
- Changes appetite

b. Physical Assessment
- Anthropometric Measurements: Body Weight, BMI
- Condition of mouth and teeth
- Dry hair, conjunctiva, skin and nails, mucosa indicates malnutrition.

2) Nursing Diagnosis Related to Nutrition Need

The following are examples of nursing diagnoses applicable to nutritional problems (NANDA, 2021)

1) Imbalanced Nutrition: More than body requirements
2) Imbalanced Nutrition: Less than body requirements
3) Readiness for enhanced nutrition
4) Risk for imbalanced nutrition: more/less than body requirements
5) Activity intolerance related to inadequate intake of iron rich foods.
6) Impaired Low Nutrition Intake

3) Planning

Planning to maintain patients' optimal nutritional status include:

- Maintain or restore optimal nutritional status.
- Promote healthy nutritional practices.
- Prevent complications associated with malnutrition.
- Decrease weight.
- Consult with dietitian, physician to adopt interventions that reflect the patients need.
- Involved family when designing intervention

4) Implementation

Nursing intervention to promote optimal nutrition for hospitalized clients is often collaboration with dietitian.

a) Assisting Patients with Oral Feeding

When a patient needs help, it is important to protect his or her safety, prevent patient from aspiration.

b) Assisting Patients with Enteral Tube Feeding (Naso Gastric Tube/NGT)

Enteral nutrition (EN) or giving food with Nasogastric Tube provides nutrients into The Gastro Intestinal tract. It is the preferred method of meeting nutritional needs if a patient is unable to swallow or take in nutrients orally yet has a functioning Gastro Intestinal Tract.

SUMMARY

Ingestion of a diet balanced with carbohydrates, fats, proteins, and vitamins and minerals provides the essential nutrients to carry out the normal physiological functioning of the body across the life span. Through digestion food is broken down into its simplest form for absorption. Digestion and absorption occur mainly in the small intestine. Patients with alterations in chewing and swallowing are at risk for aspiration. Improper nutrition impacts all body systems; nutritional assessment includes a review of physical assessment. One of the most important responsibilities of a nurse administering enteral feedings is to take precautions to prevent patients from aspirating the feeding.

REVIEW QUESTION

1. A 55-year-old female is about 9 kg (20 lb) over her desired weight. She has been on a low-calorie" diet with no improvement. Which statement reflects a healthy approach to the desired weight loss? "I need to:
   A. Increase my exercise to at least 30 minutes every day."
   B. Switch to a low-carbohydrate diet.
   C. Keep a list of my forbidden foods on hand at all times."
   D. Buy more organic and less processed foods
2. An older Asian client has mild dysphagia from a recent stroke. The nurse plans the client's meals based on the need to:
   A. Have at least one serving of thick dairy (e.g., pudding, ice cream) per meal.
   B. Eliminate the beer usually ingested every evening.
   C. Include as many of the client's favorite foods as

possible.

D. Increase the calories from lipids to 40%

3. Select Macronutrient and Micronutrients!
4. List nursing history to assess nutritional status of client!
5. Explain 5 factors influencing nutritional need!

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CHAPTER 4.

CONCEPT OF FLUIDS, ELECTROLYTE AND ACID BASE BALANCE NEED

LEARNING OBJECTIVES

After completing this chapter student should be able to:

1. Review the function, distribution, composition, movement, and regulation of fluids and electrolytes in the body
2. Identify factors affecting normal body fluid, electrolyte, and acid–base balance.
3. Collect assessment data related to clients' fluid, electrolyte, and acid–base balances.
4. Identify examples of nursing diagnoses, outcomes, and interventions for clients with altered fluid, electrolyte, or acid–base balance.

A. Review Body Fluids and Electrolyte

Have you ever had diarrhea or vomiting? how does it feel if we lack body fluids?

Water is a substantial proportion of body weight. In fact, about 60% of the body

Weight of an adult man is water, the primary body fluid. What is the definition of fluid?

The term fluid means water that contains dissolved or suspended substances such as glucose, mineral salts, and protein. Age, sex, and body fat affect total body water.

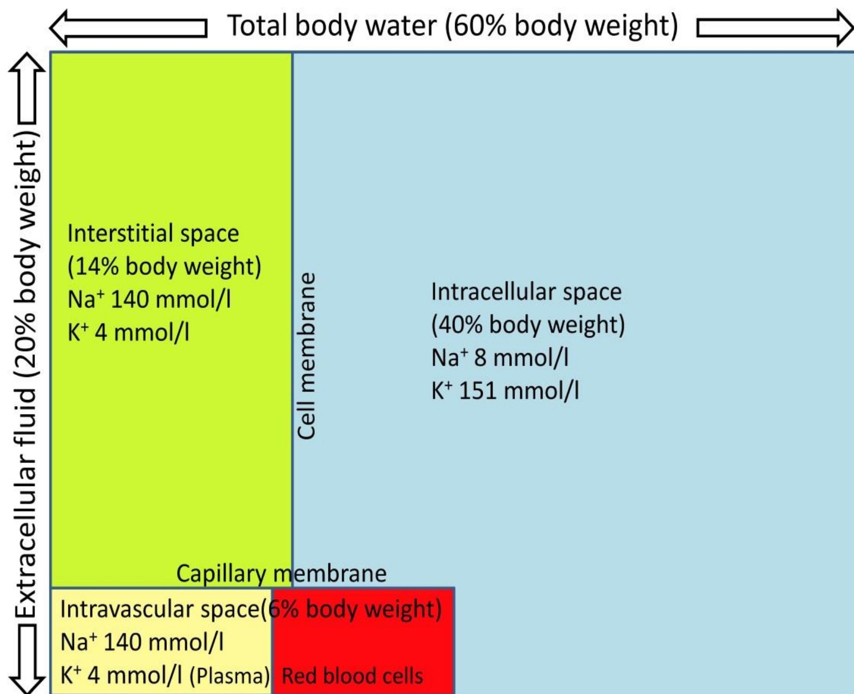
Infants have the highest proportion of water, accounting for 70% to 80% of their body

Weight. The proportion of body water decreases with age. In adults older than 60
Years of age, it represents only about 50% of total body weight.

The body's fluid is divided into two major compartments:

a. **Intracellular Fluid (ICF)**
   Intracellular fluid (ICF) is found within the cells of the body. It constitutes approximately two-thirds of the total body fluid in adults
b. **Extracellular Fluid (ECF)** is found outside the cells and accounts for about one- third of total body fluid.
   ECF is further subdivided into two compartments:
   - **intravascular**: plasma, accounts for approximately 20% of ECF and is found within the vascular system.
   - **Interstitial fluid**, accounting for approximately 75% of ECF, surrounds the cells Intracellular fluid is vital to normal cell functioning. It contains solutes such as oxygen, electrolytes, and glucose, and it provides a medium in which metabolic Processes of the cell take place.

Figure 7. Illustrate Composition and Distribution of Body Fluids



Source: Fundamental of Nursing: Concepts, Process and Practice. (2022)

Movement of water and electrolytes

The methods by which water and solutes move in the body are:

a) **Diffusion**: Passive movement of electrolytes from areas of higher concentration to areas of lower concentration separated by a semipermeable
b) **Osmosis**: Specific kind of diffusion in which water moves across cell membranes, from the less concentrated solution (the solution with less solute and more water) to the more concentrated solution (the solution with more solute and less water)

c) **Filtration**: Filtration is a process whereby fluid and solutes move together across a membrane from an area of higher pressure to an area of lower pressure.

d) **Active transport**: Active transport is the movement of solutes across cell membranes from a less concentrated solution to a more concentrated one. For example, concentrations of Na^{+}, Cl^{-}, and $HCO3^{-}$ are higher in the ECF, whereas the concentrations of K+, Mg 2+, and phosphate are higher in the ICF.

Acid-based Balance

An important part of regulating the homeostasis of body fluids is regulating their acidity and alkalinity. An **acid** is a substance that releases hydrogen ions (H^{+}) in solution. **Bases, or alkalis**, have a low hydrogen ion concentration and can accept hydrogen ions in solution. The relative acidity or alkalinity of a solution is measured by its pH, which is an inverse reflection of the hydrogen ion concentration of the solution. The higher the hydrogen ion concentration, the lower the pH; the lower the hydrogen ion concentration, the higher the pH. Water has a pH of 7 and is neutral. Solutions with a pH lower than 7 are acidic; those with a pH higher than 7 are alkaline.

Regulating Body Fluids

a) **Fluid Intake**

Average daily fluid intake (water) for adult about 2400–2700 ml/day. The thirst mechanism is primary regulator of fluid intake. The thirst center located in the hypothalamus of the brain. Fluid intake come from:

- Drink a water
- Eating

b) Fluid Output

Average daily output for adult about 2300–2600 ml/day. There are 4 routes of fluid output:

- Urine
- Insensible water loss (IWL) through skin perspiration (sweat)
- Feces
- Perspiration from mouth, nose when we speaking and breathing

B. Factors Affecting Body Fluid, Electrolytes, and Acid–Base Balance

The ability of the body to adjust fluids, electrolytes, and acid–base balance is influenced by age, sex and body size, environmental temperature, and lifestyle.

a) Age

Infants and growing children have much greater fluid turnover than adults because their higher metabolic rate increases fluid loss. In older individuals, the normal aging process may affect fluid balance. The thirst response is often diminished. Antidiuretic hormone levels remain normal or may even be elevated, but the nephrons become less able to conserve water in response to ADH (Anti Diuretic Hormone).

b) Sex and Body Size

Total body water also is affected by sex and body size. Fat cells contain little or no water, but lean muscle tissue has a high water content; therefore, individuals with a higher percentage of body fat have less body water than individuals with a higher percentage of lean muscle. Women generally have proportionately more body fat and, therefore less body water than men.

c) **Environmental Temperature**

Individuals with an illness and those participating in strenuous activity are at increased risk for fluid and electrolyte imbalances when the environmental temperature is high. Fluid losses through sweating are increased in hot environments as the body attempts to disperse heat.

d) **Lifestyle**

- Diet, exercise, stress, and alcohol consumption affect fluid, electrolyte, and acid–base balance.
- Intake of fluids and electrolytes is affected by diet: Individuals with anorexia nervosa or bulimia are at risk for severe fluid and electrolyte imbalances because of inadequate food intake.

C. FLUID IMBALANCE

a) **Hypervolemia**

Occurs when the body retains both water and sodium in similar proportions to normal ECF. This is commonly referred to as hypervolemia (increased blood volume).

Edema is volume excess; both intravascular and interstitial spaces have an increased water and sodium content. Excess interstitial fluid is known as edema. Edema typically is most apparent in areas where the tissue pressure is low, such as around the eyes, and acral.

b) **Hypovolemia**

Hypovolemia occurs when the body loses both water and electrolytes from the ECF in similar proportions.

Dehydration, or a hyperosmolar fluid imbalance, occurs when water is lost from the body, leaving the client with excess sodium. Because water is lost while electrolytes,

particularly sodium, are retained, serum osmolality and serum sodium levels increase. Water is drawn into the vascular compartment from the interstitial space and cells, resulting in cellular dehydration.

D. NURSING CARE PATIENT WITH FLUID, ELECTROLYTE AND ACID-BASED NEED

1. Assessment

a. Nursing History:

- Fluid intake:
  - How much and what type of fluids do you drink each day?
  - Describe your diet for a typical day. (Pay particular attention to the client's intake of foods high in sodium, and of protein, whole grains, fruits, and vegetables.)
  - Have there been any recent changes in your food or fluid intake, for example, as a result of following a weight-loss program?
  - Are you on any type of restricted diet?
  - Has your food or fluid intake recently been affected by changes in appetite, nausea, or other factors such as pain or difficulty breathing?
- Fluid output:
  - Have you noticed any recent changes in the frequency or amount of urine output?
  - Have you recently experienced any problems with vomiting, diarrhea, or constipation? Amount of vomits?
  - Have you noticed any other unusual fluid losses such as excessive sweating? Drainage

of gastric or intestinal

- Current and past medical history:
  - Are you currently seeing a healthcare provider for treatment of any chronic diseases such as kidney disease, heart disease, lung disease, high blood pressure, diabetes mellitus, diabetes insipidus, or thyroid, parathyroid, or adrenal disorders?
  - Have you recently experienced any acute conditions such as gastroenteritis, severe trauma, head injury, or surgery?

b. Physical Assessment

- Skin: Edema, turgor, color, temperature, moisture, dry skin
- Cardiovasculair system: heart rate, peripheral pulses, blood pressure, capillary refill.
- Respiratory system: lung sounds, respiratory rate and pattern.
- Vital Sign: Pulse, Temperature, Blood Pressure, Respiration.

2. Nursing Diagnosis

The following are examples of nursing diagnoses applicable to fluid, electrolytes and acid base problem (NANDA, 2021)

a) Deficient fluid volume
b) Excess fluid volume
c) Risk for imbalanced fluid volume
d) Risk for deficient fluid volume
e) Impaired oral mucous membrane
f) Activity intolerance

3. **Planning**

When planning care a nurse identifies nursing interventions that will assist the client to achieve these broad goals:

a) Maintain or restore normal fluid balance.
b) Maintain or restore normal balance of electrolytes in the intracellular and extracellular compartments.
c) Maintain or restore gas exchange and oxygenation.
d) Prevent associated risks (e.g., tissue breakdown, decreased cardiac output,
e) confusion, other neurologic signs)

4. **Implementation**

a) Monitoring fluid intake and output (I/O Chart)
b) Maintaining food and fluid intake
c) Measures of Blood pressure, Pulse, Respiration and Temperature
d) Caring for patients with intravenous infusion
e) Calculating infusion drops

SUMMARY

A balance of fluids, electrolytes, acids, and bases in the body is necessary for good health. Body fluid is divided into two major compartments: intracellular fluid (ICF) inside the cells and extracellular fluid (ECF) outside the cells. ECF is subdivided into two compartments: intravascular (plasma) and interstitial. It constitutes about one-third of total body fluid. ECF is in constant motion throughout the body. It is the transport system that carries nutrients to and waste products from the cells. The percentage of total body fluid varies according to an individual's age, body fat, and gender. The younger an individual is, and the less body fat present, the greater the proportion of body fluid; post adolescent females have a smaller percentage of fluid in relation to total body weight than men. Fluid intake is regulated by the thirst mechanism. Fluid output occurs chiefly through excretion of urine, although body fluid is also lost through sweat, feces, and respiration. In healthy adults, measurable fluid intake and output should balance (about 1500 mL per day). The output of urine normally approximates the oral intake of fluids. Water from food and oxidation is balanced by fluid loss through urine, feces, and insensible losses, such as losses through the skin as perspiration. A number of body systems and organs are involved in regulating the volume and composition of body fluids: the kidneys, lungs, the cardiovascular and gastrointestinal systems, and the endocrine system.

Review Question

1. ECF is primarily composed of:
   A. Aqueous fluid and lymphatic fluid.
   B. CSF and interstitial fluid.
   C. Interstitial and intravascular fluids.
   D. Vascular fluid and CSF.
2. A chemical set up to resist changes, particularly in the level of pH, is:
   A. A base.
   B. A buffer.
   C. A salt.
   D. An acid.
3. Water moves across a semipermeable membrane via which process?
   A. Active transport.
   B. Diffusion.
   C. Filtration.
   D. Osmosis
4. To balance water output, an average adult must have daily fluid intake of approximately:
   A. 500-900 ml.
   B. 1,000-2,000 ml.
   C. 2,000-3,000 ml.
   D. 4,000-6,000 ml.
5. The primary organs involved in pH regulation are:
   A. Kidneys and lungs.
   B. Heart and intestines.
   C. Lung and endocrine glands.
   D. Skin and kidneys.

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CHAPTER 5

CONCEPT OF URINARY ELIMINATION NEED

LEARNING OBJECTIVES

After completing this chapter student should be able to:

1. Review the function and role of urinary system structures in urine formation and elimination.
2. Identify factors that commonly impact urinary elimination
3. Obtain a nursing history from a patient with an alteration in urinary elimination.
4. Explain nursing care related to urinary elimination.

A. Anatomy & Physiology review female and male urinary bladders and urethras

Urinary elimination is divided into two: the upper urinary tract's kidneys and ureters and the lower urinary tract's urinary bladder, urethra, and pelvic floor.

Kidneys

The paired kidneys are situated on either side of the spinal column, behind the peritoneal cavity. The right kidney is slightly lower than the left due to the position of the liver. They are the primary regulators of fluid and acid–base balance in the body. The functional units of the kidneys, the nephrons, filter the blood and remove metabolic wastes.

Ureters

Once the urine is formed in the kidneys, it moves through the collecting ducts into the calyces of the renal pelvis

and from there into the ureters. In adults the ureters are from 25 to 30 cm (10 to 12 in.) long and about 1.25 cm (0.5 in.) in diameter. The upper end of each ureter is funnel shaped as it enters the kidney. The lower ends of the ureters enter the bladder at the posterior corners of the floor of the bladder. At the junction between the ureter and the bladder, a flap like fold of mucous membrane acts as a valve to prevent reflux (backflow) of urine up the ureters.

Bladder

The urinary bladder is a hollow, distensible, muscular organ that holds urine. When empty, the bladder lies in the pelvic cavity behind the symphysis pubis. In males the bladder rests against the rectum, and in females it rests against the anterior wall of the uterus and vagina. The bladder has two parts, a fixed base called the trigone and a distensible body called the detrusor. The bladder expands as it fills with urine. Normally the pressure in the bladder during filling remains low, and this prevents the dangerous backward flow of urine into the ureters and kidneys. Backflow can cause infection. Normal bladder capacity is between 300 and 600 mL of urine.

Urethra

Urine travels from the bladder through the urethra and passes to the outside of the body through the urethral meatus. The urethra passes through a thick layer of skeletal muscles called the pelvic floor muscles. These muscles stabilize the urethra and contribute to urinary continence. The external urethral sphincter, made up of striated muscles, contributes to voluntary control over the flow of urine. The female urethra is approximately 3 to 4 cm (1 to 1.5 inches) long, and the male urethra is about 18 to 20 cm (7 to 8 inches) long. The shorter

length of the female urethra increases risk for urinary tract infection (UTI) because of close access to the bacteria-contaminated perinea area.

Act of Urination

Micturition, voiding, and urination all refer to the process of emptying the urinary bladder. Urine collects in the bladder until pressure stimulates special sensory nerve endings in the bladder wall called stretch receptors. This occurs when the adult bladder contains between 250 and 450 mL of urine. In children, a considerably smaller volume, 50 to 200 mL, stimulates these nerves.

The stretch receptors transmit impulses to the spinal cord, specifically to the voiding reflex center located at the level of the second to fourth sacral vertebrae, causing the internal sphincter to relax and stimulating the urge to void. If the time and place are appropriate for urination, the conscious portion of the brain relaxes the external urethral sphincter muscle and urination takes place. If the time and place are inappropriate, the micturition reflex usually subsides until the bladder becomes more filled and the reflex is stimulated again.

Factors Influencing Urination

1) Developmental factors
2) Psychosocial factors
3) Fluid and intake
4) Medication
5) Pathologic condition

B. Common Urinary Elimination Problem

1. Polyuria

Polyuria (or diuresis) refers to the production of abnormally large amounts of urine by the kidneys, often several liters more than the client's usual daily output. Polyuria can follow excessive fluid intake, a condition known as polydipsia, or may be associated with diseases such as diabetes mellitus, diabetes insipidus, and chronic nephritis. Polyuria can cause excessive fluid loss, leading to intense thirst, dehydration, and weight loss.

2. Oliguria

The terms oliguria and anuria are used to describe decreased urinary output. Oliguria is low urine output, usually less than 500 mL a day or 30 mL an hour for an adult

3. Anuria

Anuria refers to a lack of urine production.

4. Dysuria

Dysuria means voiding that is either painful or difficult. It can accompany a stricture (decrease in diameter) of the urethra, urinary infections, and injury to the bladder and Urethra.

5. Urinary Incontinence (UI)

Urinary Incontinence is any involuntary urine leakage. UI is a common problem, affecting 27% of men and 43% women over the age of 40, 20% to 40% of older adults, and over 70% of elderly nursing home.

6. Urinary Retention

When emptying of the bladder is impaired, urine accumulates and the bladder becomes overdistended, a condition known as **urinary retention**. Common causes

of urinary retention include benign prostatic hyperplasia (BPH), surgery, and some medication. Clients with urinary retention may experience overflow incontinence, eliminating 25 to 50 mL of urine at frequent intervals.

C. NURSING CARE PATIENT URINARY ELIMINATION NEED

1. Assessment

a. Nursing History:

The nurse determines the client's normal voiding pattern and frequency, appearance of the urine and any recent changes, any past or current problems with urination.

Pattern of urinary:

- How many times do you urinate during a 24-hour period?
- Has this pattern changed recently?
- Do you need to get out of bed to void at night?
- How often?

Description of urine and any changes

- How would you describe your urine in terms of color, clarity (clear, transparent, or cloudy), and odor (faint or strong)?

Urinary elimination problems

- What problems have you had or do you now have with passing your urine?
- Passage of small amounts of urine?
- Voiding at more frequent intervals?
- Trouble getting to the bathroom in time, or feeling an urgent need to void?
- Painful voiding?

b. Physical assessment

Physical assessment of urinary tract usually includes

- Palpation and Percussion of the kidneys and bladder to detect areas of tenderness.
- Inspection the urethral meatus of both male and female clients for swelling, discharge, and inflammation

2. Nursing diagnosis

The following are examples of nursing diagnoses applicable to urinary elimination need (NANDA, 2021):

a) Impaired Urinary Elimination: Dysfunctional in urine elimination.

b) Functional urinary incontinence

c) Urinary retention

d) Risk for infection

e) Low self esteem

f) Risk for impaired skin integrity.

3. Planning

a. Maintain adequate hydration.

- Drink six to eight glasses of water a day
- Spread it out evenly throughout the day.
- Avoid or limit drinking beverages that contain caffeine (coffee, tea, chocolate
- drinks, soft drinks).

b. Prevent urinary tract infections.

- Women: Cleanse the perineum from front to back after each voiding and bowel movement; wear cotton underwear

c. Teach patient how to identify and contract the correct muscle.

- Women: Instruct the patient to squeeze the anus

as if to hold in gas or to insert a finger into the vagina and feel the muscle squeeze around her finger.

- Men: Instruct the patient to stand in front of a mirror, squeeze the anus as if to hold in gas, and watch to see if the penis moves up and down as he contracts the pelvic floor muscles.

4. Implementation

a. Assisting toileting using Urinal
b. Promoting fluid intake
c. Managing urinary incontinence
d. Bladder training
e. Care of Urinary Catheterization
f. Care of condom catheter
g. Kegel Exercise

SUMMARY

Urinary elimination depends on normal functioning of the upper urinary tract's kidneys and ureters and the lower urinary tract's urinary bladder, urethra, and pelvic floor. Urine is formed in the nephron, the functional unit of the kidney, through a process of filtration, reabsorption, and secretion. Many factors influence an individual's urinary elimination, including growth and development, psychosocial factors, fluid intake, medications, muscle tone, various diseases and conditions, and surgical and diagnostic procedures. Alterations in urine production and elimination include polyuria, oliguria, anuria, frequency, nocturia, urgency, dysuria, enuresis, incontinence, and retention. Each may have various influencing and associated factors that need to be identified. Examples of nursing diagnoses that may apply to clients with urinary elimination problems can include altered urinary elimination (specify specific problem, e.g., urinary retention), urinary incontinence (specify type) and related diagnoses such as potential for infection

Review Question

1. A client is diagnosed with an elevated aldosterone level. Which aspect of urinary elimination will this finding affect?
   A. Increased urine output
   B. Urinary incontinence
   C. Decreased urine output
   D. Urinary retention
2. During shift report, the nurse learns that an older female client is unable to maintain continence after she senses the urge to void and becomes incontinent on the way to the bathroom. Which specific type of urinary incontinence is the most appropriate for the nursing diagnosis?

   A. Stress
   B. Reflex
   C. Functional
   D. Urge
3. Explain the urination process!
4. List factors influencing urination!
5. List nursing assessment to collect data of urinary elimination problem!

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CHAPTER 6

CONCEPT OF BOWEL NEED

LEARNING OBJECTIVES

After completing this chapter student should be able to:

1. Review the role of gastrointestinal organs and their physiological function in digestion and elimination.
2. Identify factors that influence fecal elimination
3. Explain nursing care measures required for patients with an intestinal diversion

A. Review Physiology of Defecation

Elimination of the waste products of digestion from the body is essential to health. The excreted waste products are referred to as feces or stool.

Large Intestine (Colon)

The large intestine extends from the ileocecal (ileocolic) valve, which lies between the small and large intestines, to the anus. The colon (large intestine) in the adult is generally about 125 to 150 cm (50 to 60 in.) long. It has seven parts: the cecum; ascending, transverse, and descending colons; sigmoid colon; rectum; and anus The colon acts to transport along its lumen the products of digestion, which are eventually eliminated through the anal canal. These products are flatus and feces. Flatus is largely air and the by-products of the digestion of carbohydrates.

Peristalsis is wavelike movement produced by the circular and longitudinal muscle fibers of the intestinal walls; it propels the intestinal contents forward.

Rectum and Anus

The body expels feces and flatus from the rectum through the anus. Contraction and relaxation of the internal and external sphincters, which are innervated by sympathetic and parasympathetic nerves, aid in the control of defecation. The anal canal (anus) contains a rich supply of sensory nerves that allow people to tell when there is solid, liquid, or gas that needs to be expelled and aids in maintaining continence.

Defecation

Defecation is the expulsion of feces from the anus and rectum. It is also called a bowel movement. The frequency of defecation is highly individual, varying from several times per day to two or three times per week. The amount defecated also varies among individuals. When peristaltic waves move the feces into the sigmoid colon and the rectum, the sensory nerves in the rectum are stimulated and the individual becomes aware of the need to defecate.

Factors that Affect Defecation

- Defecation Habit
- Activity
- Fluid and Intake
- Psychologic factors
- Age
- Medication

B. FECAL ELIMINATION PROBLEM

1) Constipation

Constipation may be defined as fewer than three bowel movements per week. This infers the passage of dry, hard stool or the passage of no stool. It occurs when the movement of feces through the large intestine is slow, thus allowing time for additional reabsorption of fluid from the large intestine. Associated with constipation are difficult evacuation of stool and increased effort or straining of the voluntary muscles of defecation. The individual may also have a feeling of incomplete stool evacuation after defecation. Laxatives are medications that stimulate bowel activity and so assist fecal elimination. Other medications soften stool, facilitating defecation.

2) Bowel Incontinence

Bowel incontinence, also called fecal incontinence, refers to the loss of voluntary ability to control fecal and gaseous discharges through the anal sphincter. The may occur at specific times, such as after meals, or it may occur irregularly. Fecal incontinence is generally associated with impaired functioning of the anal sphincter or its nerve supply, such as in some neuromuscular diseases, spinal cord trauma, and tumors of the external anal sphincter muscle.

3) Diarrhea

Diarrhea refers to the passage of liquid feces and an increased frequency of defecation. It is the opposite of constipation and results from rapid movement of fecal contents through the large intestine. Some individuals pass stool with increased frequency, but diarrhea is not present unless the stool is relatively unformed and

excessively liquid. Fatigue, weakness, malaise, and emaciation are the results of prolonged diarrhea

C. NURSING CARE PATIENT FECAL ELIMINATION NEED

1) Assessment

Assessment of fecal elimination includes taking a nursing history; performing a physical examination of the abdomen, rectum, and anus; and inspecting the feces. The nurse also should review any data obtained from relevant diagnostic tests.

a. Nursing history

- Defecation pattern:
  - when do you usually have a bowel movement?
  - has this pattern changed recently?
- Description of feces and any changes:
  - have you noticed any changes in the color, texture (hard, soft, watery), shape, or odor of your stool recently?
- Fecal elimination problems:
  - what problems have you had or do you now have with your bowel movements (constipation, diarrhea, excessive flatulence, seepage, or incontinence)?
  - when and how often does it occur?
  - what do you think causes it (food, fluids, exercise, emotions, medications, disease, surgery)?
  - what have you tried to solve the problem, and how effective was it?

b. Physical assessment

- Inspection: Structure of abdomen, any lesion
- Auscultation: Checking peristaltic sound (Normally peristaltic = 5–35 x/minutes)
- Palpation: to examine any tenderness, Appendicitis, mass/tumor
- Percussion: Tymphani (normal)

2) Nursing Diagnoses

The following are examples of nursing diagnoses applicable to urinary elimination need (NANDA, 2021):

a) Bowel Incontinence
b) Risk for constipation
c) Risk for deficient fluid volume
d) Deficient knowledge (bowel training)
e) Constipation

3) Planning

a) Facilitate toileting: Ensure safe and easy access to the toilet. Make sure lighting is appropriate. Facilitate instruction as needed about transfer techniques
b) Monitoring bowel elimination pattern: Instruct the client, if appropriate, to keep a record of time and frequency of stool passage, any associated pain, and color and consistency of the stool.
c) Medications: Discuss problems associated with overuse of laxatives, if appropriate, and the use of alternatives to laxatives, suppositories, and enemas, Discuss the addition of a fiber supplement if the client is taking a constipating medication.

4) Implementation

a) Establish a regular exercise regimen.
b) Consume high-fiber foods, such as vegetables, fruits, and whole grains, in the diet.

c) Maintain fluid intake of 2000 to 3000 mL/day.
d) Helping using bedpan
e) Allow time to defecate, preferably at the same time each day.
f) Avoid OTC/Over the Counter medications to treat constipation and diarrhea.
g) Drink at least 8 glasses of water per day to prevent dehydration. Consider drinking a few glasses of electrolyte replacement fluids a day.
h) Thoroughly clean and dry the perianal area after passing stool to prevent skin irritation and breakdown. Use soft toilet tissue to clean and dry the area.
i) Administering enema

Summary

Primary functions of the large intestine are the absorption of water and nutrients, the mucoid protection of the intestinal wall, and fecal elimination. Patterns of fecal elimination vary greatly among individuals, but a regular pattern of fecal elimination with formed, soft stools is essential to health and a sense of well-being. Various factors affect defecation: developmental level, diet, fluid intake, activity and exercise, psychological factors, defecation habits, medications, diagnostic and medical procedures, pathologic conditions, and pain. Common fecal elimination problems include constipation, diarrhea, bowel incontinence, and flatulence. Each has specific defining characteristics and contributing causes that often relate to or are identical to the factors that affect defecation. Lack of exercise, irregular defecation habits, and overuse of laxatives are all thought to contribute to

constipation. Sufficient fluid and fiber intake are required to keep feces soft.

Review Question

1. Explain 5 nursing diagnosis related to bowel elimination problem!
2. Identify 3 problems related to bowel elimination!
3. Describe physiology of defecation!
4. List 3 nursing diagnosis related to fecal elimination disorder!
5. What is normal peristaltic?

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CHAPTER 7

CONCEPT OF ACTIVITY AND EXERCISE NEED

LEARNING OBJECTIVES

After completing this chapter student should be able to:

1. Understand the role of the musculoskeletal and nervous systems in the regulation of activity and exercise
2. Identify factors influencing a client's body alignment and activity
3. Assess activity-exercise pattern, body alignment, gait, appearance and movement of joints, mobility capabilities and limitations, muscle mass and strength, activity tolerance, and problems related to immobility
4. Apply nursing care interventions for preventing deconditioning in hospitalized patients.

A. Normal Movement

Movement is a complex process that requires coordination between the musculoskeletal and nervous systems. Normal movement and stability are the result of an intact musculoskeletal system, an intact nervous system, and intact inner ear structures responsible for equilibrium. Body movement involves four basic elements:

- Body alignment (posture),
- Joint mobility,

- Balance
- Coordinated movemen

B. Regulation of Movement

The nervous system regulates movement and posture. The precentral gyrus, or motor strip, is the major voluntary motor area and is in the cerebral cortex. A majority of motor fibers descend from the motor strip and cross at the level of the medulla. Transmission of impulses from the nervous system to the musculoskeletal system is an electrochemical event and requires a neurotransmitter.

Basically, neurotransmitter are chemicals (e.g., acetylcholine) that transfer the electrical impulse from the nerve across the myoneural junction to stimulate the muscle, causing movement.

Proprioception. Proprioception is a muscle sense that makes us aware of the position of the body and its parts, including body movement, orientation in space, and muscle stretch. Proprioceptors are located within muscle spindles. Rapidly conducting and slower-conducting nerve fibers encircle an area of the muscle spindle found within skeletal muscles. When a muscle stretches, the afferent impulses from sensory neurons pass to the spinal cord and are relayed to the brain, providing a means to monitor changes in muscle length.

The nervous system controls balance specifically through the inner ear, the cerebellum, and through vision. The inner ear contains specialized mechanoreceptors or hair cells that are stimulated through sound waves, creating nerve impulses perceived in the brain as either sound or balance. These sense organs that are involved in balance are located within the vestibule and semicircular canals of the ear. Together the sense organs function in dynamic equilibrium, a function

needed to maintain balance when the head or body rotates or suddenly moves.

C. Activity and Exercise

An activity-exercise pattern refers to an individual's routine of exercise, activity, leisure, and recreation. It includes:

a) **Activities of Daily Living (ADL'S)** that require energy expenditure.

   Activity Daily Living (ADL) is an activity carried out by someone to meet their daily needs such as such as daily activities:

- personal hygiene,
- dressing,
- cooking,
- shopping,
- eating,
- working,
- home maintenance.

b) **Exercise** including gym, sports, recreations.

D. Mobility

The ability to move freely, easily, rhythmically, and purposefully in the environment, is an essential part of living. Individuals must move to protect themselves from trauma and to meet their basic needs. Mobility is vital to independence; a fully immobilized individual is as vulnerable and dependent as

an infant. Individuals often define their health and physical fitness by their activity because mental well-being and the effectiveness of body functioning depend largely on their mobility status. For example, when a client is upright, the lungs expand more easily, intestinal activity (peristalsis) is more effective, and the kidneys are able to empty completely.

E. Factors Affecting Body Activity

1. Age (growth and development)
2. Nutrition
3. Personal Attitudes
4. Exercise

F. Effects of Immobility

Immobility is affected by any disorder that impairs the ability of the nervous system, musculoskeletal system, cardiovascular system, respiratory system, and vestibular apparatus. Disorders of the nervous system such as Parkinson's disease, multiple sclerosis, central nervous system tumors, strokes, infectious processes (e.g., meningitis), and head and spinal cord injuries can leave muscle groups weakened, paralyzed (paresis), spastic (with too much muscle tone), or flaccid (without muscle tone). Individuals who have in-active lifestyles or who are faced with inactivity because of illness or injury are at risk for many problems that can affect major body systems such as:

- **Disuse atrophy**. Unused muscles atrophy (decrease in size), losing most of their strength and normal function.
- **Contractures**. When the muscle fibers are not able to shorten and lengthen, eventually a contracture (permanent shortening of the muscle) forms, limiting joint mobility.

- **Joint deformities such as foot drop/wrist drop**
- **Stiffness and pain in the joints**. Without movement, the collagen (connective) tissues at the joint become ankylosed (permanently immobile). In addition, as the bones demineralize, excess calcium may deposit in the joints, contributing to stiffness a joints.

G. Type of Exercise

a. **Isotonic (dynamic)** exercises are those in which the muscle shortens to produce muscle contraction and active movement. Most physical conditioning exercises— running, walking, swimming, cycling, and other such activities—are isotonic, as are ADLs and active ROM/Range of Motion exercises (those Initiated by the client).

b. **Isometric** (static or setting) exercises are those in which muscle contraction occurs without moving the joint (muscle length does not change). These exercises involve exerting pressure against a solid object and are useful for strengthening abdominal, gluteal, and quadriceps muscles used in ambulation; for maintaining strength in immobilized muscles in casts or traction; and for endurance training.

c. **Isokinetic** (resistive) exercises involve muscle contraction or tension against resistance. During isokinetic exercises, the individual tenses (isometric) against resistance. Special machines or devices provide the resistance to the movement

H. Nursing Care Patient Activity and Exercise Need

1. Assessment

a. Nursing History:

An activity and exercise history is usually part of the comprehensive nursing history. Examples of interview questions to elicit these data are shown below:

- Daily activity level:
  - What activities do you carry out during a routine day? Are you able to carry out the following tasks independently? Eating, Dressing and Grooming, Bathing, Toileting Ambulating, Using a Wheelchair, Transferring In and Out of Bed, Bath, and Car, Cooking, House Cleaning, Shopping
  - Where problems exist in your ability to carry out such tasks
  - Would you rate yourself as partially or totally dependent?
  - How is the task achieved (by family, friend, agency, or use of specialized equipment)?
- Activity tolerance:
  - What types of activities make you tired?
  - Do you ever experience dizziness shortness of breath, marked increase in respiratory rate, or other problems following mild or moderate activity?
- Exercise:
  - What type of exercise do you carry out to enhance your physical fitness?
  - What is the frequency and length of this exercise session?
  - Do you believe exercise is beneficial to your health? Explain

b. Physical Examination.

Physical examination related to activity and exercise:

- body alignment
- gait
- appearance
- movement of joints,
- capabilities and limitations for movement,
- muscle mass and strength (0–5),
- activity tolerance, and problems related to immobility.

2. Nursing diagnosis

The following are examples of nursing diagnoses applicable to activity and exercise need (NANDA, 2021):

a) Activity intolerance
b) Impaired physical mobility
c) Inadequate physical energy for activities
d) Risk for disuse syndrome

3. Planning

The goals established for clients will vary according to the nursing diagnosis and signs and symptoms related to each individual. The client will have:

- Increased tolerance for physical activity
- Restored or improved capability to ambulate and participate in ADLs
- Absence of injury from falling or improper use of body mechanics
- Absence of any complications associated with immobility.

4. Implementation

Maintaining musculoskeletal function:

a. **Providing Range of Motion (ROM) Exercises**

Active Range of Motion

Active ROM exercises are isotonic exercises in which the client moves each joint in the body through its complete range of movement, maximally stretching all muscle groups within each plane over the joint. These exercises maintain or increase muscle strength and endurance and help to maintain cardiorespiratory function in an immobilized client. They also prevent deterioration of joint capsules, ankylosis, and contractures (permanent shortening of the muscle). Client can do the exercise by themself and nurse as instructor.

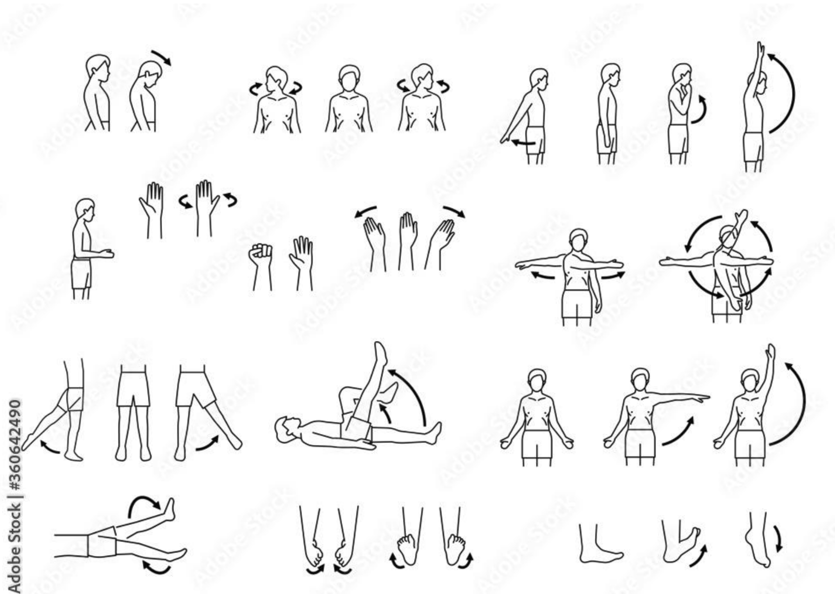
Passive ROM Exercises

Different from active ROM, in passive ROM, Nurse or physiotherapy will moves each of the client's joints through its complete range of movement, maximally stretching all muscle groups within each plane over each joint. Because the client does not contract the muscles, passive ROM exercise is of no value in maintaining muscle strength but is useful in maintaining joint flexibility. The movements should be systematic, and the same sequence should be followed during each exercise session. Each exercise should be repeated, at the client's tolerance, from three to five times. The series of exercises should be done twice daily. Types of joint movement in ROM (Range of Motion):

- **Flexion** Decreasing the angle of the joint (e.g., bending the elbow)

- **Extension** Increasing the angle of the joint (e.g., straightening the arm at the elbow)
- **Hyperextension** Further extension or straightening of a joint
- **Abduction** Movement of the bone away from the midline of the body
- **Adduction** Movement of the bone toward the midline of the body
- **Rotation** Movement of the bone around its central axis
- **Circumduction** Movement of the distal part of the bone in a circle while the proximal end remains fixed
- **Eversion** Turning the sole of the foot outward by moving the ankle joint
- **Inversion** Turning the sole of the foot inward by moving the ankle joint
- **Pronation** Moving the bones of the forearm so that the palm of the hand faces downward when held in front of the body

Figure 8. Range of Motion



source:https://stock.adobe.com/images/human-body-range-of-motion-body-movement-icon-set/360642490

b. Positioning

Positioning a client in good body alignment and changing the position regularly (every 2 hours) and systematically are essential aspects of nursing practice

- **Supine Position**, in supine position, the patient is face up with their head resting on a pad positioner or pillow and their neck in a neutral position. The supine position is one of the most natural positions for patients and usually allows for all patient anatomical structures to remain in natural neutral alignment.
- **Fowler's position,** patient position with a bed

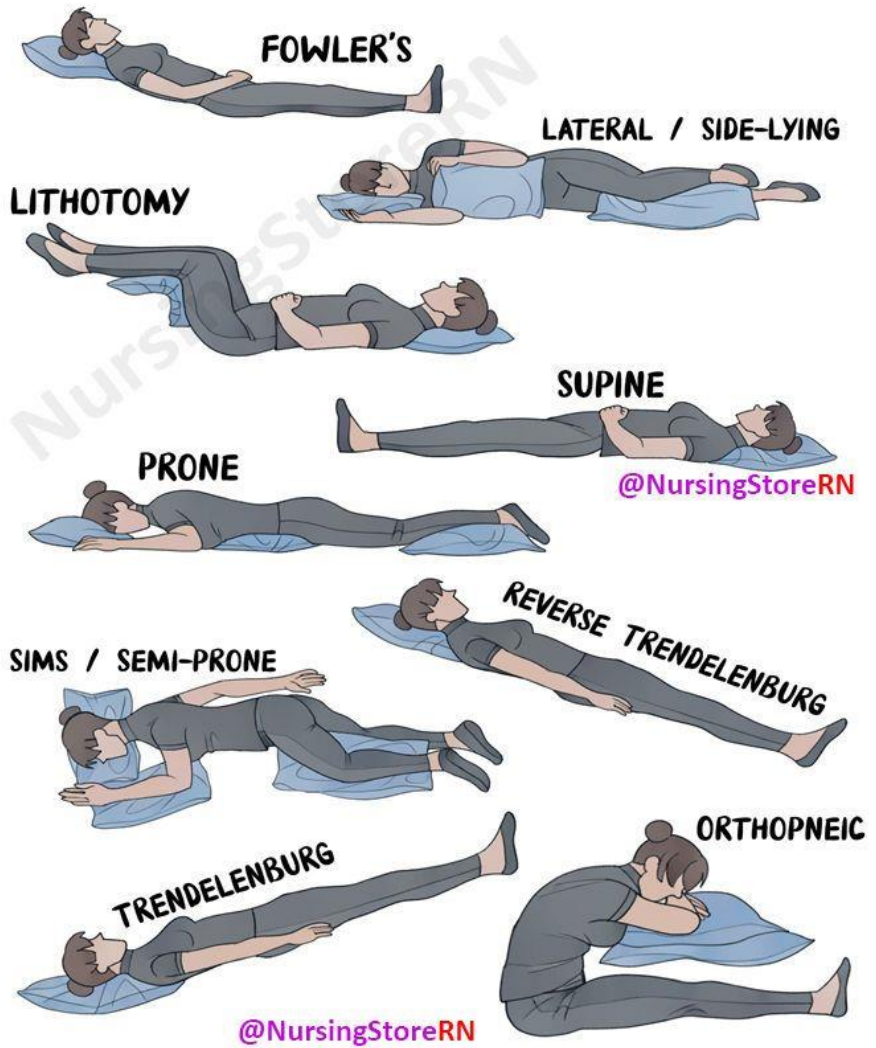
position in which the head and trunk are raised 45° to 60°. But Typically, Fowler's position refers to a 45° angle of elevation of the upper body.

- **Semi-Fowler's position** is when the head and trunk are raised 15° to 45°. This position is sometimes called low Fowler's and typically means 30° of elevation.
- **High-Fowler's position**, the head and trunk are raised 60° to 90°, and most often the client is sitting upright at a right angle to the bed Fowler's position is the position of choice for people who have difficulty breathing and for some people with heart problems. When the client is in
- **Lateral (side-lying) position,** the client lies on one side of the body. Flexing the top hip and knee and placing this leg in front of the body creates a wider, triangular base of support and achieves greater stability. This flexion reduces lordosis and promotes good back alignment. For this reason, the lateral position is good for resting and sleeping clients. The lateral position helps to relieve pressure on the sacrum and heels.
- **Dorsal recumbent position**, a position in which the patient lies on the back with the lower extremities moderately flexed and rotated outward. It is employed in the application of obstetric examination, catheterization and helping for fecal or urinary elimination
- **Prone Position**, in prone position, the patient lies on the abdomen with head turned to one side and the hips are not flexed. The prone position also promotes drainage from the mouth and

is especially useful for unconscious clients or those clients recovering from surgery of the mouth or throat.

Sims' Position (semi prone), the lower arm is positioned behind the client, and the upper arm is flexed at the shoulder and the elbow. Both legs are flexed in front of the client. The upper leg is more acutely flexed at both the hip and the knee than is the lower one. Sims' position may be used for unconscious clients because it facilitates drainage from the mouth and prevents aspiration of fluids. It is also used for paralyzed clients because it reduces pressure over the sacrum and greater trochanter of the hip. It is often used for clients receiving enemas and occasionally for clients undergoing examinations or treatments of the perineal area. Many clients, especially pregnant women, find Sims' position comfortable for sleeping. Clients with sensory or motor deficits on one side of the body usually find. See the illustration of position in Figure 9 below:

Figure 9. Body Position

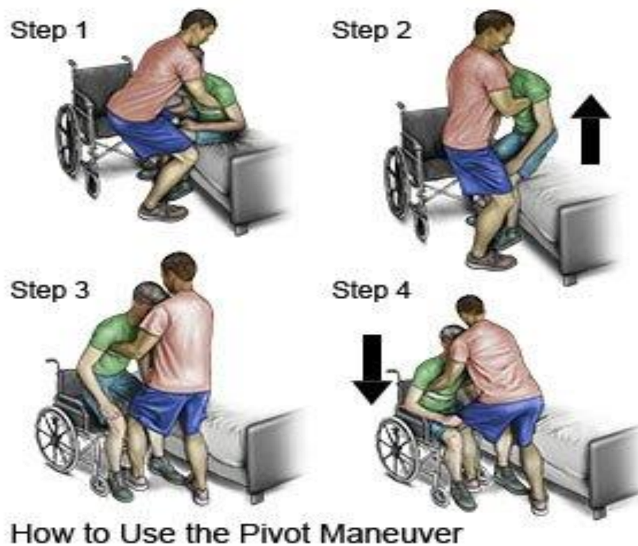


source: https://www.pinterest.co.uk/pin/patient-positioning-nursing--470626229820825329/

I. Transferring Patient

Many clients require some assistance in transferring between bed and chair or wheelchair, between wheelchair and toilet, and between bed and stretcher. Before transferring any client, however, the nurse must determine the client's physical and mental capabilities to participate in the transfer technique from wheel chair to bed, from bed to wheel chair, from bed to stretcher, from stretcher to bed.

Figure 10. Safe Transferring Patient



Source: Fundamental of Nursing: Concepts, Process and Practice*.* (2022)

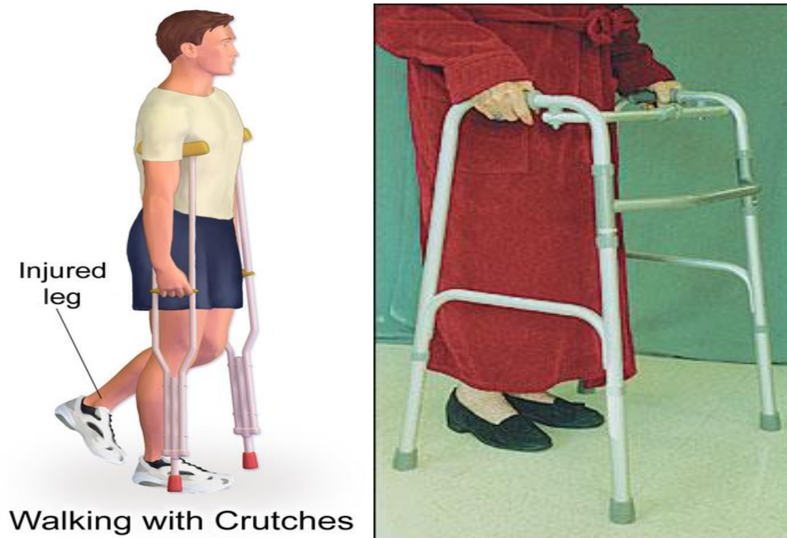
J. Using Mechanical Aids for Ambulation Including Canes Walkers, and Crutches

Assistive devices for ambulation are tools used to aid in walking. The most common types ambulation devices include: canes, Crutches and walker. You need to know how to use correctly to teach and train for patient.

- **Cane**. Canes Three types of canes are commonly used: the standard straight-legged cane; the tripod cane, which has three feet; and the quad cane, which has four feet and provides the most support
- **Walker**. Walkers are mechanical devices for ambulatory clients who need more support than a cane provides and lack the strength and balance required for crutches. Walkers come in many different shapes and sizes, with devices suited to individual needs. The standard type is made of polished aluminum. It has four legs with rubber tips and plastic handgrips.
- **Crutches**. Crutches may be a temporary need for some clients and a permanent one for others. Crutches should enable a client to ambulate independently; therefore, it is important to learn to use them properly. The most frequently used kinds of crutches are the underarm crutch, or axillary crutch with hand bars, and the Lofstrand crutch, which extends only to the forearm. On the Lofstrand crutch, the metal cuff around the forearm and the metal bar stabilize the wrists and thus make walking easier, especially on stairs. All crutches require suction tips, usually made of rubber, which help to prevent slipping on a floor surface

Figure 11. Walking with Crutch

Figure 12. Walking with Walker



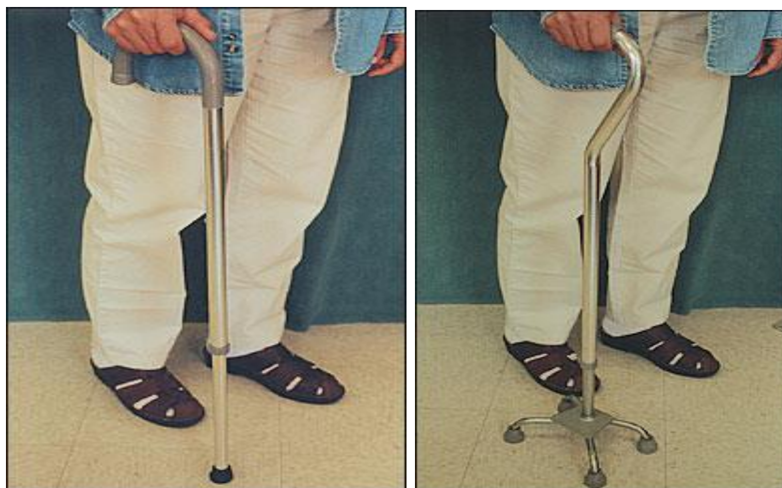


Figure 13. Walking with Canes

Source: Fundamental of Nursing: Concepts, Process and Practice. (2022)

SUMMARY

Exercise and activity are essential components for maintaining and regaining health and wellness. Research on exercise has demonstrated it to be an excellent strategy for preventing and treating some cardiovascular and pulmonary diseases, mood disorders, diseases of aging, diabetes, and immune diseases. The ability to move freely, easily, and purposefully in the environment is essential for individuals to meet their basic needs.

Purposeful coordinated movement of the body relies on the integrated functioning of the musculoskeletal system. Nursing diagnoses that relate to activity and mobility problems can include actual and potential for inadequate physical energy for activities, and inactive lifestyle. Other relevant diagnoses are fear (of falling), impaired self-esteem, potential for falling, and, if the client is immobilized, many other potential problems such as altered respiratory status and potential for infection.

Review Question:

1. A nurse is caring for a client diagnosed with early osteoporosis. Which intervention is most applicable for this client?
   A. Institute an exercise plan that includes weight-bearing activities.
   B. Increase the amount of calcium in the client's diet
   C. Protect the client's bones with strict bed rest
   D. Provide the client with assisted range-of-motion exercising twice daily
2. A nurse is providing range-of-motion exercising to a client's elbow when the client complains of pain. What action should the nurse take?

A. Stop immediately and report the pain to the client's physician.
B. Discontinue the treatment and document the results in the medical record.
C. Reduce the movement of the joint just until the point of slight resistance.
D. Continue to exercise the joint as before to loosen the stiffness

3. The nurse is performing an assessment of an immobilized client. Which assessment causes the nurse to take action?
   A. Heart rate 86 beats/min
   B. Reddened area on sacrum
   C. Nonproductive cough
   D. Urine output of 50 mL/h
4. Five minutes after the client's first postoperative exercise, the client's vital signs have not yet returned to baseline. Which is an appropriate nursing diagnosis?
   A. Inadequate physical energy for activities
   B. Potential for inadequate physical energy for activities
   C. Impaired self-esteem
   D. Potential for falling
5. The client is ambulating for the first time after surgery. The client tells the nurse, "I feel faint." Which is the best action by the nurse?
   A. Find another nurse for help.
   B. Return the client to her room as quickly as possible.
   C. Tell the client to take rapid, shallow breaths.
   D. Assist the client to a nearby chair

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CHAPTER 8

CONCEPT OF SLEEP AND REST NEED

LEARNING OBJECTIVES

After completing this lecture student able to:

1. Explain the physiology and the functions of sleep.
2. Identify the characteristics of the NREM and REM sleep states.
3. Describe variations in sleep patterns throughout the lifespan.
4. Identify factors that affect sleep and rest.
5. Describe common sleep disorders
6. Identify nursing interventions designed to promote normal rest and sleep cycles for patients of all ages.

A. Anatomy & Physiology Review of Sleep

Sleep is a basic human need; it is a universal biological process common to all individuals. Humans spend about one-third of their lives asleep. We require sleep for many reasons: to cope with daily stresses, to prevent fatigue, to conserve energy, to restore the mind and body, and to enjoy life more fully. Sleep enhances daytime functioning and is vital for cognitive, physiologic, and psychosocial function. Sleeping allows the brain to restore itself. During sleep the body clears itself of adenosine. This action allows an individual to awaken feeling alert and refresh.

Neurotransmitters, located within neurons in the brain, affect the sleep-wake cycle. For example, serotonin is thought to lessen the response to sensory stimulation and gamma-amino

butyric acid (GABA) to shut off the activity in the neurons of the reticular activating system. Another key factor to sleep is exposure to darkness. Darkness and preparing for sleep (e.g., lying down, decreasing noise) cause a decrease in stimulation of the Reticular Activating System (RAS). During this time, the pineal gland in the brain begins to actively secrete the natural hormone melatonin, and the individual feels less alert. During sleep, the growth hormone is secreted and cortisol is inhibited. With the beginning of daylight, melatonin is at its lowest level in the body and the stimulating hormone, cortisol, is at its highest. Wakefulness is also associated with high levels of acetylcholine, dopamine, and noradrenaline. Acetylcholine is released in the reticular formation, dopamine in the midbrain, and noradrenaline in the pons. These neurotransmitters are localized within the reticular formation and influence cerebral cortical arousal.

Reticular Activating System (RAS)

Nerve impulses from the senses reach the reticular activating system (RAS), which is in the reticular formation (located in the brainstem) with projections to the hypothalamus and cerebral cortex. The nerve fibers in the RAS relay impulses to the cerebral cortex for perception by the individual.

B. Types of Sleep

The two types of sleep are:

1) **NREM (Non–Rapid Eye Movement)**

NREM occurs when activity in the RAS is inhibited. About 75% of sleep during a night is NREM sleep. NREM divided into three stages. Each of the stages is associated with distinct brain activity and physiology.

- Stage 1 is the stage of very light sleep and lasts only a few minutes. During this stage, the individual feels drowsy and

relaxed, the eyes roll from side to side, and the heart and respiratory rates drop slightly. The sleeper can be readily awakened and may deny that he or she was sleeping.

- Stage 2 is the stage of sleep during which body processes continue to slow down. The eyes are generally still, the heart and respiratory rates decrease slightly, and body temperature falls. An individual in stage 2 requires more intense stimuli than in stage 1 to awaken, such as touching or shaking.
- Stage 3 is the deepest stage of sleep, differing only in the percentage of delta waves recorded during a 30- second period. During deep sleep or delta sleep, the sleeper's heart and respiratory rates drop 20% to 30% below those exhibited during waking hours. The sleeper is difficult to arouse. The individual is not disturbed by sensory stimuli, the skeletal muscles are very relaxed, reflexes are diminished, and snoring is most likely to occur. This stage is essential for restoring energy and releasing important growth hormones.

2) REM Sleep

REM sleep usually recurs about every 90 minutes and lasts 5 to 30 minutes. Most dreams take place during REM sleep but usually will not be remembered unless the individual arouses briefly at the end of the REM period. During REM sleep, the brain is highly active, and brain metabolism may increase as much as 20%. The healthy adult sleeper usually experiences four to six cycles of sleep during 7 to 8 hours.

C. Factors Affecting Sleep

1). Illness

Illness that causes pain or physical distress (e.g., arthritis, back pain, respiratory problems/SOB, high body temperature, stomach pain and other problems) can result in sleep problems. Individuals who are ill require more sleep than normal, and the normal rhythm of sleep and wakefulness is often disturbed. Individuals deprived of REM sleep subsequently spend more sleep time than normal in this stage.

2). Environment can promote or hinder sleep.

Any change, such as noise in the environment, can inhibit sleep. Hospital environments can be quite noisy, and special care needs to be taken to reduce noise in the hallways and nursing care units. Discomfort from environmental temperature (e.g., too hot or cold) and lack of ventilation can affect sleep. Light levels can be another factor. An individual accustomed to darkness while sleeping may find it difficult to sleep in the light. Another influence includes the comfort and size of the bed. An individual's partner who has different sleep habits, snores, or has other sleep difficulties may become a problem for the individual also.

3) Lifestyle

Following an irregular morning and nighttime schedule can affect sleep. Moderate exercise in the morning or early afternoon is usually conducive to sleep, but exercise late in the day can delay sleep. The individual's ability to relax before retiring is an important factor affecting the ability to fall asleep. It is best, therefore, to avoid doing homework or office work before or after getting into bed. Night shift workers frequently obtain less sleep than other

workers and have difficulty falling asleep after getting off work. Wearing dark wraparound sunglasses during the drive home and light-blocking shades in the bedroom can minimize the alerting effects of exposure to daylight, thus making it easier to fall asleep when body temperature is rising

4) **Emotional stress**

Stress is considered by most sleep experts to be the one of the greatest causes of difficulties in falling asleep or staying asleep. Clients who are consistently exposed to stress will increase the activation of the hypothalamic–pituitary–adrenal (HPA) axis leading to sleep disorders. An individual who becomes preoccupied with personal problems (e.g., school- or job-related pressures, family or marriage problems) may be unable to relax sufficiently to get to sleep. Anxiety increases the norepinephrine blood levels through stimulation of the sympathetic nervous system. This chemical change results in less deep and REM sleep and more stage changes and awakenings

5) **Medications**

Some medications affect the quality of sleep. Most hypnotics can interfere with deep sleep and suppress REM sleep. Beta blockers have been known to cause insomnia and nightmares. Narcotics, such as morphine, are known to suppress REM sleep and to cause frequent awakenings and drowsiness. Tranquilizers interfere with REM sleep. Although antidepressants suppress REM sleep, this effect is considered a therapeutic action.

D. Common Sleep Disorder

1) **Insomnia** is described as the inability to fall asleep or remain asleep. The presence of an individual's report of difficulty with sleep.
2) **Narcolepsy** is a sleep disorder that makes people very drowsy during the day. People with narcolepsy find it hard to stay awake for long periods of time. They fall asleep suddenly. This can cause serious problems in their daily routine.
3) **Parasomnias** is behavior that may interfere with sleep and may even occur during sleep. It is characterized by physical events such as movements or experiences that are displayed as emotions, perceptions, or dreams. Parasomnias with non–rapid eye movement are associated with sleep terrors, sleepwalking, nightmare

E. Sleep and Rest

When people are at rest, they usually feel mentally relaxed, free from anxiety, and physically calm. When people are at rest, they are in a state of mental, physical, and spiritual activity that leaves them to feeling refreshed and ready to resume the captivities of the day. People have their own habits for obtaining rest and can find ways to adjust environment or conditions that affect their ability to rest. Activities relate to rest including: reading book, practicing a relaxation exercise, listening to music, taking a long walk.

a. Assessment

1) Sleep History:
   - How would you describe your sleeping problem?
   - What changes have occurred in your sleeping pattern?
   - How often does this happen?

- How many cups of coffee, tea, or caffeinated beverages do you drink per day?
- Do you have difficulty falling asleep?
- Do you wake up often during the night? If so, how often?
- Do you wake up earlier in the morning than you would like and have difficulty falling back to sleep?
- How do you feel when you wake up in the morning?
- Are you sleeping more than usual? If so, how often do you sleep?
- Do you have periods of overwhelming sleepiness? If so, when does this happen?
- Have you ever suddenly fallen asleep in the middle of a daytime activity? Does anything unusual happen when you laugh or get angry?
- Has anyone ever told you that you snore, walk in your sleep, or stop breathing for a while when sleeping?
- What have you been doing to deal with this sleeping problem? Does it help?
- What do you think might be causing this problem?
- Do you have any medical condition that might be causing you to sleep more (or less)?
- Are you receiving medications for an illness that might alter your sleeping pattern?
- Are you experiencing any stressful or upsetting events or conflicts that may be affecting you

2) Health History

A health history is obtained to rule out medical or psychiatric causes of the client's difficulty sleeping. It is important to note that the presence of a medical or psychiatric illness (e.g., depression, Parkinson's disease,

Alzheimer's disease, or arthritis) does not preclude the possibility that a second problem (e.g., obstructive sleep apnea) may be contributing to the difficulty sleeping. Because medications can frequently cause or exacerbate sleep disturbances, information should be obtained about all of the prescribed and nonprescription medications, including herbal remedies, that a client consumes

b. Nursing Diagnosis

The following are examples of nursing diagnoses applicable to sleep and rest need (NANDA, 2021):

1) Fatigue related to insufficient sleep
2) Insomnia related to disruption in amount and quality of sleep
3) Sleep deprivation related to prolonged periods of time without sleep
4) Ineffective coping related to insufficient quality and quantity of sleep
5) Deficient knowledge related to misinformation

c. Planning

The major goal for clients with sleep disturbances:

- Maintain (or develop) a sleeping pattern that provides sufficient energy for daily activities.
- Enhancing the client's feeling of well-being or improving the quality and quantity of the client's sleep.

d. Implementation

1) **Bedtime Rituals (Sleep Rituals).** Common prebedtime (sleep rituals) activities of adults include listening to music, reading, taking a soothing bath,

and praying. Children need to be socialized into a presleep routine such as a bedtime story, holding onto a favorite toy or blanket, and kissing everyone goodnight. Sleep is also usually preceded by hygienic routines, such as washing the face and hands (or bathing), brushing the teeth, and voiding.

2) **Creating a Restful Environment**. Everyone needs a sleeping environment with minimal noise, a comfortable room temperature, appropriate ventilation, and appropriate lighting.

3) **Promoting Comfort and Relaxation**.
   - Provide loose-fitting nightwear
   - Assist clients with hygienic routines
   - Relaxation techniques can be encouraged as part of the nightly routine. Slow, deep breathing for a few minutes followed by slow, rhythmic contraction and relaxation of muscles can alleviate tension and induce calm.
   - Before the client goes to bed, warm the bed with prewarmed bath blankets
   - Use 100% cotton flannel sheets or apply thermal blankets between the sheet and bedspread.
   - Encourage the client to wear own clothing, such as flannel nightgown or pajamas, socks, leg warmers, long underwear, sleeping cap (if scalp hair is sparse), or sweater, or use extra blankets.

SUMMARY

The 24-hour sleep-wake cycle is a circadian rhythm that influences physiological function and behavior. The control and regulation of sleep depend on a balance among regulators within the CNS. During a typical night's sleep, a person passes through four to five complete sleep cycles. Each sleep cycle contains three NREM stages of sleep and a period of REM sleep; time in each stage varies. Sleep provides physiological and psychological restoration. Sleep requirements vary by age, with neonates sleeping on average 16 hours a day and older adults needing 7 to 8 hours of sleep a night.

Review Question:

1. A client complains of being unable to stay awake during the day even after sleeping throughout the night. What should the nurse suggest to this client?
   A. Go to your physician for a physical examination
   B. Go to a mental health professional for evaluation of possible depression.
   C. Purchase an over-the-counter sleep aid to deepen nighttime sleep.
   D. Drink more caffeinated beverages in the daytime to stay awake.
2. During a yearly physical, a 52-year-old male client mentions that his wife frequently complains about his snoring. During the physical exam, the nurse notes that his neck size is 18 inches, his soft palate and uvula are reddened and swollen, and he is overweight. What is the most appropriate nursing intervention for the nurse to recommend to this client?
   A. Recommend that he and his wife sleep in separate

bedrooms so that his snoring does not disturb his wife.

B. Refer him to a dietitian for a weight-loss program.

C. Caution him not to drink or take sleeping pills since they may make his snoring worse.

D. Refer him to a sleep disorders center for evaluation and treatment of his symptoms.

3. Which statement made by the patient indicates an understanding of sleep-hygiene practices?

   A. “I usually drink a cup of warm milk in the evening to help me sleep.”

   B. “If I exercise right before bedtime, I will be tired and fall asleep faster

   C. “I know it does not matter what time I go to bed as long as I tired

   D. If I use hypnotic for a long time, my insomnia will be cured

4. A nurse is taking a sleep history from a patient. Which statement made by the patient needs further follow-up? 1.

   A. “I feel refreshed when I wake up in the morning.”

   B. “I use soft music at night to help me relax.”

   C. “It takes me about 45 to 60 minutes to fall asleep.”

   D. “I take the pain medication for my leg pain about 30 minutes before I go to bed.”

1. A nurse is admitting a critically ill client to the intensive care unit. What questions should the nurse ask regarding this client’s sleep history?

   A. No questions should be asked.

   B. When do you usually go to sleep?

   C. Do you have any problems with sleeping?

   D. What are your bedtime rituals?

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CHAPTER 9

CONCEPT OF HIGIENE NEED

LEARNING OBJECTIVES

After completing this chapter, student will be able to:

1. Describe hygienic care that nurses provide to clients.
2. Identify factors influencing personal hygiene.
3. Identify normal and abnormal assessment findings while providing hygiene care.
4. Apply the nursing process.

A. Hygiene

Hygiene is the science of health and its maintenance. Personal hygiene is the self-care by which individuals attend to such functions as bathing, toileting, general body hygiene, and grooming. Hygiene is a highly personal matter determined by individual and cultural values and practices. It involves care of the skin, feet, nails, oral and nasal cavities, teeth, hair, eyes, ears, and perineal-genital areas.

Before learning this chapter, students require to review the structural anatomy of the skin, eye, mouth, nail, ear, genital, and hair.

Skin

The skin is the largest organ of the body. It serves five major functions:

1) It protects underlying tissues from injury by preventing the passage of microorganisms. The skin and mucous membranes are considered the body's first line of

defense.

2) It regulates the body temperature.
3) It secretes sebum, an oily substance that (a) softens and lubricates the hair and skin, (b) prevents the hair from becoming brittle, and (c) decreases water loss from the skin when the external humidity is low.
4) It transmits sensations through nerve receptors, which are sensitive to pain, temperature, touch, and pressure.
5) It produces and absorbs vitamin D in conjunction with ultraviolet rays from the sun, which activate a vitamin D precursor present in the skin.

The presence of past or current skin problems alerts the nurse to specific nursing interventions or referrals the client may require. Many skin care conditions have implications for hygienic care. Common skin problem:

- Dry Skin
- Pruritus
- Acne
- Abrasion
- Body odor

The Feet, Hands, and Nails

The feet, hands and nails often require special attention to prevent infection, odor, and injury. The condition of a patient's hands and feet influences the ability to perform hygiene care. Without the ability to bear weight, ambulate, or manipulate the hands, a patient is at risk for losing self-care ability. Foot pain often changes a patient's gait, causing strain on different joints and muscle groups. Discomfort while standing or walking limits self-care abilities. The nails are epithelial tissues that grow from the root of the nail bed, located in the skin at the nail groove hidden by a fold of skin called the cuticle. A normal

healthy nail appears transparent, smooth, and convex, with a pink nail bed and translucent white tip. Inadequate nutrition and disease cause changes in the shape, thickness, and curvature of the nail. Common problem of the foot and nails:

- Callus
- Plantar warts
- Paronychia
- Ingrown Toenails
- Foot odors

The Oral Cavity

The oral cavity consists of the lips surrounding the opening of the mouth, the cheeks running along the sidewalls of the cavity, the tongue and its muscles, and the hard and soft palate. Dehydration, and mouth breathing may impair salivary secretion in the mouth, which increases the patient's risk for xerostomia, or dry mouth. Difficulty in chewing develops when surrounding gum tissues become inflamed or infected or when teeth are lost or become loosened. Regular oral hygiene helps to prevent **gingivitis** (i.e., inflammation of the gums) and dental caries (i.e., tooth decay produced by interaction of food with bacteria). Common problem of oral cavity:

- Halitosis/mouth odor
- Glossitis/Inflammation of the tongue
- Gingivitis/Inflammation of the gums
- Cheilosis/Cracking of lips
- Dental caries
- Stomatitis Inflammation of the oral mucosa

The Hair

The hair growth, distribution, and pattern indicate a person's general health status. Special hair-care practices focus on the

care of the scalp, axilla, and pubic areas. Hormonal changes, nutrition, emotional and physical stress, aging, infection, and some illnesses affect hair characteristics such as hair color and hair distribution.

Common problem of the hair:

- Pediculosis/Lice
- Hirsutism
- Alopecia/Hair loss

The Eyes, Ears, and Nose

When providing hygiene, the eyes, ears, and nose require careful attention because of sensitive anatomical structures. For example, the cornea of the eye contains many nerve endings sensitive to irritants such as soap. The eyes secrete tears, which contain substances to cleanse and lubricate the eye and protect it from bacteria. Specialized glands in the auditory canal secrete cerumen, which traps foreign bodies and repels insects. Cerumen builds up and becomes impacted in some people. Patients with alterations in one or more of the senses often need help to meet their hygiene needs.

Common Problems of eyes, ear nose:

- Cerumen
- Infection
- Eye inflammation/Red eyes

Perineal-Genital Care

Perineal care as part of the bed bath is embarrassing for many clients. Nurses also may find it embarrassing initially, particularly with clients of the opposite sex. Most clients who require a bed bath from the nurse are able to clean their own genital areas with minimal assistance. The nurse may need to

hand a moistened washcloth and soap to the client, rinse the washcloth, and provide a towel. Because some clients are unfamiliar with terminology for the genitals and perineum, it may be difficult for nurses to explain what is expected.

B. Nursing Care Patient with Hygiene Need

1. Nursing History:

a. Skin and Perianal Problem:

- Do you have any tendency toward skin dryness, itchiness, rashes, bruising, excessive perspiration, or lack of perspiration? Have you had skin or scalp lesions in the past? Pruritus in perianal area?
- Do you have any allergic tendencies? If so, what allergic?
- What is your usual showering or bathing times?
- What hygienic products do you routinely use (e.g., bath oils, powder, facial cleansing creams, body lotions or creams, deodorants, antiperspirants)?
- Do you have any problems managing your hygienic practices (e.g., baths and facial care)?
- Do you have any problem with area perianal? redness, odor?

b. Oral/Mouth Problem

- What are your usual mouth care or denture care practices?
- What oral hygiene products do you routinely use (e.g., mouthwash, type of toothpaste, dental floss, denture cleaner)?
- Do you have any loose or sensitive teeth?
- Do you experience bleeding after brushing or flossing your teeth?

- When was your last dental examination, and how often do you see your dentist?
- Do you have any problems managing your mouth care?
- Have you had or do you have any problems such as bleeding, swollen, or reddened gums, ulcerations, lumps, or tooth pain?
- Have your eating patterns changed due to mouth pain or discomfort with chewing?

c. Foot and Nails Problem:

- How often do you wash your feet and cut your toenails?
- What hygiene products do you usually use on your feet (e.g., soap, foot powder or deodorant, lotion, or cream)?
- What type of shoes and socks do you wear?
- How often do you put on clean socks?
- Do you have any problems managing your foot care?
- How can the nurses best help you?
- Do you have any problems with foot odor?
- Do you have any foot discomfort? If so, where?
- Does this discomfort affect how you walk?
- Have you noticed any problems with foot mobility (e.g., joint stiffness)?
- Do you have diabetes, any circulatory problems with feet (e.g., swelling, changes in skin color, arthritis)
- What are your usual nail care practices?
- Do you have any problems managing your nail care? If so, what are they?
- Have you had any problems associated with your nails (e.g., inflammation of the tissue surrounding the nail, injury, prolonged exposure to water or chemicals, circulatory problems)

2. Physical Assessment:

a. Physical assessment of the skin and perianal Inspection and palpation:
   - color of skin
   - texture
   - turgor
   - temperature
   - lesion
   - Inflammation/redness

b. Physical assessment of foot and toe:
   Palpation and inspection:
   - Inspect the condition of the fingernails and toenails, looking for lesions, dryness, inflammation, or cracking, which are often associated with a variety of common foot and nail problems
   - palpate to assess areas of tenderness, edema, and circulatory status.

c. Physical assessment of oral/mouth:
   - Inspect all areas of the mouth carefully for color, hydration, texture, and lesions teeth, and halitosis (foul-smelling breath)
   - Observe for cleanliness and use olfaction to detect halitosis.

d. Physical assessment of hair:
   - Observe a patient's ability to perform hair care. A person's appearance and feeling of well-being often are related to the way the hair looks and feels. Illness, disability, and conditions such as arthritis, fatigue, obesity, and the presence of physical barriers.
   - Physical Assessment of ear, nose, eye:
   - Examine the condition and function of the eyes, ears, and nose.

- The presence of redness indicates allergic or infectious conjunctivitis.
- Inspect of the external ear structures includes inspection of the auricle and external ear canal
- Observe for the presence of accumulated cerumen (earwax) or drainage in the ear canal and local inflammation.

3. Nursing Diagnose

The following are examples of nursing diagnoses applicable to hygiene need (NANDA, 2021):

1) Activity Intolerance
2) Impaired Dressing and Grooming
3) Impaired Mobility
4) Impaired Health Maintenance
5) Impaired Skin Integrity

4. Planning

Planning to assist a client with personal hygiene includes consideration of the client's personal preferences, health, and limitations; the best time to give the care; and the equipment, facilities, and personnel available. A client's personal preferences—about when and how to bathe, for example—should be followed as long as they are compatible with the client's health and the equipment available. Another consideration for the nurse is to assess the client's comfort level with the gender of the caregiver. Hygienic care, particularly bathing and perianal care, can be embarrassing and stressful to modest individuals. Nurses must respect a client's modesty, whether male or female, and provide adequate privacy and sensitivity. If possible, try to provide a caregiver of the same gender.

5. Implementation

a. Hygiene of skin (skin care)

- **Bathing/Bed Bath**

  Bathing removes accumulated oil, perspiration, dead skin cells, and some bacteria. Applications of oil over several days are usually necessary to remove the debris. Bathing also stimulates circulation. A warm or hot bath dilates superficial arterioles, bringing more blood and nourishment to the skin. Vigorous rubbing has the same effect. Rubbing with long, smooth strokes from the distal to proximal parts of extremities (from the point farthest from the body to the point closest) is particularly effective in facilitating venous blood flow return.

  Bathing also produces a sense of well-being. It is refreshing and relaxing and frequently improves morale, appearance, and self-concept. Some people take a morning shower for its refreshing, stimulating effect. Others prefer an evening bath because it is relaxing. These effects are more evident when an individual is ill. For example, it is not uncommon for clients who have had a restless or sleepless night to feel relaxed, comfortable, and sleepy after a morning bath.

- **Perineal/Genital Care**

  Cleansing patients' genital and anal areas is called perineal care. It usually occurs as part of a complete bed bath; however, it must be provided at least once a day and more often (see agency policy) if a patient has a urinary catheter. Patients most in need of perineal care include those at greatest risk for acquiring an infection (e.g., uncircumcised males, patients who have

indwelling urinary catheters, or those who are recovering from rectal or genital surgery or childbirth). Sometimes you are embarrassed about providing perineal care, particularly to patients of the opposite sex. Similarly, the patient may feel embarrassed. Do not let embarrassment cause you to overlook the patient's hygiene needs. A professional, dignified, and sensitive approach reduces embarrassment and helps put the patient at ease. If a patient performs self-care, various problems such as vaginal and urethral discharge, skin irritation, and unpleasant odors often go unnoticed. Stress the importance of perineal care in preventing skin breakdown and infection. Be alert for complaints of burning during urination or localized soreness, excoriation, or pain in the perineum.

- **Bed Making**

  Bed-making is an essential procedure in nursing in which nurses prepare and arrange different types of beds for the client's comfort in the hospital or other health care institutions. Bed-making procedure ensures the patient's comfort according to the situation. This requires frequent inspection to be sure that linen is clean, dry, and free of wrinkles. When patients are diaphoretic, have draining wounds, or are incontinent, check more frequently for wet or soiled linen. Usually, you make a bed in the morning after patients bathe or while they bathe at a sink or in a shower. Bed making divided into:
  - **Occupied bed making**
  - **Un-occupied bed making**

b. Feet and nails care

- Foot care (especially for patient with diabetic)
- Nail care

- Keep skin soft and smooth by applying an emollient lotion over all surfaces of
- the feet but not between toes.
- Wear well-fitting shoes and clean, dry socks at all the time, never go barefoot.

c. Mouth/oral care

- **Oral Hygiene**

  Regular oral hygiene, including brushing, flossing, and rinsing, prevents and controls plaque-associated oral diseases. When patients become ill, many factors influence their need for oral hygiene, such as their ability to take fluids orally, presence of oral lesions or trauma, and level of consciousness. Patients who are unconscious or have artificial airways, such as tracheostomy or endotracheal tube, have special precautions for oral care because they do not have a gag reflex. Patients in hospitals or long-term care facilities do not always receive the aggressive oral care they need.
- **Brushing**

  Effective oral hygiene includes brushing the teeth at least twice a day. Fluoride and antimicrobial mouth rinses help prevent tooth decay. The toothbrush needs to have a straight handle and a brush small enough to reach all areas of the mouth. Rounded soft bristles stimulate the gums without causing abrasion and bleeding.

- **Denture Care**

  Encourage patients to clean their dentures on a regular basis to avoid gingival infection and irritation. When patients become disabled, someone else assumes responsibility for denture care. Dentures are a patient's

personal property and must be handled with care because they break easily. They must be removed at night to rest the gums and prevent bacterial buildup. To prevent warping, keep dentures covered in water when they are not worn and always store them in an enclosed, labeled cup with the cup placed on the patient's bedside stand. Discourage patients from removing their dentures and placing them on a napkin or tissue because they could easily be thrown away.

4. Hair care

- **Shampooing**

  The Frequency of shampooing depends on a person's daily routines and the condition of the hair. Remind patients in hospitals or extended-care facilities that staying in bed, excess perspiration, or treatments that leave blood or solutions in the hair require more frequent shampooing. Some patients allowed to sit in a chair choose to be shampooed in front of a sink or over a washbasin; however, certain conditions (e.g., eye surgery or neck injury) limit bending.

- **Hair Brushing and Combing**

  Frequent brushing helps keep hair clean and distributes oil evenly along hair shafts. Combing prevents hair from tangling. Encourage patients to maintain routine hair care and provide help for patients with limited mobility or weakness and those who are confused or weakened by illness. Patients in a hospital or extended-care facility appreciate the opportunity to have their hair brushed and combed before being seen by others. When caring for patients from different cultures, learn as much as possible from them or their families about preferred hair care practices.

SUMMARY

Clients' hygienic practices are influenced by numerous factors including culture, religion, environment, developmental level, health and energy, and personal preferences. The major functions of the skin are to protect underlying tissues, regulate body temperature, secrete sebum, transmit sensations through nerve receptors for sensory perception, and produce and absorb vitamin D in conjunction with ultraviolet rays from the sun.

When planning hygiene care, the nurse must take the client's preferences into consideration. Nurses provide perinea-genital care for clients who are unable to do so for themselves. Nurses can often teach clients how to prevent foot problems.

Oral hygiene should include daily dental flossing and mechanical brushing of the teeth. Regular dental checkups and fluoride supplements are recommended to maintain healthy teeth.

Hair care varies per individual client. It is necessary for the nurse to discuss the client preferences for hair care. Clients with a hearing aid may require nursing assistance with the device. Nurses need to provide a positive and safe environment for clients.

Review Question

1. List function of skin!
2. During assessment nurse found patient has halitosis and stomatitis, explain what are these conditions!
3. State 3 nursing diagnosis related to hygiene!
4. State 5 nursing history related to skin hygiene!
5. What is nursing implementation related to oral care?

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CHAPTER 10

CONCEPT OF COMFORT AND SAFETY NEED

LEARNING OBJECTIVES

After completing this chapter, you should be able to:

1. explain the meaning of comfort and safety
2. list the purposes of providing comfort and safety
3. discuss the measures to promote comfort
4. explain the meaning, purposes and types of safety measures
5. describe the measures to promote environmental safety.

In the previous chapter we discussed about hygienic measures to keep client neat and clean, it is important to meet comfort and safety needs also. In this unit you will learn about comfort and safety measures both at hospital and at home. This will help the care provider to take care of the needs related to comfort and safety. It is important to know about various measures to be adopted for their safety so that helpless patient can be made comfortable as well as safe in their home environment.

A. Providing Comfort to the Patient

Let us now learn about what do you mean by comfort and some of the factors responsible for discomfort of the patient, so that you take certain measures to avoid these discomfort situations.

Comfort is a state of mind in which an individual is generally at peace with himself and with his environment.

Factors influencing comfort:

1) Physical conditions:
   - pain
   - restricted movement
   - uncomfortable bed
   - improper environment such as too bright light or too much humidity
   - temperature too hot or too cold (extremes) and
   - inadequate attention to personal needs e.g. cleanliness, elimination. nourishment
2) Psychological conditions
   - fear and anxiety in regard to illness
   - concern for the family
   - interruption in daily routine
   - noise or failure to provide privacy

Purposes of providing comfort:

- relieve fatigue or physical strain
- improve and stimulate circulation
- prevent muscular spasm and contractures/deformities prevent bed sores/decubitus ulcers
- facilitate drainage from body cavity
- facilitate breathing.

Pain

Pain is the most cause comfort of disorder. Pain is an unpleasant and highly personal experience that may be imperceptible to others, while consuming all parts of an individual's life. Pain is a physical and emotional experience, as a response to actual or potential tissue damage.

Types of pain: Acute pain when pain lasts only through the expected recovery period of less than 3 months. Chronic pain,

also known as persistent pain, is caused by pain signals firing in the nervous system beyond 3 months to even years. Students require reviewing Pathophysiology of pain.

Etiology of pain

a. Mechanical:

- Trauma to body tissues (e.g., surgery) Tissue damage
- Alterations in body tissues (e.g., edema) Pressure on pain receptors
- Tumor Pressure on pain receptors
- Muscle spasm

b. Thermal:

- Extreme heat or cold (e.g., burns)

c. Chemical:

- Tissue ischemia (e.g., blocked coronary artery)
- Muscle spasm

Factors Influencing pain:

a. Age.

Age influences the pain experience. It is important to consider how a painful event affects a patient developmentally. For example, pain may prevent an adolescent from engaging socially with friends. A middle-aged adult may be unable to continue work in cases when pain is severe. It is particularly important to recognize how developmental differences affect how infants and older adults react to pain. Serious impairment of functional status often accompanies pain in older patients and reduce mobility and Activity Daily Living (ADLs).

b. Previous Experience.

Each person learns from painful experiences. Prior experience does not mean that a person accepts pain

more easily in the future. Previous frequent episodes of pain without relief or bouts of severe pain cause anxiety or fear. In contrast, if a person repeatedly experiences the same type of pain that was relieved successfully in the past, he or she finds it easier to interpret the pain sensation.

c. **Neurological Function.**
   A patient's neurological function influences the pain experience. Any factor that interrupts or influences normal pain reception or perception (e.g., spinal cord injury, peripheral neuropathy, or neurological disease) affects a patient's awareness of and response to pain. Some pharmacological agents (analgesics, sedatives, and anesthetics) influence pain perception and response because of the manner in which they affect the nervous system.

d. **Cultural Factor.**
   Ethnic background and cultural heritage are factors that can influence both an individual's reaction to pain and the expression of that pain. Behavior related to pain is a part of the socialization process. For example, individuals in one culture may learn to be expressive about pain, whereas individuals from another culture may have learned to keep those feelings to themselves.

Nursing Care Patient with Comfort Disorder (Pain)

1. Assessment

a. Pain History: PQRST (Precipitating factors, quality, region/radiation, severity, timing)

- **Precipitating factors**:
  - What triggers the pain or makes it worse?
  - What measures or methods have you found

helpful in reducing or relieving
- the pain?
- What pain medications do you use?

- **Quality**:
  - Tell me what your discomfort feels like.
- **Region/Radiation**:
  - Where is your discomfort?
  - Ask client to point to the location and document the exact location (e.g., left lower abdomen instead of abdominal pain). Do you feel the pain moving to other parts of the body? If yes, where?
- **Severity**:
  - On a scale of 0 to 10, with '0' representing no pain (substitute the term client uses e.g., 'no burning') and '10' representing the worst pain imaginable (e.g., burning sensation'),
  - how would you rate the degree of discomfort you are in right now?
- **Timing**:
  - Time of onset: When did or does the pain start?
  - Duration: How long have you had it, or how long does it usually last?
  - Constancy: Do you have pain-free periods? And for how long?

b. Effect on Activities of Daily Living (ADLs) client's perspective on the pain's severity.
Ask the client to describe how the pain has affected the following aspects of life: Sleep, appetite, concentration work or school, interpersonal relationships, marital relations or sex, home activities, driving and walking, leisure activities, emotional status (mood, irritability, depression, anxiety).

c. Coping Resources. Everyone exhibits personal ways of coping with pain. Strategies may relate to earlier pain experiences or the specific meaning of the pain; some may reflect religious or cultural influences. Nurses can encourage and support the client's use of methods known to have helped in modifying pain, unless they are specifically contraindicated. Strategies may include seeking quiet and solitude, learning about their condition, pursuing interesting or exciting activities (for distraction), saying prayers (or engaging in other meaningful rituals), or socializing (with family, friends, support groups, etc.)

d. Physical Assessment

Pain Scale

A numerical rating scale (NRS) requires patients to rate pain on an 11-point line of 0 to 10, with 0 representing no pain and 10 representing the worst pain the patient can imagine. A visual analog scale (VAS) consists of a straight line without labeled subdivisions. The straight line shows a continuum of intensity and has labeled end points. A patient indicates pain by marking the appropriate point on the line. Use a scale to measure the current severity of a patient's pain. Another pain scale, originally developed for children to assess pain, is now used worldwide with people ages 3 and older The Wong-Baker Faces Pain Rating Scale.

Figure 14. VAS (Visual Analog Scale)

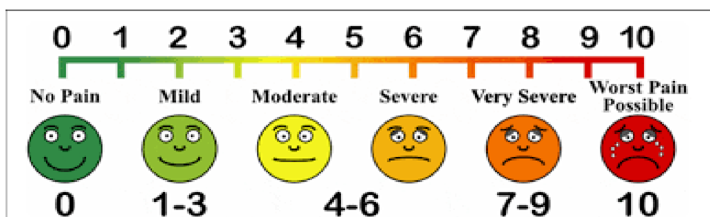

Figure 15. Numeric Rating Scale (NRS)

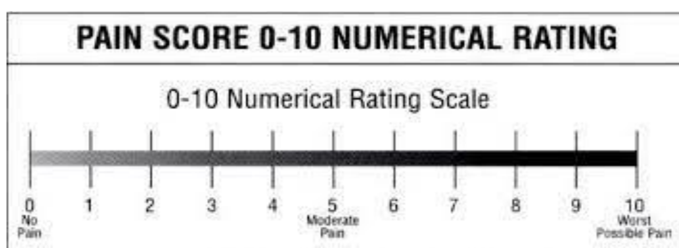

Figure 16. Wong Baker Faces Rating Scale

Nursing Fundamentals: Caring & Clinical Decision Making (2012)

2. Nursing diagnosis related to discomfort need (pain)

The following are examples of nursing diagnoses applicable to comfort Need include pain (NANDA, 2021):

1) Self-care deficit related to poor control pain
2) Insomnia related to increased pain perception at night
3) Acute pain

4) Chronic pain
5) Anxiety related to past experiences of poor control of pain
6) Hopelessness related to feeling continual pain
7) Ineffective coping related to prolonged continue back pain

3. Planning

1) Establish a trusting relationship., Saying "I believe you are in pain, and I am going to do whatever I can to help you" will promote this trusting relationship.
2) Use pain relief measures that require little effort, such as listening to music or performing relaxation techniques.
3) Provide measures to relieve pain before it becomes severe. For example, providing an analgesic before the onset of pain is preferable to waiting for the client to report pain, when a larger dose may be required

4. Implementing

Non-Pharmacology intervention to give comfort:

1) Massage: back rub
2) Application of heat or cold
3) Acupressure
4) Positions: Patients are provided certain positions for their comfort or for therapeutic purpose such as lying down (supine), side lying (lateral), Fowler's position (sitting at 45°), lying on abdomen (prone) etc. to prevent contractures, to promote drainage, to facilitate breathing and to treat pressure sores.
5) Deep Breath Exercise
6) Relaxation and guided imagery allow patients to alter

affective motivational and cognitive pain perception. Relaxation is mental and physical freedom from tension or stress that provides individuals a sense of self-control.

7) Distraction. Distraction works best for short, intense pain lasting a few minutes such as during an invasive procedure or while waiting for an analgesic to work. Use activities enjoyed by the patient as distractions (e.g., singing, praying, listening to music, or playing games).

Pharmacology intervention to give comfort (Pain):

- Non-Steroid Anti-Inflammatory Drugs (NSAIDs)
- Acetaminophen
- Analgesic
- Opioid

B. Providing Safety to the Patient

As comfort measures are important for well-being of the patient, it is equally desired to meet safety requirements as well. Let us learn about safety in brief. A safe and comfortable environment is one that contributes to the well-being of the patient and promote recovery. It implies freedom from injury. Nurses need to be aware of what constitutes a safe environment for a particular individual or for a group of individuals in home and community settings.

a. Factors Affecting Safety

- **Mobility and Health Status**

  Alterations in mobility related to paralysis, muscle weakness, diminished balance, and lack of coordination place clients at risk for injury. Spinal cord injuries or paralysis impair the client’s ability to perceive discomfort, increasing the risk for injury or

skin breakdown. Clients who have impaired mobility such as hemiplegia or leg casts are prone to falls related to poor balance. Clients weakened by illness or surgery may have impaired levels of alertness, placing them at risk for falls or injury.

- **Environmental Factors**
  Client safety is affected by the healthcare setting. Depending on the client situation, the nurse may need to assess Environmental Factors Client safety is affected by the healthcare setting. Depending on the client situation, the nurse may need to assess he environment of the workplace, home, or community.
- **Home**
  A safe home requires well-maintained flooring and carpets, a nonskid bathtub or shower surface, handrails, functioning smoke alarms that are strategically placed, and knowledge of fire escape routes. Outdoor areas, where steps or stairs increase the risk for falls, may need ramps instead. Swimming pools need to be safely secured and maintained. Adequate lighting, both inside and out, will minimize the potential for unintentional injuries.
- **Sensory–Perceptual Alterations**
  Accurate sensory perception of environmental stimuli is vital to safety. People with impaired touch perception, hearing, taste, smell, and vision are highly susceptible to injury. A client with impaired vision may trip over a toy or not see an electric cord. A client with impaired hearing may not hear a siren in traffic. A client with impaired olfactory sense may not smell burning food or the sulfur aroma of escaping gas.

b. Nursing Care of Safety Need

1. Assessment

Nursing History and Physical Examination

The nursing history and physical examination can reveal considerable data about the client's safety practices and risks for injury. Data include: age and developmental level; general health status; mobility status; presence or absence of physiologic or perceptual deficits such as olfactory, visual, tactile, taste, or other sensory impairments; altered thought processes or other impaired cognitive or emotional capabilities; substance abuse.

2. Nursing Diagnosis

The following are examples of nursing diagnoses applicable to safety Need (NANDA, 2021):

1) Risk for Injury
2) Risk for Falling
3) Risk for Infection
4) Risk for trauma: accidental injury (wound, burn, fracture)
5) Risk for infection

3. Planning

Nursing interventions to meet desired outcomes are largely directed toward helping the client and family to accomplish the following:

- Identify environmental hazards in the home and community.
- Demonstrate safety practices appropriate to the home healthcare agency, community, and workplace.
- Experience a decrease in the frequency or severity of injury.
- Demonstrate safe childrearing practices or lifestyle practices.

4. Implementation

a. Restraining Clients

Restraints are devices used to reduce or prevent physical activity of a client or a part of the body when the client is unable to remove the device., or retaliation by staff. Physical restraints have been shown to not prevent the safety problems that they are used to prevent, such as avoiding falls and pulling out medical devices (e.g., IV, Foley catheter, endotracheal tube).

b. Preventing for Falls

- On admission, orient clients to their surroundings and explain the call system.
- Carefully assess the client's ability to ambulate and transfer. Provide nonskid footwear, walking aids, and assistance as required.
- Encourage the client to use the call light to request assistance. Ensure that the light is within easy reach.
- Place bedside tables and overbed tables near the bed or chair so that clients do not overreach and consequently lose their balance.
- Always keep hospital beds in the low position and wheels locked when not providing care so that clients can move in or out of bed easily.
- Keep the environment tidy; keep light cords from underfoot and furniture out of the way.

c. Preventing Infection and Nosocomial Infection

- Hand Hygiene/hand washing after and before doing procedure
- Disinfecting using disinfectant agents to destroy pathogen
- Supporting defenses for susceptible host hygiene, nutrition, fluid, sleep, stress, immunization

SUMMARY

Pain is “whatever the person says it is, and exists whenever he says it does.” It is a subjective sensation to which no two people respond in the same way. It can directly impair health and prolong recovery from surgery, disease, and trauma. Types of pain may be described in terms of location, duration, intensity, and etiology. Assessment of a client who is experiencing pain, however, should also include subjective and objective data. Although the nursing diagnosis given to clients experiencing pain can be mild acute pain, moderate acute pain, severe acute pain, or chronic pain, the pain itself may also be the etiology of other nursing diagnoses. Overall client goals include preventing, modifying, or eliminating pain so that the client is able to partly or completely resume usual daily activities and to cope more effectively with the pain experience. When planning, nurses need to choose pain relief measures appropriate for the client, based on assessment data.

Injuries are a major cause of death among individuals of all ages in the United States. Nurses need awareness of what constitutes a safe environment for specific individuals and for groups of people in the home, community, and workplace. Hazards to safety occur at all ages and vary according to the age and development of the individual. Nursing assessment of safety includes assessing factors that can affect safety, for example, age and developmental level, lifestyle, mobility and health status, sensory–perceptual alterations, cognitive awareness, ability to communicate, safety awareness, and environmental factors. Nurses assess clients at risk for injury through methods such as nursing history and physical examination, risk assessment tools, and home hazard appraisal.

REVIEW QUESTION

1. Which statement best reflects a nurse's assessment of pain?
   A. "Do you have any complaints?"
   B. "Are you experiencing any discomfort?"
   C. "Is there anything I can do for you now?"
   D. "Do you have any complaints of pain?"
2. When planning care for pain control of older clients, which principles should the nurse apply? Select all that apply.
   A. Pain is a natural outcome of the aging process.
   B. Pain perception increases with age.
   C. The client may deny pain.
   D. The nurse should avoid use of opioids.
   E. The client may describe pain as an "ache" or "discomfort."
3. A client recovering from abdominal surgery refuses analgesia, saying that he is "fine, as long as he doesn't move." Which nursing diagnosis should be a priority?
   A. Lack of knowledge (pain control measures)
   B. Fear of drug addiction
   C. Difficulty maintaining a clear airway
   D. Altered physical mobility
4. Explain the definition of safety!
5. How the nurse can prevent falls?

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CHAPTER 11

CONCEPT OF SEXUALITY NEED

LEARNING OBJECTIVES

After completing this chapter, you should be able to:

1. Describe sexual development across the lifespan.
2. Define sexual health.
3. Discuss variations in sexual expression.
4. Give examples of how the family, culture, religion, and personal expectations and ethics influence one's sexuality.
5. Describe physiologic changes during the sexual response cycle.
6. Identify basic sexual questions the nurse should ask during client assessment.
7. Formulate nursing diagnoses and interventions for the client experiencing sexual problems.

All humans are sexual beings. Regardless of gender, age, race, socioeconomic status, religious beliefs, physical and mental health, or other demographic factors, we express our sexuality in a variety of ways throughout our lives. Human sexuality is difficult to define. Sexuality is an individually expressed and highly personal phenomenon that evolves from life experiences. Physiologic, psychosocial, and cultural factors influence an individual's sexuality and lead to the wide range of attitudes and behaviors seen in humans. Satisfying or "normal" sexual expression can be described as whatever behaviors give pleasure and satisfaction to those adults

involved, without threat of coercion or injury to self or others. What constitutes normal sexual expression, however, varies among cultures and religions.

A. Sexual Development

Sexuality changes as a person grows and develops. Each stage of development brings changes in sexual functioning and the role of sexuality in relationships. Sexuality is a complex process that involves many factors. It begins at birth and continues throughout life tasks that individuals face at various stages of development. from adolescence to middle age, but we now understand that sexuality is already in progress at birth and continues throughout life, including into old age.

Infancy and Early Childhood

The first several years of life are crucial in the development of sexuality and gender identity. Commonly, a child identifies with the parent or caregiver of the same sex and develops a complementary relationship with the parent or caregiver of the opposite sex. Children become aware of differences between the sexes, begin to perceive that they identify as male or female, and interpret the behaviors of others as socially consistent with the binary categories of female or male.

School-Age Years

During the school years parents, educators, and peer groups serve as role models and teach children how to relate to other people. Preadolescent children often segregate by sex, which minimizes heterosexual activities and facilitates same-sex sexual behaviors. This early sexual behavior is not indicative of sexual orientation. School-age children generally have

questions regarding the physical and emotional aspects of sex. They need accurate information from home and school about changes in their bodies and emotions during this period and what to expect as they move into puberty. Knowledge about normal emotional and physical changes associated with sexual maturation decreases anxiety as these changes begin to happen.

Puberty/Adolescence

The emotional changes during puberty and adolescence are as dramatic as the physical ones. Pre-adolescence is often marked by increased sexual interest. Adolescents function within a powerful peer group, with the almost constant anxiety of "Am I normal?" and "Will I be accepted?" They face many decisions and need accurate information on topics such as body changes, sexual activity, emotional responses within sexual relationships, STIs, contraception, and pregnancy. The status of sexual health education varies throughout the United States and is insufficient in many areas. In most states, fewer than half of high schools teach all 19 sexual health topics recommended by the Centers for Disease Control and Prevention (CDC). **Dysmenorrhea** (painful menstruation) is prevalent among adolescent females. Cramping, lower abdominal pain radiating to the back and upper thighs, nausea, vomiting, diarrhea, and headaches may occur for a few hours up to 3 days. Dysmenorrhea results from powerful uterine contractions, which cause ischemia and cramping pain. The symptoms of dysmenorrhea are treated with administration of analgesics such as aspirin, application of heat to the abdomen, certain exercises such as abdominal muscle strengthening, biofeedback, and non-steroidal anti-inflammatory medications, such as ibuprofen.

Young and Middle Adulthood

In young adulthood, many individuals form intimate relationships with long-term implications. These relationships may take the form of dating, cohabitation, or marriage. Note, however, that some individuals do not form intimate relationships until late adulthood and that some never form these types of relationships. Young adult men and women are often concerned about normal sexual response, for both themselves and their partners. In heterosexual relationships, problems may arise because of basic differences in male and female expectations and responses. During middle adulthood both males and females experience decreased hormone production, causing the climacteric, usually called menopause in women. These events often affect the individual's sexual self-concept, body image, and sexual identity.

Older Adulthood

Older adults may define sexuality far more broadly and include in their definition such things as touching, hugging, romantic gestures (e.g., giving or receiving flowers), comfort, warmth, dressing up, joy, spirituality, and beauty. Interest in sexual activity is not lost as individual's age. For men, however, more time is needed to achieve an erection and to ejaculate (the erection may last longer than at a younger age); more direct genital stimulation is required to achieve an erection; the volume of ejaculated fluid decreases; and the intensity of contractions with orgasm may decrease. The refractory period after orgasm is longer.

B. Sexual Health

Sexual health is an individual and constantly changing phenomenon falling within the wide range of human sexual

thoughts, feelings, needs, and desires. For most individuals, sexual health is not a concern until its absence or impairment is noticed. That individual best determines an individual's degree of sexual health, sometimes with the assistance of a qualified professional. Sexual health is a state of well-being in relation to sexuality across the lifespan that involves physical, emotional, mental, social, and spiritual dimensions. Sexual health is an inextricable element of human health and is based on a positive, equitable, and respectful approach to sexuality, relationships, and reproduction that is free of coercion, fear, discrimination, stigma, shame, and violence. Sexual health includes: the ability to understand the benefits, risks, and responsibilities of sexual behavior; the prevention and care of disease and other adverse outcomes; and the possibility of fulfilling sexual relationships. Sexual health occurs when sexual relationships are respectful, safe, and pleasurable.

C. Factors Influencing Sexuality

Many factors influence an individual's sexuality.

Family

For the majority of us, the family is the earliest and most enduring social relationship. Families are the fabric of our day-to-day lives and shape the quality of our lives by influencing our outlooks on life, our motivations, our strategies for achievement, and our styles for coping with adversity. Within our families we develop our gender identity, body image, sexual self-concept, and capacity for intimacy. Through family interactions we learn about relationships and gender roles and our expectations of others and ourselves

Culture

Culture influences the sexual nature of dress, rules about marriage, expectations of role behavior and social responsibilities, and sex practices. Societal attitudes vary widely. Attitudes about childhood sexual play with self or children of the same gender or other gender may be restrictive or permissive. Premarital and extramarital sex and homosexuality may be culturally unacceptable or tolerated. Polygamy (several mates or marriage partners) or monogamy (one mate or marriage partner) may be the norm. Gender expression also varies from culture to culture. Culture is so much a part of everyday life that it is taken for granted. We assume that others share our own views, including those for whom we provide care. It is impossible to provide sensitive nursing care if we believe that our own culture is more important than, and preferable to, any other culture.

Religion

Religion influences sexual expression. It provides guidelines for sexual behavior and acceptable circumstances for the behavior, as well as prohibited sexual behavior and the consequences of breaking the sexual rules. The guidelines or rules may be detailed and rigid or broad and flexible. Some religions view forms of sexual expression other than male–female intercourse as unnatural and hold virginity before marriage to be the rule. Many religious values conflict with the more flexible values of society that have developed during the past few decades (often labeled the “sexual revolution”), such as the acceptance of premarital sex, unwed parenthood, homosexuality, and abortion. These conflicts create marked anxiety and potential sexual dysfunctions in some individuals.

Personal Expectations and Ethics

Although ethics is integral to religion, ethical thought and ethical approaches to sexuality can be viewed separately from religion. Cultures have developed written or unwritten codes of conduct based on ethical principles. Personal expectations concerning sexual behavior come from these cultural norms. What one individual or culture views as bizarre, perverted, or wrong may be natural and right to another. Examples include values regarding masturbation, oral or anal intercourse, and cross-dressing. Many individuals accept a variety of sexual expressions they are performed by consenting adults, are practiced in private, and are not harmful. Individuals need to explore and communicate clearly about various types of acceptable sexual expression to prevent domination of sexual decision-making by any individual.

D. Alterations in Sexual Health

Infertility

Infertility is the inability to conceive after 1 year of unprotected intercourse. A couple who wants to conceive but is unable to has special needs. Some experience a sense of failure and think that their bodies are defective. Sometimes the desire to become pregnant grows until it permeates most waking moments. Some individuals become preoccupied with creating just the right circumstances for conception. With advances in reproductive technology, infertile couples face many choices that involve religious and ethical values and financial limitations. Choices for the infertile couple include pursuit of adoption, medical assistance with fertilization, or adapting to the probability of remaining childless.

Sexual Abuse

Sexual abuse is a widespread health problem. Abuse crosses all gender, socioeconomic, age, and ethnic groups. Most often it is at the hands of an intimate partner or family member. Sexual abuse has far-ranging effects on physical and psychological functioning. Sometimes it begins, continues, or even intensifies during pregnancy. Cues that raise a question of possible sexual abuse include extreme jealousy and refusal to leave a woman's presence. The overall appearance is sometimes that of a very concerned and caring husband or boyfriend, when the underlying reason for this behavior is very different. Nurses are in an ideal position to assess occurrences of sexual violence, help patients confront these stressors, and educate individuals regarding community services. Nurses are mandated reporters and must report suspected child and elder abuse to the proper authorities. When you suspect or recognize abuse, mobilize support for the victim and the family. When abuse is suspected, remember to not ask the patient about any abusive behaviors in the presence of the suspected abuser. Provide privacy and obtain information in a protective environment. When there is abuse, all family members usually require therapy to promote healthy interactions and relationships. Patients who have been raped often need to work through the crisis before feeling comfortable with intimate expressions of affection. The partner needs to know how to help and support the patient. Children who have been molested sexually need to understand that they are not at fault for the incident. The parents need to understand that their response is critical to how the child reacts and adapts.

Personal and Emotional Conflicts

Ideally sex is a natural, spontaneous act that passes easily through a number of recognizable physiological stages and ends in one or more orgasms. In reality this sequence of events is more the exception than the rule. You will care for patients who have problems with one or more of the stages of sexual activity, including the feeling of wanting sex, the physiological processes and emotions of having sex, and the feelings experienced after sex. For example, some women and men who are taking antidepressants report that their ability to reach orgasm is affected negatively.

Sexual Dysfunction

Sexual dysfunction, the absence of complete sexual functioning, is common. The incidence of sexual dysfunction in the general population is estimated to be as high as 40% in men and 60% to 80% in women.

E. Nursing Care Patient with Sexuality Need

1) Nursing History Including a sexual history as part of the general nursing history is important for some clients and not important for others. It is critical, however, to introduce the topic of sexuality to all clients in order to give them permission to bring up any concerns or problems. All nursing histories should at least include a question such as “Have there been any changes in your sexual functioning that might be related to your illness or the medications you take?” Nurses might also facilitate communication by saying, “As a nurse, I’m concerned about all aspects of your health. Clients often have questions about sexual matters, both when they are well and when they are ill. When I take your history, sexual

concerns are included to help plan a comprehensive treatment approach.”

Are you sexually active? With men, women, or both?

- Are you sexually active with one or more than one partner?
- Describe the positive and negative aspects of your sexual functioning.
- Do you have difficulty with sexual desire? Arousal? Orgasm? Satisfaction?
- Do you experience any pain during sex?
- If there are problems, how have they influenced how you feel about yourself? How have they affected your partner? How have they affected the relationship?
- Do you expect your sexual functioning to change because of your health status?
- What are your partner’s concerns about your future sexual functioning?
- Do you have any other sexual questions or concerns that I have not addressed?

2) Physical Examination

Physical examination of the female genitals and reproductive tract and the male genitals is part of a routine physical examination.

The nurse performs a physical examination or refers the client to an appropriate member of the healthcare team. Nursing history data indicating the need for a physical examination include the following:

- Suspicion of infertility, pregnancy, or an STI (Sexual Transmitted Disease)
- Reports of discharge, presence of a lump or sore, or change in color, size, and shape of a genital organ
- Changes in urinary function

- Need for Papanicolaou test
- Request for birth control.

3) Nursing diagnosis

The following are examples of nursing diagnoses applicable to Sexuality Need (NANDA, 2021):

a. Altered sexual activity
b. Ineffective sexuality pattern
c. Sexual dysfunction
d. Impaired sexual partner relations
e. Inadequate alternative sexual strategies
f. Inadequate role model

4) Planning

Overall goals to meet clients' sexual needs include the following:

a. Maintain, restore, or improve sexual health.
b. Increase knowledge of sexuality and sexual health.
c Prevent the occurrence or spread of STIs.
d Prevent unwanted pregnancy.
e. Increase satisfaction with the level of sexual functioning.
f. Improve sexual self-concept.

Maintain a healthy sexual self-concept:

a. Provide privacy during intimate body care.
b. Give attention to the client's appearance and dress.
c. Give clients privacy to meet their sexual needs alone or with a partner within physically safe limits. Remember that clients' comfort in discussing

5) Implementation

a. **Sex Education**

Nurses can assist clients to understand their anatomy and how their body functions. Understanding the anatomy of the genitals may help women learn how their body responds to sexual stimulation. Both men and women need to learn the kind of stimulation that is pleasing and causes arousal. The importance open communication between partners should also be encouraged.

b. **Kegel Exercises**

These exercises involve contraction and relaxation of the pubococcygeal muscle, the muscle that contracts when an individual prevents urine flow. The benefits of Kegel exercises include increased pelvic floor muscle tone; increased vaginal lubrication during sexual arousal; increased sensation during intercourse; increased genital sensitivity; stronger gripping of the base of the penis; earlier postpartum recovery of the pelvic floor muscle; and increased flexibility of episiotomy scars. Kegel exercises may also benefit males with ejaculatory control.

c. **Prevention STI/Sexual Transmitted Infection**

- Genital Hygiene
- Avoid free sex

d. **Breast Self-Examination**

SUMMARY

Sexuality is important in developing self-identity, interpersonal relationships, intimacy, and love. There is a tremendous range of variation in how individuals express their sexuality including sexual orientation, gender identity, and sexual practices. Factors that affect sexuality include family, culture, religion, personal expectations and ethics, disease processes, medications, and relationship problems. Sexual problems include desire disorders, arousal disorders, orgasmic disorders, sexual pain disorders, and problems with satisfaction. Assessing risk for or actual sexual problems is part of the initial nursing assessment. Nurses assess attitudes toward sexuality, including factors that affect attitudes and behaviors. Nurses must be knowledgeable about all aspects of sexuality, including how their own values and issues surrounding sexuality impact patient-centered care. The nurse is educationally and experientially positioned to take the lead among health care providers to promote sexual health. Sexual health involves physical and psychosocial aspects and contributes to an individual's sense of self-worth and positive interpersonal relationships.

REVIEW QUESTION:

1. Which question should be delivered to assess sexual health history?
2. A 75-year-old male client reports decreased frequency of sexual intercourse although he does not express dissatisfaction or difficulty. He seems a little embarrassed by the discussion but is engaged and asks some questions. An appropriate nursing diagnosis would be which of the following?
   A. Sexual dysfunction

B. Altered body image
C. Inactive lifestyle
D. Need for improved knowledge

3. Clients may be unlikely to introduce the topic of sex with healthcare providers for which reason?
   A. They assume that healthcare providers know little about sexual functioning.
   B. Most clients have few questions or problems.
   C. Female clients prefer to discuss problems with female healthcare providers.
   D. They are too embarrassed to introduce the topic of sex.
4. Explain 3 nursing diagnosis related sexuality disorder!
5. Clients may be unlikely to introduce the topic of sex with healthcare providers for which reason?
   A. They assume that healthcare providers know little about sexual functioning.
   B. Most clients have few questions or problems.
   C. Female clients prefer to discuss problems with female healthcare providers.
   D. They are too embarrassed to introduce the topic of sex.

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CHAPTER 12

CONCEPT OF SPIRITUALITY NEED

LEARNING OBJECTIVES

After completing this chapter, you will be able to:

1. Describe the interconnection of spirituality and religion concepts as they relate to health and spiritually sensitive nursing care.
2. Compare and contrast spiritual needs, spiritual disruption, and spiritual health.
3. Appreciate spiritual development by describing spiritual developmental issues of childhood and aging in particular.
4. Describe methods to assess the spiritual and religious preferences, strengths, concerns, or distress of clients and plan appropriate nursing care
5. Describe nursing care and therapeutics to support religiosity and promote clients' spiritual health.

A. Spirituality and Religion

Spirituality is generally thought to refer to the human tendency to seek meaning and purpose in life, inner peace and acceptance, forgiveness and harmony, hope, beauty, and so forth. Another aspect of spirituality often recognized is the awareness of something transcendent—a higher power, creative force, divine being, or infinite source of energy. For example, an individual may believe in God, Allah, the Great Spirit, or a Higher Power.

In contrast, the term **religion** is usually applied to ritualistic practices and organized beliefs. Indeed, there has been a

tendency in nursing—as in psychology and other fields—to separate these two concepts. Yet trying to make religion an opposite of spirituality (e.g., institutional versus personal, objective versus subjective, narrow versus broad, cerebral versus emotional, bad versus good) is unfair to both concepts.

B. Spiritual Health, or Spiritual Wellness or Well-Being

Spiritual health results when individuals intentionally seek to strengthen their spiritual muscles, as it were, through various spiritual disciplines (e.g., prayer, meditation, service, fellowship with similar believers, learning from a spiritual mentor, worship, study, fasting). People gain spiritual health by finding a balance between their values, goals, and beliefs and their relationships with themselves and others. Throughout life a person often grows more spiritual, becoming increasingly aware of the meaning, purpose, and values of life. In times of stress, illness, loss, or recovery, a person uses previous ways of responding or adjusting to a situation. Often these coping styles lie within a person's spiritual beliefs. Spiritual beliefs change as patients grow and develop. Spirituality begins as children learn about themselves and their relationships with others, including a higher power. Nurses who understand a child's spiritual beliefs are able to care for and comfort the child. As children mature into adulthood, they experience spiritual growth by entering into lifelong relationships with people who share similar values and beliefs. Healthy spirituality in older adults gives peace and acceptance of the self and is often the result of a lifelong connection with a higher power. Illness and loss sometimes threaten and challenge the spiritual developmental process. Older adults often express their spirituality by turning to important relationships and giving of themselves to others

C. Factors Influencing Spirituality

Acute Illness

Sudden, unexpected illness often creates **spiritual distress**. For example, both a 50-year-old patient who has a heart illness, loss, grief, or a major life change occurs, people either use spiritual resources to help them cope and search for meaning, or spiritual needs and concerns develop. Spiritual distress is a disruption in the life principle that pervades a person's entire being and transcends the person's biologic and psychosocial nature. Nurses play a key role in helping patients resolve feelings of spiritual distress. Nurses create a healing environment and maximize recovery by enhancing patients' spiritual well-being

Chronic Illness

Many chronic illnesses threaten a person's independence, causing fear, anxiety, and spiritual distress. Dependence on others for routine self-care needs often creates feelings of powerlessness. Powerlessness and the loss of a sense of purpose in life impair the ability to cope with alterations in functioning. Spirituality is an important dimension of how patients adapt to and live with chronic illness. Successfully adapting to these changes strengthens a person spiritually, but it sometimes takes a long-term plan to help a patient with a chronic illness achieve spiritual well-being. As a nurse, you are in a unique position to help patients reevaluate their lives and achieve spiritual.

Terminal Illness

Dying is a holistic process encompassing a patient's physical, social, psychological, and spiritual health Terminal illness causes fears of physical pain, loss of independence, isolation,

the unknown, and dying. It creates an uncertainty about what death means, making patients susceptible to spiritual distress. However, some patients have a spiritual sense of peace that enables them to face death without fear. Spirituality helps these patients find peace in themselves and their death. Individuals experiencing a terminal illness find themselves reviewing life and questioning its meaning. Those who struggle ask common questions, such as “Why is this happening to me?” or “What have I done?” Terminal illness affects family and friends as well.

D. Nursing Care Patient with Spirituality Need

1) Assessment

To provide spiritually sensitive care, the nurse must first assess whether such care is needed or welcome. Data about a client’s spiritual beliefs and practices can be obtained through a nursing history as well as from ongoing clinical observations of the client’s behavior, verbalizations, mood, and so on.

Spiritual History (interview):

- Is spirituality or religion important to you? (Or, how spiritual or religious do you think of yourself as being?)
- What spiritual or religious beliefs and practices are especially important for your healthcare team to know about?
- In what ways can I or we (nurses, healthcare team) support your spirit?
- How will being sick interfere with your religious practices?
- What spiritual or religious beliefs influence you the most

as you make healthcare decisions?

- How is your faith helpful to you? Is it sustaining you the way you would like it to while you are sick? In what ways is it important to you right now?
- Would you like a visit from your spiritual counselor or the hospital chaplain?
- What are your hopes and your sources of strength right now? What comforts you during hard time

2) Nursing Diagnosis

The following are examples of nursing diagnoses applicable to Spirituality Need
(NANDA, 2021):

a. Altered religious ritual
b. Altered spiritual practice
c. Spiritual distress
d. Risk for Spiritual Status
e. Decreased Spiritual Distress
f. Hopelessness
g. Powerlessness

3) Planning

In the planning phase, the nurse identifies therapeutics to support or promote
spiritual health in the context of illness. Planning in relation to spiritual needs may
involve one or more of the following:

- Helping clients to practice their religious rituals
- Supporting clients to recognize and incorporate spiritual beliefs in healthcare
decision-making

- Encouraging clients to recognize positive meanings for health challenges
- Promoting a sense of hope and peace
- Providing spiritual resources when requested
- Facilitating connection with others (e.g., estranged family, clergy and faith community members).

4) Implementation

a. Supporting Religious Practice

- Create a trusting relationship with the client so that any religious concerns or practices can be openly discussed and addressed.
- Avoid relying on personal assumptions when caring for clients.
- Inform clients and family caregivers about spiritual support available at your institution (e.g., Meditation room, mosque, etc.).
- Allow time and privacy for, and provide comfort measures prior to, private worship, prayer, meditation, reading, or other spiritual activities.
- Prepare client's environment for spiritual rituals or clergy visitations as needed (e.g., have chair near bedside for clergy, create private space).

b. Prayer and Meditation

Prayer involves humans experiencing the divine (however that is perceived).

Some would describe prayer as an inner experience for gaining awareness

of self (including Self— or the immanent manifestation of the divine). Others
may view it as a conversation with the divine (e.g., to entreat or dialogue).

Meditation is of Buddhist origin yet pervades Western societies. Mindfulness meditation techniques have been adapted for Christian prayer and as a nonreligious lifestyle strategy for improving health and overall well-being. Numerous studies document various physical, psychologic, and spiritual benefits for those who practice mindfulness regularly. Mindfulness techniques vary, but key elements include focused attention on the present moment or the body's experience; awareness, depth, and steadiness of breathing; and putting judgmental and intrusive thoughts "on hold."

c. Encourage Client to Pray

SUMMARY

Clients have a right to receive care that respects their individual spiritual and religious values. The spiritual needs of clients and support people often come into focus at a time of illness. Spiritual beliefs can help individuals make sense of illness and cope with what lies ahead. Spiritual disruption refers to a disturbance in or a challenge to an individual's beliefs that provide strength, hope, and meaning to life. Possible factors in spiritual disruption include physiologic problems, treatment-related concerns, and situational concerns. Spiritual disruption may be reflected in a number of behaviors, including depression, anxiety, verbalizations of

unworthiness, and fear of death. Nurses must follow ethical guidelines for providing spiritual care, and not impose personal beliefs or practices on clients. Spiritual assessment can follow a three-tiered approach. Initially, the nurse must determine if the client accepts a spiritual reality. For those who do, the next tier of questions should collect information not only about spiritual beliefs and practices affecting health, but also about how the client desires spiritual care from the healthcare team. Only those who manifest a spiritual need require a focused, in-depth assessment. Such an assessment may best be done by a chaplain or spiritual care expert. Nursing interventions that promote spiritual health include offering one's presence, conversing about spirituality, supporting the client's religious practices, empathic communication, assisting clients with prayer, and referring the client to a spiritual care expert. Nurses need to be aware of their own spiritual beliefs to be comfortable assisting others.

REVIEW QUESTION

1. Which nursing action would be most beneficial in enhancing clients' spiritual health?
   A. Discuss one's own spiritual beliefs with the client.
   B. Provide the client with privacy and a quiet room.
   C. Sit by the client's side in silence.
   D. Call a representative of the client's religion should the client wish so.
2. During assessment, a client says that it has been a long time since she has thought very much about religion. The nurse caring for this client has a strong belief in God and the healing power of prayer. What action should be taken by the nurse?

    A. Mention the nurse’s belief and offer to pray with the client for forgiveness.
    B. Tell the client that the nurse will pray for her often.
    C. Ask the client if there are any spiritual needs with which the staff can assist.
    D. Refer the client for spiritual counseling.

3. A client is experiencing severe pain that cannot be controlled by analgesics. An appropriate intervention is full presenting, which involves which of the following?
    A. Physical presence
    B. Physical presence with mental awareness of the client
    C. Physical, mental, and emotional presence
    D. Physical, mental, emotional, and spiritual presence
4. A client reports, “Cancer was the best thing that happened to me! It is making me appreciate life so much more.” This statement fits best with which nursing diagnosis?
    A. Spiritual disruption
    B. Potential for spiritual disruption
    C. Spiritual health enhancement
    D. Cognitive denial
5. A dying client states, “Part of what makes dying hard is that I don’t know for sure where I’m going. Nurse, what do you believe happens in the hereafter?” Which ethical guideline should guide your response?
    A. Never share personal spiritual beliefs.
    B. Share all spiritual beliefs, favoring none.
    C. Share only your beliefs.
    D. First assess for what prompts the client’s question.

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CHAPTER 13

CONCEPT OF LOSS, GRIEVING, DYING AND DEATH

LEARNING OBJECTIVES

After completing this chapter, you will be able to:

1. Describe types and sources of losses.
2. Discuss selected frameworks for identifying stages of grieving.
3. Identify clinical symptoms of grief.
4. Discuss factors affecting a grief response.
5. Identify measures that facilitate the grieving process.
6. Describe nursing measures for care of the body after death

A. Loss and Grief

Loss is an actual or potential situation in which something that is valued is changed or no longer available. Individuals can experience the loss of body image, a significant other, a sense of well-being, a job, personal possessions, or beliefs. Illness and hospitalization often produce losses. Death is a loss both for the dying individual and for those who survive. Although death is inevitable, it can stimulate individuals to grow in their understanding of themselves and others. Individuals experiencing loss often search for the meaning of the event, and it is generally accepted that finding meaning is needed in order for healing to occur. However, individuals can be well adjusted without searching for meaning, and even those who find meaning may not see it as an end point but rather as an ongoing process.

Grief is the total response to the emotional experience related to loss. Grief is manifested in thoughts, feelings, and behaviors associated with overwhelming distress or sorrow.

Types and Sources of Loss

There are two general types of loss, **actual and perceived**. An **actual loss** can be recognized by others. **A perceived loss** is experienced by an individual but cannot be verified by others. Psychologic losses are often perceived losses because they are not directly verifiable. For example, a woman who leaves her employment to care for her children at home may perceive a loss of independence and freedom. Both losses can be anticipatory. An anticipatory loss is experienced before the loss actually occurs. For example, a woman whose husband is dying may experience actual loss in anticipation of his death. Loss can be viewed as situational or developmental. Losing one's job, the death of a child, and losing functional ability because of acute illness or injury are situational losses. Losses that occur in normal development—such as the departure of grown children from the home, retirement from a career, and the death of aged parents—are developmental losses that can, to some extent, be anticipated and prepared for.

Types of Grief Responses

- **A normal grief** reaction may be abbreviated or anticipatory. Abbreviated grief is brief but genuinely felt. This can occur when the lost object is not significantly important to the grieving individual or may have been replaced immediately by another, equally esteemed object. Anticipatory grief is experienced in advance of the event such as the wife who grieves before her ailing husband

dies. A young individual may grieve before an operation that will leave a scar. Because many of the normal symptoms of grief will have already been expressed in anticipation, the reaction when the loss actually occurs is sometimes quite abbreviated.

- **Disenfranchised grief** occurs when an individual is unable to acknowledge the loss to others. Situations in which this may occur often relate to a socially unacceptable loss that cannot be spoken about, such as suicide, abortion, or giving a child up for adoption. Other examples include losses of relationships that are socially unsanctioned and may not be known to others (such as with extramarital relationships).
- **Unhealthy grief**—that is, pathologic or **complicated grief**—exists when the strategies to cope with the loss are maladaptive and out of proportion or inconsistent with cultural, religious, o age-appropriate norms.

Stages of Grieving

a. Denial

Refuses to believe that loss is happening. Is unready to deal with practical problems, such as prosthesis after the loss of a leg. May assume artificial cheerfulness to prolong denial.

b. Anger

Client or family may direct anger at nurse or staff about matters that normally would not bother them.

c. Bargaining

Seeks to bargain to avoid loss (e.g., “let me just live until [a certain time] and then I will be ready to die”).

d. Depression

Grieves over what has happened and what cannot be. May talk freely (e.g., reviewing past losses such as money or job), or may withdraw.

e. **Acceptance**

. May have decreased interest in surroundings and support people. May wish to begin making plans (e.g., will, prosthesis, altered living arrangements).

Factors Influencing the Loss and Grief Responses

Several factors affect an individual's response to a loss or death. These factors include age, significance of the loss, culture, spiritual beliefs, gender, socioeconomic status, support systems, and the cause of the loss or death. Nurses can learn general concepts about the influence of these factors on the grieving experience, but the constellation of these factors and their significance will vary from client to client.

- **Age**

Age affects an individual's understanding of and reaction to loss. With familiarity, individuals usually increase their understanding and acceptance of life, loss, and death. Individuals rarely experience the loss of loved ones at regular intervals. As a result, preparation for these experiences is difficult. Other life losses, such as losing a pet, a friend, youth, or a job, can help individuals anticipate the more severe loss of death of loved ones by teaching them successful coping strategies

- **Significance of the Loss**

The significance of a loss depends on the perceptions of the individual experiencing the loss. One individual may experience a great sense of loss over a divorce; another may

find it only mildly disrupting. Several factors affect the significance of the loss:

• Importance of the lost individual, object, or function

• Degree of change required because of the loss

• The individual's beliefs and values. For older adults who have already encountered many losses, an anticipated loss such as their own death may not be viewed as highly negative, and they may be apathetic about it instead of reactive. More than fearing death, some may fear loss of control or becoming a burden.

- **Culture**

Culture influences an individual's reaction to loss. How grief is expressed is often determined by the customs of the culture. Unless an extended family structure exists, grief is handled by the nuclear family. The death of a family member in a typical nuclear family leaves a great void because the same few individuals fill most of the roles. In cultures where several generations and extended family members either reside in the same household or are physically close, the impact of a family member's death may be softened because the roles of the deceased are quickly filled by other relatives. Some individuals believe that grief is a private matter to be endured internally. Therefore, feelings tend to be repressed and may remain unidentified. Individuals socialized to "be strong" and "make the best of the situation" may not express deep feelings or personal concerns when they experience a serious loss. Some cultural groups value social support.

- **Spiritual Beliefs**

Spiritual beliefs and practices greatly influence both an individual's reaction to loss and subsequent behavior. Most religious groups have practices related to dying, and these are

often important to the client and support people. To provide support at a time of death, nurses need to understand the client's particular beliefs and practices

- **Gender**

The gender roles into which many individuals are socialized in the United States affect their reactions at times of loss. Males are frequently expected to "be strong" and show very little emotion during grief, whereas it is acceptable for females to show grief by crying. When a wife dies, the husband, who is the chief mourner, may be expected to repress his own emotions and to comfort sons and daughters in their grieving. Gender roles also affect the significance of body image changes to clients. A man might consider his facial scar to be "macho," but a woman might consider hers ugly. Thus the woman, but not the man, would see the change as a loss.

- **Socioeconomic Status**

The socioeconomic status of an individual often affects the support system available at the time of a loss. A pension plan or insurance, for example, can offer an individual who is widowed or disabled a choice of ways to deal with a loss; an individual who is confronted with both severe loss and economic hardship may not be able to cope with either.

- **Support System**

The individuals closest to the grieving individual are often the first to recognize and provide needed emotional, physical, and functional assistance. However, because many individuals are uncomfortable or inexperienced in dealing with losses, the usual support people may instead withdraw from the grieving individual. In addition, support may be available when the loss is first recognized, but as the support people return to their

usual activities, the need for ongoing support may be unmet. Sometimes, the grieving individual is unable or unready to accept support when offered.

- **Cause of Loss or Death**

Individual and societal views on the cause of a loss or death may significantly influence the grief response. Some diseases are considered “clean,” such as cardiovascular disorders, and engender compassion, whereas others may be viewed as repulsive and less unfortunate. A loss or death beyond the control of those involved may be more acceptable than one that is preventable, such as a drunk driving incident. Injuries or deaths that occur during respected activities, such as “in the line of duty,” are considered honorable, whereas those occurring during illicit activities may be considered the individual’s just rewards

Nursing care loss and grieving:

1) Assessing

   Nursing assessment of the client experiencing a loss includes three major components:

   a. nursing history,
   b. assessment of personal coping resources, and
   c. physical assessment.

   During the routine health assessment of every client, the nurse poses questions regarding previous and current losses. Data regarding general health status; other personal stressors; cultural and spiritual traditions, rituals, and beliefs related to loss and grieving; and the client’s support network will be needed to determine a plan of care.

PREVIOUS LOSS

- Have you ever lost someone or something very important to you?
- Have you or your family ever moved to a new home or location?
- What was it like for you when you first started school? Moved away from home?
- Got a job?
- Retired?
- Are you physically able to do all the things you used to do?
- Has anyone important or close to you died?
- Do you think there will be any losses in your life in the near future? If there has been previous grieving:
- Did you have trouble sleeping? Eating? Concentrating?
- What kinds of things did you do to make yourself feel better when something like that happened?
- Did you observe any spiritual or cultural practices when you had a loss like that?
- Whom did you turn to if you were very upset about the loss?
- How long did it take you to feel more like yourself again and go back to your usual activities?

CURRENT LOSS

- What have you been told about the loss? Is there anything else you would like to know or don't understand?
- What changes do you think this illness, surgery, problem will cause in your life?
- What do you think it will be like without the lost object?
- Have you ever experienced a loss like this before?

- Can you think of anything good that might come out of this?
- What kind of help do you think you will need? Who is going to be helping you with this loss?
- Are there any organizations in your community that might be able to help? If there is current grieving:
- Are you having trouble sleeping? Eating? Concentrating? Breathing?
- Do you have any pain or other new physical problems?
- What are you doing to help you deal with this loss?
- Are you taking any drugs or medications to help you cope with this loss?

2) Nursing Diagnosis

The following are examples of nursing diagnoses applicable to loss and grieving
(NANDA, 2021):
- Risk for loneliness
- Grieving
- Interrupted family processes

3) Planning

The overall goals for clients grieving the loss of body function or a body part are to adjust to the changed ability and to redirect both physical and emotional energy into rehabilitation. The goals for clients grieving the loss of a loved one or thing are to remember them without feeling intense pain and to redirect emotional energy into one's own life and adjust to the actual or impending loss.

Planning for Home Care

Clients who have sustained or anticipate a loss may require ongoing nursing care to assist them in adapting to the loss. Determining how much and what type of home care follow-up is needed is based in great part on the nurse's knowledge of how the client and family have coped with previous losses. To prepare for home care, the nurse reassesses the client's abilities and needs.

Implementation

1) Encourage the client to express and share grief with support people
2) Teach family members to encourage the client's expression of grief, not to push the client to move on or enforce his or her own expectations of appropriate reactions.
3) Encourage the client to resume normal activities on a schedule that promotes physical and psychologic health.
4) Providing Emotional Support: Provide information regarding how to access community resources: clergy, support groups, and counseling services

B. Dying and Death

Definitions of Death

The traditional clinical signs of death were cessation of the apical pulse, respirations, and blood pressure, also referred to as heart-lung death. Another definition of death is cerebral death or higher brain death, which occurs when the higher brain center, the cerebral cortex, is irreversibly destroyed The concept of death is developed over time, as the individual grows, experiences various losses, and thinks about concrete and abstract concepts. In general, humans move from a childhood belief in death as a temporary state, to adulthood

in which death is accepted as very real but also very frightening, to older adulthood in which death may be viewed as more desirable than living with a poor quality of life.

Signs of Impending Clinical Death

a. LOSS OF MUSCLE TONE

- Relaxation of the facial muscles (e.g., the jaw may sag)
- Difficulty speaking
- Difficulty swallowing and gradual loss of the gag reflex
- Decreased activity of the gastrointestinal tract, with subsequent nausea, accumulation of flat abdominal distention, and retention of feces, especially if narcotics or tranquilizers are being administered
- Possible urinary and rectal incontinence due to decreased sphincter control
- Diminished body movement

b. SLOWING OF THE CIRCULATION

- Diminished sensation
- Mottling and cyanosis of the extremities
- Cold skin, first in the feet and later in the hands, ears, and nose (the client, however, may feel warm if there is a fever)
- Slower and weaker pulse
- Decreased blood pressure

c. CHANGES IN RESPIRATIONS

- Rapid, shallow, irregular, or abnormally slow respirations
- Noisy breathing, referred to as the death rattle, due to collecting of mucus in the throat
- Mouth breathing, dry oral mucous membran

Indications of Death:

- Total lack of response to external stimuli
- No Muscular movement, especially breathing
- No reflexes

Responses to Dying and Death

The reaction of any individual to another individual's impending or real death, or to the potential reality of his or her own death, depends on all the factors regarding loss and the development of the concept of death. Response of dying and death influences by:

- Cause of death
- Spiritual beliefs
- Support system

Nursing Care for Dying and Death:

1) Assessing

To gather a complete database that allows accurate analysis and identification of appropriate nursing diagnoses for dying clients and their families, the nurse first needs to recognize the states of awareness manifested by the client and family members. In cases of terminal illness, the state of awareness shared by the dying client and the family affects the nurse's ability to communicate freely with clients and other healthcare team members and to assist in the grieving process.

Three types of awareness:

- **Closed awareness**, in closed awareness, the client is not made aware impending death.
- **mutual pretense**, the client, family, and healthcare personnel know that the prognosis is terminal but do

not talk about it and make an effort not to raise the subject

- **open awareness,** the client and others know about the impending death and feel comfortable discussing it, even though it is difficult.

2) Nursing Diagnosis

The following are examples of nursing diagnoses applicable to dying and death (NANDA, 2021):

- Hopelessness
- Powerlessness
- Interrupted family processes

3) Planning

Major goals for dying clients are:

(a) maintaining physiologic and psychologic comfort and

(b) achieving a dignified and peaceful death, which includes maintaining personal control and accepting declining health status.

4) Implementation

The major nursing responsibility for clients who are dying is to assist the client to a peaceful death.

More specific responsibilities include the following:

- To minimize loneliness, fear, and depression
- To maintain the client's sense of security, self-confidence, dignity, and self-worth
- To help the client accept losses
- To provide physical comfort.

Palliative Care:

- provides relief from pain and other distressing symptoms;
- integrates the psychological and spiritual aspects of patient care;

- offers a support system to help patients live as actively as possible until death;

Providing Spiritual Support

Spiritual support is of great importance in dealing with death. Although not all clients identify with a specific religious faith or belief; most have a need for meaning in their lives, particularly as the experience a terminal illness

Postmortem Care

- **Rigor mortis** is the stiffening of the body that occurs about 2 to 4 hours after death. Rigor mortis starts in the involuntary muscles (heart, bladder, and so on), the progresses to the head, neck, and trunk, and finally reaches the extremities. Rigor mortis usually leaves the body about hours after death
- **Algor mortis** Is the gradual decrease of the body's temperature after death. When blood circulation terminates and the hypothalamus ceases to function, body temperature falls about 1°C (1.8°F) per hour until it reaches room temperature. Simultaneously, the skin loses its elasticity and can easily be broken when removing dressings and adhesive tape. After blood circulation has ceased, the red blood cells break down, releasing hemoglobin, which discolors the surrounding tissues. This discoloration, referred to as livor mortis, appears in the lowermost or dependent areas of the body.

SUMMARY

Nurses help clients deal with many losses, including loss of body image, a loved one, a sense of well-being, or a job. Loss, especially loss of a loved one or a valued body part, can be viewed as either a situational or a developmental loss and as either an actual or a perceived loss (both of which can be anticipatory). Grieving is a normal, subjective emotional response to loss; it is essential for mental and physical health. Grieving allows the bereaved individual to cope with loss gradually and to accept it as a reality. Knowledge of different stages or phases of grieving and factors that influence the loss reaction can help the nurse understand the responses and needs of clients. How an individual deals with loss is closely related to the individual's age, culture, spiritual beliefs, gender, socioeconomic status, support systems, and the significance and cause of the loss or death

REVIEW QUESTIONS

1. An 82-year-old man has been told by his primary care provider that it is no longer safe for him to drive a car. Which statement by the client would indicate beginning positive adaptation to this loss?
   A. "I told the doctor I would stop driving, but I am not going to yet."
   B. "I always knew this day would come, but I hoped it wouldn't be now."
   C. "What does he know? I'm a better driver than he will ever be."
   D. "Well, at least I have friends and family who can take me places."

2. A nurse receives an advance health care directive to include in the medical record upon admitting a client to the hospital. The directive is witnessed by two of the client's three children. How does the nurse interpret this information?
   A. This advance directive may not be legal as children cannot witness advance directives in some states.
   B. Having the children's signatures on the advance directive is good because it indicates they agree with the client's wishes.
   C. The advance directive cannot be honored unless it is witnessed by all three children.
   D. In order to be valid, the advance directive must be witnessed by the client's physician.
3. The shift changed while the nursing staff was waiting for the adult children of a deceased client to arrive. The oncoming nurse has never met the family. Which initial greeting is most appropriate?
   A. "I'm very sorry for your loss."
   B. "I'll take you in to view the body."
   C. "I didn't know your father but I am sure he was a wonderful person."
   D. "How long will you want to stay with your father?"
4. Explain stage of grieving process.
5. Identify signs of clinical death!

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