

Lesson # 21

Title: Cognitive Impairment/Dementia/Alzheimer's

Lesson Objectives:

- I. The student will be able to explain conditions associated with cognitive impairment.
- II. The student will be able to describe behaviors related to cognitive impairment.
- III. The student will be able to identify therapies/methods used to reduce challenging behaviors.
- IV. The student will be able to demonstrate communication strategies and techniques for use with the cognitively impaired resident.

Key Terms:

Activity Therapy – increased activities with a goal.

Agitation – restlessness; emotional state of excitement or restlessness.

Alzheimer's disease – a progressive, degenerative and irreversible disease. Alzheimer's disease is caused by the formation of tangled nerve fibers and protein deposits in the brain.

Aphasia – inability to speak, or to speak clearly.

- Expressive aphasia – may be slow to speak or to formulate sentences.
- Receptive aphasia – may be slow to respond to communication attempts due to delay in processing the communication and the response.

Catastrophic Reaction – overreacting to stimuli in an unreasonable way.

Cognition – ability to think logically/quickly.

Cognitive Impairment – inability related to thinking, concentrating, and/or remembering.

Confusion – inability to think clearly, trouble focusing, difficulty making decisions, feelings of disorientation.

Delirium – state of sudden severe confusion that is usually temporary.

Delusions – believing things that are untrue. Fixed false beliefs.

Dementia – serious loss of mental abilities (thinking, remembering, reasoning and communication).

Depression – state of low mood and lack of interest in activity.

Elopement – a cognitively impaired resident is found outside the facility and whose whereabouts had been unknown to staff.

Hallucinations – seeing/hearing things not there. False sensory perceptions.

Hoarding – collecting and storing items in a guarded manner.

Interventions – actions to be taken by staff in response to an event or behavior.

Pacing – walking back and forth in the same area.

Pillaging – taking items that belong to another.

Reality Orientation – using calendars, clocks, signs and lists to assist residents with cognitive impairment to remember who and where they are.

Reminiscence Therapy – used to encourage residents to talk about past.

Repetitive Phrasing – continually repeating the same phrase over and over.

Sundowning – behavioral changes that occur in the evening with improvement or disappearance during the day.

Validation Therapy – allows residents to believe they live in the past or imaginary circumstances. Staff let the residents believe what the resident is saying, without trying to enforce current reality.

Wandering – walking aimlessly around the facility.

Content:

I. Conditions:

- A. Confusion – characterized by the inability to think clearly, trouble focusing, difficulty making decisions, feeling of disorientation
- B. Delirium – state of sudden severe confusion that is usually temporary
- C. Dementia – a general term that refers to serious loss of mental abilities, such as thinking, remembering, reasoning, and communicating. Dementia is not a normal part of aging
- D. Alzheimer's disease – a progressive, degenerative and irreversible disease. Alzheimer's disease is caused by the formation of tangled nerve fibers and protein deposits in the brain. Alzheimer's disease is the most common cause of dementia. Alzheimer's disease is characterized by stages:

1. Stage 1 – no impairment (normal function) – the resident does not experience any memory problems
2. Stage 2 – very mild cognitive decline (may be normal age-related changes or earliest signs of Alzheimer’s disease) – the resident may feel as if he or she is having memory lapses – forgetting familiar words or the location of everyday objects
3. Stage 3 – mild cognitive decline (early stage Alzheimer’s can be diagnosed in some, but not all, individuals with these symptoms) – friends, family or co-workers begin to notice difficulties
 - a) Noticeable problems coming up with the right word or name
 - b) Trouble remembering names when introduced to new people
 - c) Having noticeably greater difficulty performing tasks in social or work settings
 - d) Forgetting material that one has just read
 - e) Losing or misplacing a valuable object
 - f) Increasing trouble with planning or organizing
4. Stage 4 – moderate cognitive decline (mild or early-stage Alzheimer’s disease) – at this point, a careful medical interview should be able to detect clear-cut symptoms in several areas:
 - a) Forgetfulness of recent events
 - b) Impaired ability to perform challenging mental arithmetic – for example, counting backward from 100 by 7s
 - c) Greater difficulty performing complex tasks such as planning dinner for guests, paying bills or managing finances
 - d) Forgetfulness about one’s own personal history
 - e) Becoming moody or withdrawn, especially in socially or mentally challenging situations
5. Stage 5 – moderately severe cognitive decline (moderate or mid-stage Alzheimer’s disease) – gaps in memory and thinking are noticeable, and residents begin to need help with day-to-day activities. At this stage, those with Alzheimer’s may:

- a) Be unable to recall their own address or telephone number or the high school or college from which they graduated
 - b) Become confused about where they are or what day it is
6. Stage 6 – severe cognitive decline (moderately severe or mid-stage Alzheimer’s disease) memories continues to worsen, personality changes may take place and individuals need extensive help with daily activities. At this stage, residents may:
- a) Lose awareness of recent experiences as well as of their surroundings
 - b) Remember their own name but have difficulty with their personal history
 - c) Distinguish familiar and unfamiliar faces but have trouble remembering the name of a spouse or caregiver
 - d) Need help dressing properly and may, without supervision, make mistakes such as putting pajamas over daytime clothes or shoes on the wrong feet
 - e) Experience major changes in sleep patterns – sleeping during the day and becoming restless at night
 - f) Need help handling details of toileting (for example, flushing the toilet, wiping or disposing of tissue properly)
 - g) Having increasingly frequent trouble controlling their bladder or bowels
 - h) Experience major personality and behavioral changes, including suspiciousness and delusions (such as believing that their caregiver is an imposter) or compulsive, repetitive behavior like hand-wringing or tissue shredding
 - i) Tend to wander or become lost
7. Stage 7 – very severe cognitive decline (severe or late-stage Alzheimer’s disease) – in the final stages of this disease, residents lose the ability to respond to their environment, to carry on a conversation and, eventually, to control movement. They may still say words or phrases. At this stage,

residents need help with much of their daily personal care, including eating or using the toilet. They may also lose the ability to smile, to sit without support and to hold their heads up. Reflexes become abnormal. Muscles grow rigid. Swallowing impaired

I. Behaviors, Causes and Interventions

- A. Agitation –could be caused by noise, other residents’ behaviors, pain, hunger etc.)
 - 1. Remove trigger(s), if known
 - 2. Maintain calm environment
 - 3. Stay calm
 - 4. Patting, stroking may reassure resident/may not
- B. Pacing/Wandering – could be a need to exercise, resident has forgotten location of room or chair, hungry, need to toilet, pain, etc.
 - 1. Ensure resident is in a safe area
 - 2. Ensure resident is wearing appropriate footwear
 - 3. Re-direct to another activity of interest if resident appears tired and may become at risk for falls
- C. Elopement – may be evident through exit-seeking actions, verbalizing wanting to leave, staying close/near doors, trying to open doors/windows
 - 1. Redirect and engage in other activities
 - 2. Ensure doors remain secured/alarms functional
 - 3. Report missing resident immediately
- D. Hallucinations/Delusions – may be caused by acute illness or psychiatric diagnosis/condition
 - 1. Ignore harmless hallucinations or delusions
 - 2. Provide reassurance
 - 3. Do not argue
 - 4. Stay calm
 - 5. Redirect to activities or to another discussion
 - 6. Notify nurse of hallucination(s)/delusion(s)

- E. Sundowning – as this occurs in the evening, consider need for increased activities and/or staffing in the evening
 - 1. Remove trigger(s)
 - 2. Avoid stress in environment
 - 3. Keep environment calm and quiet
 - 4. Reduce/remove caffeine from evening fluids/diet, if possible
 - 5. Redirect; offer activity or favorite food
- F. Catastrophic Reaction – may be caused by fatigue or over stimulation
 - 1. Remove trigger(s), if possible
 - 2. Offer food or quiet activity
 - 3. Redirect
- G. Repetitive Phrasing – may be caused by habit or cognitive impairment
 - 1. Be patient and calm
 - 2. Answer question
 - 3. Do not try to silence or stop
 - 4. Redirect
- H. Violence – may be caused by delusion, hallucination, acute illness, cognitive impairment, provocation by another resident, etc.
 - 1. Step out of reach
 - 2. Block blows with open hand or forearm
 - 3. Do not strike back or grab resident
 - 4. Call for help
 - 5. Stay calm
 - 6. Identify triggers and remove, if possible
- I. Disruptive actions – may be caused by delusion, hallucination, acute illness, cognitive impairment, provocation by another resident, etc.
 - 1. Remain calm
 - 2. Avoid treating like a child
 - 3. Gently direct to a private area, provide distraction or activity
 - 4. Explain procedure(s) or change in normal pattern
 - 5. Be reassuring

- J. Challenging Social Acts – may be caused by delusion, hallucination, acute illness, cognitive impairment, provocation by another resident, etc.
 - 1. Remain calm
 - 2. Identify trigger, if possible
 - 3. Gently redirect to private area
 - 4. Report physical or verbal abuse to the nurse
- K. Challenging Sexual Acts – may be provoked by a thought, visual, etc.
 - 1. Do not over-react
 - 2. Be sensitive
 - 3. Try to redirect or relocate to a private area
 - 4. Ensure the safety of other residents, if potentially involved
 - 5. Report to nurse
- L. Pillaging/Hoarding – note that either activity is not stealing, rather, a behavior often associated with a psychiatric diagnosis
 - 1. Label personal belongings of all residents
 - 2. Regularly check rooms for items which might belong to others
 - 3. Provide direction to resident's own room (a visual cue could be helpful)
 - 4. Mark other residents' room with symbols or labels to avoid residents from entering

II. Methods/Therapies to Reduce Behaviors

- A. Reality Orientation – using calendars, clocks, or signs to help memory
- B. Validation Therapy – allowing the resident to live in the past or in imaginary circumstances; to try to convince otherwise is often upsetting
- C. Reminiscence Therapy – encouraging the resident to remember; to talk about the past
- D. Activity Therapy – using activities that the resident enjoys to prevent boredom and frustration
- E. Music Therapy – form of sensory stimulation; hearing familiar songs can cause a response in residents that do not respond to other therapies

- F. Re-direction – gently and calmly encouraging the resident to do a different action; change focus of attention

III. Tips to Remember when Dealing with Cognitively Impaired Residents

- A. Not personal – residents do not have control over words or actions
- B. Talk with family – learn about the resident’s life, names of family members, occupation, hobbies, pets, foods, favorites
- C. Team work – report changes or observations; be flexible and patient
- D. Handle behaviors/situations as they occur – remember that the resident has lost the ability to remember prior directions given
- E. Know your limits – watch for signs of stress, frustration and burnout

IV. Communication Strategies

- A. Always identify yourself
- B. Speak slowly, calmly in a low tone
- C. Avoid loud, noisy environments
- D. Avoid startling or scaring; approach from the front, remain visible to the resident
- E. Allow the resident to determine how close you should be

V. Techniques to Handle Difficult Behaviors

A. Anxiety/Fear

1. Stay calm, speak slow
2. Reduce noise or distractions
3. Explain what you are doing
4. Use simple words and short sentences
5. Watch your body language and ensure it is not threatening

B. Forgetful/ Memory Loss

1. Repeat, using same words
2. Give short simple instructions
3. Answer questions with brief answers
4. Watch tone, facial expressions and body language

C. Unable to express needs

1. Ask to point or gesture
2. Use pictures or written words
3. Offer comfort if resident is becoming frustrated

D. Unsafe or abusive language or activities

1. Avoid saying “don’t” or “no”
2. Redirect to another activity or discussion
3. Remove hazard, if possible
4. Don’t take the resident’s actions personally

E. Depressed, lonely or crying

1. Take time with resident; do not rush
2. Really listen and provide comfort
3. Try to involve in activities to redirect resident focus
4. If continues or repeats, report to nurse

VI. Behavior Interventions

A. Bathing

1. Schedule at time that resident is agreeable
2. Be organized
3. Take your time
4. Provide privacy
5. Make sure resident is not afraid of tub/shower
6. Have resident assist, as able
7. Maintain safety; do not leave alone
8. Do not argue with resident; if upset, try again at another time

B. Dressing

1. Encourage to choose what to wear
2. Avoid delays, but do not rush
3. Provide privacy
4. Use simple steps; short step-by-step directions
5. Allow resident to assist

6. Take time and be calm

C. Toileting

1. Encourage fluids – lack of fluids can cause dehydration and constipation
2. Establish a toileting schedule; for example, take to bathroom every 2 hours
3. Toilet before and after meals
4. If incontinent – watch for patterns to determine resident routine for a 2-3 day period (this is also effective for night time incontinence)
5. Identify bathroom with sign or picture
6. Avoid dark or unlit bathrooms or hallways
7. Check briefs frequently; change when soiled and observe skin
8. Document/track bowel movements (constipation may cause increase in behaviors)

D. Eating/Meals

1. Schedule meals at regular times
2. Provide adequate lighting and space
3. Avoid delays – have meal ready, i.e., pre-cut, opened cartons or packages
4. Watch temperatures – avoid very hot foods
5. Simple (white) dishes, no extra items which could confuse resident
6. Avoid overwhelming with too many different foods
7. Give simple instructions
8. If the resident needs to be fed, use slow, calm, relaxed approach
9. Watch for chewing, swallowing or pocketing issues and report to nurse

Visual Aides:

- None

RCPS:

- None

Review Questions

1. Believing something that is not true, for example, that you are the President, is considered a hallucination or a delusion?
2. Should a cognitively impaired resident leave the facility unattended and that resident's whereabouts is unknown to staff, it is called _____.
3. Allowing the resident to believe what he or she believes to be true, without correcting or trying to bring the resident back to current reality is called _____.
4. Behavioral change that occurs in the evening which may result in challenging behavior that improves or disappears during the day is called _____.

Lesson # 22

Title: Mental Health, Depression and Social Needs

Lesson Objectives:

- I. The student will be able to demonstrate appropriate response to challenging or problematic resident behavior.
- II. The student will be able to describe interventions to be used in response to specific challenging or problematic resident behavior.
- III. The student will be able to describe the difference between mental illness and intellectual disability (mental retardation).
- IV. The student will be able to demonstrate the importance of immediately reporting to the nurse any challenging or problematic behavior.

Key Terms:

Anxiety – uneasiness or fear of a situation or condition.

Apathy – lack of interest.

Bipolar Disorder – a [psychiatric diagnosis](#) that describes [mood disorders](#) defined by the presence of one or more episodes of abnormally elevated energy levels, [cognition](#), and [mood](#) with or without one or more depressive episodes. The resident experiences extreme highs and lows.

Claustrophobia – fear of having no escape and being closed in small spaces or rooms.

Defense Mechanisms – unconscious behaviors used to release tension or cope with stress or uncomfortable, threatening situations or feelings.

Depression – a persistent feeling of sadness and loss of interest.

Intellectual Disability (Mental Retardation) – a developmental disability that causes below average mental functioning.

Manic Depression – fluctuation between deep depression to extreme activity, including high energy, little sleep, big speeches, rapid mood changes, high self-esteem, overspending and/or poor judgment.

Mental Health – level of [cognitive](#) or [emotional well-being](#) or an absence of a [mental disorder](#).

Mental Illness – disruption in a person’s ability to function at a normal level in a family, home, or community, often producing inappropriate behaviors.

Obsessive Compulsive Disorder (OCD) – uncontrollable need to repeat or perform actions in a repetitive or sequential manner.

Panic Disorder – fearful, scared or terrified for no specific reason.

Paranoid Schizophrenia – a schizophrenic disorder in which the person has false beliefs that somebody (or some people) are plotting against them.

Phobias – an extreme form of anxiety/fears.

Post-traumatic Stress Disorder – anxiety related to a disorder caused by a traumatic experience or event.

Psychotherapy – sessions with mental health professionals during which the resident discusses problems or issues.

Psychotropic Medication – drugs taken which effect the [mental state](#) and are used to treat [mental disorders](#).

Schizophrenia – a complex mental disorder that makes it difficult to tell the difference between real and unreal experiences, to think logically, and to behave normally in social situations.

Content:

I. Causes of Mental Illness

- A. Physical factors – illness, disability, aging, substance abuse or chemical imbalance
- B. Environmental factors – weak interpersonal skills, weak family support, traumatic experiences
- C. Heredity – possible inherited traits
- D. Stress – inability to handle or cope with stress

II. Response to Behaviors

- A. Remain calm
- B. Do not treat as a child
- C. Be aware of body language and facial expression
- D. Maintain a normal distance

- E. Use simple, clear language
- F. Avoid arguments
- G. Maintain eye contact
- H. Listen carefully
- I. Show respect and concern

III. Use of Defense Mechanisms – unconscious behaviors used to release tension or cope with stress or uncomfortable, threatening situations or feelings.

- A. Denial – rejection of a thought or feeling
- B. Projection – seeing feelings in others that are really one's own
- C. Displacement – transferring a strong negative feeling to something or someone else
- D. Rationalization – making excuses to justify a situation
- E. Repression – blocking painful thoughts or feelings from the mind
- F. Regression – going back to an old immature behavior

IV. Types of Mental Illness

A. Anxiety related disorders

1. Anxiety – uneasiness or fear about a situation or condition that cannot be controlled or relieved when the cause has been removed
2. Panic Disorders – fearful, scared or terrified for no specific reason
3. Obsessive Compulsive Disorders – OCD – uncontrollable need to repeat or perform actions in a repetitive or sequential manner
4. Post-traumatic Stress Disorder – PTSD – anxiety related to a traumatic experience
5. Phobias – intense fear of certain things or situations
6. Symptoms – sweating, dizziness, choking, dry mouth, racing heart, fatigue, shakiness, muscle aches, cold or clammy feeling, shortness of breath or difficulty breathing

B. Depression

1. Clinical depression – depression ranges in seriousness from mild, temporary episodes of sadness to severe, persistent depression. The term “clinical depression” is used to describe the more severe form of depression also known as “major depression” or “major depressive disorder”
 - a) Clinical depression symptoms may include:
 - A. Depressed mood most of the day, nearly every day
 - B. Loss of interest or pleasure in most activities
 - C. Significant weight loss or gain
 - D. Sleeping too much or not being able to sleep nearly every day
 - E. Slowed thinking or movement that others can see
 - F. Fatigue or low energy nearly every day
 - G. Feelings of worthlessness or inappropriate guilt
 - H. Loss of concentration or indecisiveness
 - I. Recurring thoughts of death or suicide
2. Bipolar Disorder – sometimes called manic-depressive disorder – is associated with mood swings that range from the lows of depression to the highs of mania. When the resident becomes depressed, he/she may feel sad or hopeless and lose interest or pleasure in most activities. When the resident’s mood shifts in the other direction, he/she may feel euphoric and full of energy. Mood shifts may occur only a few times a year, or as often as several times a day
3. Schizophrenia – brain disorder that affects a person’s ability to think and communicate. It affects the way a person acts, thinks, and sees the world
 - a) Does not mean “split personality”
 - b) Symptoms – delusions, hallucinations, thought disorder, disorganized behavior, loss of interest in everyday activities, appearing to lack emotion, reduced ability to plan or carry out activities, neglect of personal hygiene, social withdrawal, loss of motivation

V. Behaviors associated with mental disorders – actions and interventions

A. Combative

1. Actions – hitting, kicking, spitting, pinching, pushing, pulling hair, cursing
2. Interventions – remain calm, don't take personal, step out of way, remove other residents, never strike back or respond verbally, leave resident alone to de-escalate (calm)– but only if safe, report to nurse

B. Anger

1. Actions – shouting, yelling, threatening, throwing things, pacing, withdrawal, sulking
2. Interventions – remain calm, do not argue, try to understand what triggered anger, empathize with resident, listen, stay a safe distance, explain what you are doing

C. Sexual Behaviors

1. Actions – sexual advances, comments, sexual words or gestures, removing clothing, inappropriate touching of self or others, exposing body parts or masturbation
2. Interventions – do not over-react, be “matter-of-fact”, try to redirect, gently direct to private area, report to nurse, maintain safety of other residents
3. Special consideration – check for possible explanation for behavior, such as clothing not fitting, skin irritation, need for toileting, remember to report all inappropriate sexual behavior to the nurse

VI. Treatment for Mental Illness

- A. Medications – numerous medications are available. Physician orders the medication dependent on diagnosis and conditions that need to be addressed. The nursing staff is responsible for monitoring and administration of these medications
- B. Psychotherapy – involves sessions with mental health professionals during which the residents discuss problems or issues. The mental health professionals work

with the resident to identify and address problems and develop interventions for staff to follow when caring for the resident

VII. Special Considerations

- A. Talk of Suicide or Death - any verbalization of suicide, “death wish” or self-injury REPORT IMMEDIATELY
- B. Changes in conditions – any changes in mood, activity, eating, extreme behaviors or reactions, more upset or excitable, withdrawn, hallucinations or delusions

VIII. Mental Illness and Intellectual Disability (Mental Retardation)

- A. Intellectual Disability (Mental Retardation) – a developmental disability that causes below –average mental functioning
 - 1. Intellectual Disability (Mental Retardation) vs. Mental Illness:
 - a) Intellectual Disability (Mental Retardation) is a permanent condition; mental illness can be temporary
 - b) Intellectual Disability (Mental Retardation) is present at birth or early childhood; mental illness can develop at any age
 - c) Intellectual Disability (Mental Retardation) affects mental ability; mental illness may or may not affect mental function
 - d) No cure for Intellectual Disability (Mental Retardation). Some mental illness can be cured or controlled with treatment, such as medication or therapy.

Visual Aides:

- None

RCPS:

- None

Review Questions:

1. Should a resident verbalize thoughts of suicide or an intention to cause harm to self, when should this be reported to the nurse?
2. Should a resident begin kicking or hitting you, what actions should you take?

Lesson #23

Title: Common Diseases and Disorders - Nervous, Circulatory & Musculo-Skeletal Systems

Lesson Objectives:

- I. The student will be able to describe recognize common disease processes of the nervous system which affect the elderly resident.
- II. The student will be able to describe common disease processes of the circulatory system which affect the elderly resident
- III. The student will be able to describe common disease processes of the musculo-skeletal system which affect the elderly resident.

Key Terms:

Arthritis – a [joint disorder](#) that involves [inflammation](#) of one or more joints.

Atrophy – wasting away, decreasing in size, and weakening of muscles.

Cerebral Palsy – a group of disorders that can involve brain and nervous system functions, such as movement, learning, hearing, seeing and thinking.

Cerebrovascular Accident (CVA) – stroke; blood supply is suddenly cut off to the brain.

Congestive Heart Failure (CHF) – the heart is severely damaged and cannot pump oxygen – rich blood to the rest of the body effectively. Blood may back up in other areas of the body, and fluid may build up in the lungs, liver, gastrointestinal tract, arms and legs.

Contracture – permanent stiffening of a joint and muscle.

Epilepsy – brain disorder in which a resident has reported seizures (convulsions). Medication is ordered to control/lessen seizure activity.

Fracture – broken bone.

Heart Attack (Myocardial Infarction) – blood flow to the heart is completely blocked and oxygen cannot reach the cells in the region that is blocked.

Hypertension – high blood pressure.

Hypotension – low blood pressure.

Multiple Sclerosis (MS) – a progressive disease affecting the central nervous system.

Osteoporosis – condition when the bones become brittle and weak; may be due to age, lack of hormones, not enough calcium in bones, alcohol, or lack of exercise.

Parkinson's disease – a progressive movement disorder.

Peripheral Vascular Disease (PVD) – condition in which the extremities (commonly legs and feet) do not have enough blood circulation due to fatty deposits in the vessels that harden over time.

Range of motion – exercises which put a joint through its full range of motion.

Content - Nervous System:

- I. Nervous System – control and message center of the body
 - A. Central Nervous System (CNS) - composed of the brain and spinal cord
 1. Brain – sends, receives and interprets messages to make sense of the outside world/stimulus
 2. Spinal cord – nerves which transmit information from body organs and external stimuli to the brain and send information from the brain to other areas of the body
 - B. Peripheral Nervous System (PNS) – nerves that extend throughout the body

- II. Conditions that Affect Nervous System
 - A. Dementia
 1. Affects thought process: memory, communication
 2. As the process progresses it will make it difficult to perform ADLs: e.g., eating, dressing, bathroom
 - B. Alzheimer's Disease
 1. Set up regular schedule for bathing, toileting, exercise
 2. Use repetition in daily activities
 - C. Parkinson's Disease
 1. A progressive, degenerative disease that affects the brain
 2. As the disease progresses, it will make it more difficult for the resident to perform ADLs. Hands often tremor and limbs and trunk become rigid
 3. Assist by placing food and drink close; use assistive devices

D. Cerebrovascular Accident (CVA) or stroke

1. Symptoms: may include dizziness, blurred vision, nausea/vomiting, headache, slurred speech
2. Occurs when blood supply is suddenly cut off to the brain caused by a clot or a ruptured blood vessel
3. When dressing a resident, address the weaker side first to prevent unnecessary bending or stretching and when undressing address the stronger side first
4. Use a gait belt when walking or transferring the resident for safety precautions and stand on the weaker side

E. Multiple Sclerosis (MS)

1. A progressive disease affecting the central nervous system
2. It may be difficult to perform ADLs; be patient when assisting, as stress can increase MS effects

F. Epilepsy

1. Observe for seizure activity; report to nurse

G. Cerebral palsy

1. Muscles may become very tight; may develop contractures
2. Muscle weakness or loss of movement (paralysis)
3. Abnormal movements
4. May exhibit speech problems, hearing/vision problems, seizures, drooling, problems swallowing
5. Resident may be totally dependent on staff for ADLs

H. Head or spinal cord injuries

1. Dependent upon extent of injury, resident may need assistance or be totally dependent on staff for ADLs

III. Normal Nervous System Changes with Age

A. Decreased blood flow to certain areas of the brain causes decreased short-term memory. Nerve cells die causing decreased perception of sensory stimuli and less awareness of pain and injury

- B. Responses and reflexes slow
- C. Nerve ending decreased sensitivity
- D. Memory loss – often short-term memory

IV. Role of the Nurse Aide

- A. Observe and Report
 - 1. Shaking or trembling
 - 2. Inability to speak clearly
 - 3. Inability to move one side of the body
 - 4. Changes in vision or hearing
 - 5. Difficulty swallowing
 - 6. Depression or mood changes
 - 7. Memory loss or confusion
 - 8. Behavior changes

Content - Circulatory System:

I. Circulatory System

- A. Heart – pumps blood through the body
- B. Blood – body fluid that carries oxygen to the cells
 - Blood vessels – tubes (arteries, veins, capillaries) through which the blood is transported to and from the heart

II. Conditions that Affect the Circulatory System

- A. High blood pressure (hypertension)
 - 1. Symptoms: headache, blurred vision, dizziness
- B. Heart Attack (Myocardial Infarction)
- C. Coronary Artery Disease (CAD)
- D. Angina (chest pain)
- E. Cerebrovascular Accident (CVA) – stroke

III. Normal Circulatory Changes with Age

- A. Blood vessels become more rigid and narrow. Heart muscle has to work harder which may result in high blood pressure and poor circulation

IV. Role of the Nurse Aide

- A. Observe and report
 - 1. Complaint of headache
 - 2. Chest pain
 - 3. Blurred vision
 - 4. Dizziness
 - 5. Nausea

Content - Musculo-Skeletal System:

I. Musculo-Skeletal System – gives the body shape and structure

- A. Muscles–tissues that contract (shorten) and relax (lengthen) to make motion possible
- B. Bones- provide the frame for the body. A joint is the point where two bones come together and allow movement
- C. Ligament – connect bone to bone and support joints
- D. Tendon – connect muscle to bone
- E. Cartilage – cushions joints

II. Conditions that Affect Musculo-Skeletal System

- A. Fracture
 - 1. Symptoms of fracture include: change in skin color, bruising, pain, swelling
- B. Osteoporosis
 - 1. Bones become brittle and can break easily
 - 2. Take caution when repositioning and/or transferring the resident
- C. Arthritis
 - 1. Two common types of arthritis include: osteoarthritis and rheumatoid
 - 2. Encourage independence in ADLs to preserve ability

3. As needed, use cane or other aids

D. Contracture

III. Importance of Exercise or Range of Motion (ROM)

- A. Maintains physical and mental health
- B. Prevents problems related to immobility
- C. Problems/complications from lack of exercise or range of motion
 1. Loss of self- esteem
 2. Depression
 3. Pneumonia
 4. Urinary Tract Infections
 5. Constipation
 6. Blood clots
 7. Dulling of senses
 8. Muscle atrophy or contractures

IV. Normal Musculo-Skeletal Changes with Age

- A. Bones become more brittle and porous and may fracture more easily
- B. Loss of muscle strength and tone causes weakness and feeling tired
- C. Less flexible joints make moving more difficult
- D. Changes in spine and feet result in height loss, postural changes and difficulty walking

V. Role of the Nurse Aide

- A. Observe and Report
 1. Pain with movement
 2. Bruising
 3. Change in movement and/or activity
 4. Change in range of motion
 5. Swelling of joints
 6. Aches and/or pains

B. Fall prevention

1. Keep mobile
2. Encourage activities and exercise
3. Participate in care
4. Proper positioning
5. Use of assistive devices

Visual Aides:

- Musculo-Skeletal System Body Chart
- Nervous System Body Chart
- Circulatory/Cardiovascular System Body Chart

RCPs:

- Review Passive Range of Motion

Review Questions:

1. Should a resident complain of headache and blurred vision, the caregiver must report this to the nurse immediately. True or False
2. When assisting a resident who has had a stroke to dress, the caregiver should dress the stronger side first. True or False

Lesson #24

Title: Common Diseases and Disorders - Respiratory and Urinary Systems

Lesson Objectives:

- I. The student will be able to describe common disease processes of the respiratory system which affect the elderly resident.
- II. The student will be able to describe common disease processes of the urinary tract which affect the elderly resident

Key Terms:

Expiration – breathing out.

Incontinence – inability to control the bladder.

Inspiration – breathing in.

Sputum – fluid that is coughed up.

Content:

- I. Respiratory System
 - A. mouth and nose – take in air
 - B. trachea – tube connecting mouth and nose to lungs
 - C. lungs-move oxygen from air into blood and remove carbon dioxide (gaseous waste product)
 1. Two functions:
 - a) Inspiration – brings oxygen into the body
 - b) Expiration – eliminates carbon dioxide
- II. Common Conditions of the Respiratory System
 - A. Upper Respiratory Infection (URI) or cold
 - B. Pneumonia – lung infection caused by a bacterial, viral or fungal infection
 - C. Bronchitis – swelling of the main air passages to the lung
 - D. Asthma – disorder that causes the airways to swell and become narrow

- E. Emphysema – progressive lung disease that causes shortness of breath. A symptom of COPD
- F. Chronic Obstructive Pulmonary Disease (COPD) – chronic disease in which residents have difficulty breathing, particularly getting air out of lungs.
- G. Lung Cancer
- H. Tuberculosis (TB) – a contagious bacterial infection of the lungs.

III. Normal Changes with Age

- A. Lung capacity decreases as chest wall and lungs become more rigid. Deep breathing is more difficult. Air exchange decreases causing the resident to breathe faster to get enough air when exercising, ill, or stressed.
- B. Decreased lung strength
 - 1. Decreased lung capacity
 - 2. Decreased oxygen in blood
 - 3. Weakened voice

IV. Role of the Nurse Aide

- A. Observe and Report
 - 1. Change in respiratory rate
 - 2. Coughing or wheezing
 - 3. Complaint of pain in the chest
 - 4. Shallow breathing or difficulty breathing
 - 5. Shortness of breath
 - 6. Bluish color of lips or nail beds
 - 7. Spitting or coughing up of thick sputum or blood
 - 8. Need to rest with mild exertion
- B. Interventions to avoid respiratory problems
 - 1. Encourage fluids
 - 2. Oxygen should be in use, if ordered
 - 3. Encourage exercise and movement
 - 4. Encourage deep breathing and coughing

5. Frequent hand hygiene, especially during cold /flu season

Content - Urinary System:

I. Urinary System

- A. Kidneys – filter waste products from blood and produce urine
- B. Ureters- carry urine from kidneys to bladder
- C. Urinary bladder-stores urine
- D. Urethra- carries urine from bladder out of body
- E. Two functions
 1. Eliminates waste products through urine
 2. Maintains water balance in the body
- F. Common Conditions of the Urinary System
 1. Urinary Tract Infection (UTI) or cystitis
 2. Calculi (kidney stones)

III. Normal Changes with Age

- A. Kidney function decreases slowing removal of waste. Bladder tone decreases resulting in more frequent urination, incontinence, bladder infections and urinary retention
- B. Decreased ability of kidney to filter blood
- C. Weakened bladder muscle tone
- D. More frequent urination due to bladder holds less urine
- E. Bladder does not empty completely

IV. Role of the Nurse Aide

- A. Observe and Report to the nurse
 1. Changes in frequency and amount of urination
 2. Foul smelling urine or visible change in color of urine
 3. Inadequate fluid intake
 4. Pain or burning with urination

5. Swelling in extremities
6. Complaint of being unable to urinate or bladder feeling full
7. Incontinence or dribbling
8. Pain in back/kidney region

B. Interventions to avoid urinary problems

1. Encourage fluids
2. Frequent toileting
3. Keep resident clean and dry
4. Avoid anger or frustration if resident is incontinent

Visual Aides:

- Respiratory System Body Chart
- Urinary Tract Body Chart

RCPs:

- None

Review Questions:

1. Green, yellow or blood tinged sputum should be reported to the nurse. True or False
2. Should the resident complain of pain or burning with urination, this should be reported to the nurse? True or False

Lesson #25

Title: Common Diseases and Disorders – Gastrointestinal and Endocrine Systems

Lesson Objectives:

- I. The student will be able to describe common disease processes of the gastrointestinal system which affect the elderly resident.
- II. The student will be able to describe common disease processes of the endocrine system which affect the elderly resident.

Key Terms:

Colostomy – section of the colon is removed and the stool will be evacuated through a stoma and emptied into a bag adhered to the abdomen of the resident.

Diabetes Mellitus – the body does not produce enough or properly use insulin.

Diarrhea – frequent elimination of liquid or semi-liquid stool.

Digestion – the process of breaking down food so that it can be absorbed by the cells of the body.

Elimination – the process of expelling solid wastes that are not absorbed into the cells of the body.

Emesis – vomit.

Gastroesophageal Reflux Disease (GERD) – chronic condition in which the liquid contents of the stomach back up into the esophagus

Hemorrhoids – **enlarged** veins in the rectum.

Hyperthyroidism – overactive thyroid gland - excess of thyroid hormone

Hypothyroidism – underactive thyroid gland - thyroid hormone produces below normal.

Ileostomy – section of the intestine is removed and the stool will be evacuated through a stoma and emptied into a bag adhered to the abdomen of the resident.

Ostomy – creation of an opening from an area inside the body to the outside of the body.

Peptic Ulcer – ulcer that forms in the lining of the stomach, duodenum, esophagus

Stoma – The opening of an ostomy.

Ulcerative Colitis – chronic inflammatory bowel disease

Content - Gastrointestinal System:

- I. Gastrointestinal System
 - A. Mouth – takes food in and masticates (chews) food and fluid
 - B. Esophagus – tube that transports masticated (chewed) food from mouth to stomach
 - C. Stomach – sac that mixes food and fluid with digestive juices
 - D. Small Intestine – tube that absorbs water and digested food from waste
 - E. Large Intestine – tube that absorbs water from waste
 - F. Rectum – sac at end of large intestine which stores waste
 - G. Anus – opening at end of rectum through which waste is expelled
 - H. Other organs which aid in digestion include – gall bladder, liver, pancreas

- II. Common Conditions of the Gastrointestinal System
 - A. Gastroesophageal Reflux Disease (GERD)
 - B. Peptic Ulcer
 - C. Ulcerative Colitis
 - D. Hemorrhoids
 - E. Constipation
 1. If a resident has not had a bowel movement within three days, most facilities have protocols for intervention to prevent impaction (hard stool in the rectal vault)
 - F. Colostomy/Ileostomy
 - G. Diarrhea

- III. Normal Changes with Age
 - A. Taste buds lose sensitivity causing decreased appetite
 - B. Tooth and gum problems result in inability to eat properly
 - C. Digestion is less efficient causing constipation and food intolerance

- IV. Role of the Nurse Aide
 - A. Observe and Report to the nurse

1. Difficulty chewing and/or swallowing
2. Loss of appetite
3. Abdominal pain or complaint of cramping
4. Diarrhea
 - a) frequency, amount, consistency
 - b) observe for blood
5. Nausea and/or vomiting
 - a) if vomitus looks like coffee grounds, immediately report to nurse
6. Constipation
 - a) frequency, consistency and size bowel movements
 - b) observation of stool for blood; notify nurse

Content - Endocrine System:

I. Endocrine System

A. Glands that produce hormones and secretions to regulate body functions

II. Common Conditions that Affect the Endocrine System

A. Diabetes Mellitus

1. Hypoglycemia (low blood sugar)
 - a) sign/symptoms: cold, clammy skin, double or blurry vision, shaking/ trembling, hunger, tingling or numbness of skin; increased confusion
3. Hyperglycemia (high blood sugar)
 - a) signs/symptoms: shortness of breath, breath smells fruity, nausea/vomiting, frequent urination, thirst

G. Hyperthyroidism

1. sign/symptoms: can't tolerate being hot
2. increased heart rate, and enlarged thyroid (goiter)

H. Hypothyroidism

1. sign/symptoms: confusion, tired
2. inability to tolerate the cold

V. Normal Changes with Age

- A. Insulin production decreases possibly causing excess sugar in blood
- B. Adrenal secretions decrease reducing ability to handle stress
- C. Thyroid secretions decrease slowing metabolism

VI. Role of the Nurse Aide

- A. Identify residents in your care who are diabetic
- B. Encourage diabetic resident to consume all meals/snacks; notify nurse if resident refuses meal/snack or consumes less than half of meal/snack
- C. Notify nurse immediately of signs/symptoms of hypoglycemia
- D. Notify nurse if a diabetic resident is consuming foods in conflict with ordered diet which could cause hyperglycemia

Visual Aides:

- Gastrointestinal System Body Chart
- Endocrine System Body Chart

RCPS:

- None

Review Questions

1. List signs/symptoms of hypoglycemia (low blood sugar).
2. If vomitus looks like coffee grounds, the nurse must be notified immediately. True or False