

Aging: Parkinson's, Dementia, and

OVERVIEW

Depression

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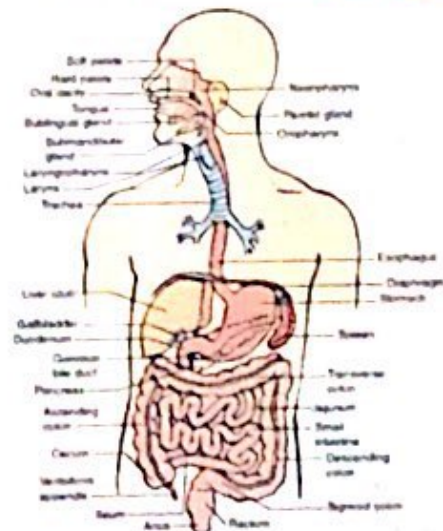
- What assessments could nurses do specifically for older pts?

- What is the most common chronic illness that causes death?

- Trends:
 - Ppl live longer
 - Baby boomer are the most rapidly expanding population
 - Tripled over 100 yrs
 - Increased life expectancy
- Nurses should be able to respond to the rapidly changing healthcare industry concerning older pts
 - Promoting positive behaviors
 - Educating impact of unhealthy behaviors in **chronic illnesses**
 - **Assess pt's functional status**
 - **Promote independence**
 - **Be able to recognize physiological differences older pts display and be able to distinguish them from diseases**
 - Others
- Health status of older adults (general)
 - About **70% of older adults** rate their health as good
 - Less so in **African Americans, Hispanics, and Latinos**
 - **Chronic illnesses** are the main cause of why geriatric pts say their health is "poor"
 - Many are preventable and treatable
 - **Chronic lower resp. diseases** are the 3rd leading cause of death
- **Intrinsic aging**: normal aging process that are genetically programmed and universal
 - There are some environmental factors that can cause worse deteriorations than others

AGE RELATED CHANGES IN DIFFERENT BODY SYSTEMS

- Cardiovascular
- Respiratory
- Integumentary
- Reproductive
- Musculoskeletal
- Genitourinary
- Gastrointestinal
- Vision/eye
- Hearing
- Taste and smell



Cardiovascular Changes

- Physiological changes
 - Decreased response to stress
 - Higher blood pressure or **orthostatic hypotension**
 - **Decreased CO**

CHANGES IN BODY SYSTEM

CARDIAC

- Name a few cardiac changes that happens as you age?

- A 72 yrs old pt ~~show~~ says he has chest pain, fatigue when exercising, & feels dizzy when standing up. Which organ system will you assess?

- What are nurs interventions for older cardiac pts?

RESPIRATORY

- What are some resp. changes that is normal w/ aging?

- Give some s/s of resp. decline w/ age.

- What can you do to help ^{older} pts w/ resp. issue?

- A 76 yrs pt come out of surgery. What education can you give to prevent pneumonia?

INTEGUMENTARY

- Give some skin changes due to aging

- Older pts are more prone to skin

_____ & _____

- Slower recovery rate
- Major s/s of CV changes
 - Fatigue with activity
 - Increased HR recovery time
 - Syncope
 - Atypical chest pain
 - Orthostatic hypotension
- Nursing interventions
 - Educate pt on heart healthy diet (low fat and salt)
 - Exercise promotion
 - Weight control
 - Regular follow up for any CV issues
 - Others



Respiratory Changes

- Physiological changes
 - Decrease gas exchange and diffusing capacity
 - Decreased coughing efficacy
 - Increased lung residual volume (air is trapped in lungs)
 - Decrease resp. muscle strength
 - Decreased vital capacity
- Major s/s of resp. changes
 - Headache
 - Chills
 - Fever
 - Coughing
 - Anorexia
 - Dehydration
 - Altered mental status
 - Others
- Nursing interventions
 - Smoking cessation education - number 1 risk factor for resp. issues
 - Good hydration
 - Vaccination for pneumonia and flu
 - If pt had surgery, pt is at higher risk for pneumonia
 - Educate about splinting, ICS use, deep breathing, etc.



Integumentary Changes

- Physiological changes
 - Decreased SQ fat
 - Decreased interstitial fluid
 - Decreased secretions
 - Decreased sweating
 - Increased capillary fragility → at risk for burns and tears
 - Others
- Major s/s of skin changes
 - Frequent burns
 - Frequent skin tears
 - Others
- Nursing interventions



- What are some educations you can give to older pts to protect skin?

- A 72 yrs old pt is on blood thinners, so he has ↑ risk of

REPRODUCTIVE SYSTEM

- You may refer pts w/ GU issues to _____ or _____

- Why is sex ed needed for older pts?

MU. ULOSKELETAL

- Older pts are prone to _____ (name a few) due to musculo skeletal weakening

- What educations can you give to promote muscle & bone health?

- Limit sun exposure to 10-15 mins per day for vit D
 - Educate sunscreen
- Recommend showers rather than hot baths (to prevent burns)
- Lubricate skin (since their natural skin oil production is low)
- Limit tape or adhesive bandages
- Be extra careful with pts who are on blood thinners
- Others

Reproductive Changes

- Physiological changes
 - Less firm testes and decreased sperm production
 - Vaginal narrowing and decreased vaginal secretion
 - Can cause painful intercourse
 - Slow sexual response
- Major s/s of reproductive changes
 - Vaginal dryness
 - Decreased libido
 - Erectile dysfunction
 - Others
- Nursing interventions
 - Make sure you are open to older pts' sexual life
 - Do not assume they are not sexually active
 - Refer to gynecology or urology if needed
 - Recommend using lubricant
 - Give sex education and protective measures to prevent STD spread
 - Since lots of older pts think they don't need to use condoms as they cannot become pregnant or make partner pregnant
 - Educate that vasodilators and other HTN meds can cause erectile dysfunction



Musculoskeletal Changes

- Physiological changes
 - Loss of muscle strength
 - Decreased muscle mass
 - Loss of bone density
 - Degenerative joint cartilage
- Major s/s of musculoskeletal changes
 - Decreased ability to engage in ADLs
 - Pain
 - Fractures
 - Falls
 - Others
- Nursing interventions
 - Specific exercises
 - Isometric exercises
 - Aerobic exercises
 - Nutritional education
 - High Ca⁺
 - Low phosphorus
 - Vit D supplements



GENITOURINARY

- Older male pts have ↑ risk of

- Name major sis of GU changes that occur w/ age.

- What are some nurs precautions to take (concerning GU system) for older pts?

- What education can you give to prevent UTI?

GI CHANGES

- What are one of your top concerns for GI issues w/ older pts?

- Older pts should get at least _____ of cat

- What are some educations you can give to promote healthy diet for older pts?

- Assess fall risk
- Assess home environment
- Others

Genitourinary Changes



- Physiological changes
 - **Benign prostate hyperplasia**
 - Relaxed perineal muscle
 - Detrusor instability → **urge incontinence**
 - Urethral dysfunction → **stress urinary incontinence**
- **Major s/s of GU changes**
 - Frequent UTI
 - Incontinence
 - Prostate issue
 - Urinary retention
- Nursing interventions
 - **Avoid Foley (due to high risk of UTI)**
 - **Check for mental state alteration (can be due to high ammonia or sepsis from UTI)**
 - **If antibiotics do not work, it may not be sepsis**
 - Discourage drinking in the evening
 - Educate on ways to avoid UTI
 - Empty bladder all the way
 - Lots of fluid
 - **Cranberry juice consumption**
 - Others
 - Pelvic floor exercise
 - Avoid **Irritants** like caffeine, alcohol, or artificial sweetener (can increase change of **urgencies**)

Gastrointestinal Changes

- Physiological changes
 - Difficulty swallowing
 - **Delayed esophageal and gastric emptying**
 - Decreased salivation
 - Others
- **Major s/s of GI changes**
 - Nutritional imbalance
 - **Electrolyte imbalance**
 - **Can manifest in other organ systems like cardiac**
 - Dry mouth
 - Constipation
 - Others
- Nursing interventions
 - Educate healthy diet
 - Low fat
 - **Enough protein**
 - **Enough fiber**
 - **At least 1200mg of Ca⁺ for women 50yrs and older and men 70yrs and older**



- Define "sundowning"
- Which med may be given to Alzheimer pts?
- An Alzheimer pt is severely confused, what can you do to help pt?
- Why should you try & ambulate Alzheimer pts even if they are a little agitated?

- ADL assistance
- Death
- Medical management
 - Cholinesterase inhibitors (Aricept and Exelon) can improve memory
- Nursing interventions
 - Effective communication skills**
 - Speak clearly
 - Re-orient pt to situation if pt is confused
 - Fall precautions
 - Be aware of **sundowning - increased confusion at night**
 - Promote independence and avoid restraints if possible
 - Watch for medicine effectiveness
 - Make pt move as much as possible to reduce risks related to immobility
 - Address "caregiver burnout"

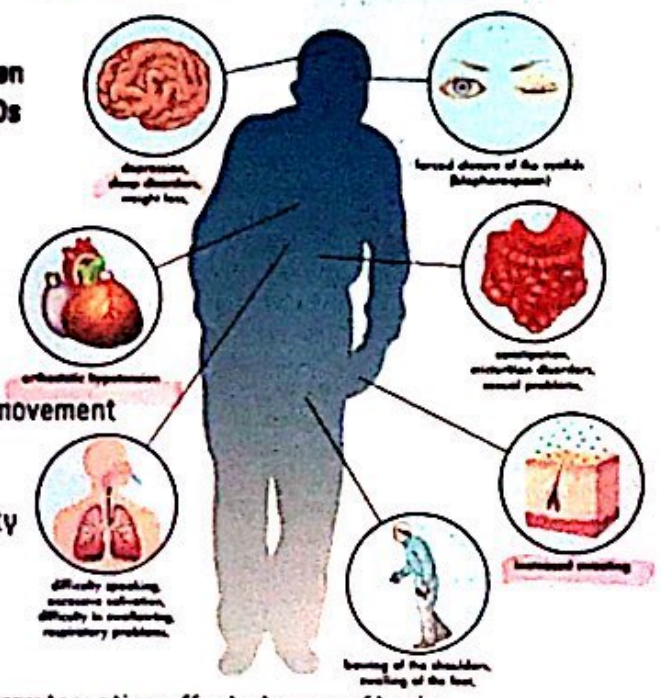


PARKINSONS

- What are some s/s of Parkinson's?
- What meds may help w/ Parkinson's?
- Which surgical procedure may help w/ Parkinson's? (2)
- pt w/ Parkinson's who have issues speaking & breathing can be referred to _____

PARKINSON DISEASE

- Slow progression
- Affects more women than men
- s/s can appear as early as 30s
- Risk factors:
 - Age
 - Environment
 - Heredity
- Clinical manifestations
 - Tremors
 - Rigidity
 - **Bradykinesia - slow movement**
 - Postural instability
 - Dysphagia
 - Depression or anxiety
 - Others
- Treatment
 - Meds that increase Dopamine
 - **Stereotactic procedure:** targeting affected areas of brain
 - Thalamotomy
 - Pallidotomy
 - Neural transplantation



Nursing interventions

- Educate use of supportive devices
- Administer prescribed meds and make sure pt is adhering
- Interprofessional communication like **occupational therapist or speech therapist**
 - **Speech therapist is crucial for promoting speech and breathing**
 - **Occupational therapist is crucial for exercising**

- Older pts should get at least _____ of vit D.

- Longterm use of _____ & _____ is bad to promote urinating & passing feces

NERVOUS SYSTEM & ALZHEIMERS

- How can a nurse prevent/mitigate confusion?

- What are your teachings to prevent orthostatic hypotension?

- Name a few risk factors of Alzheimer's

- What are the early & late signs of Alzheimer's?

- at least 600-800 IU of vit D
- Provide good oral hygiene
- Recommend ice chips for enough fluid intake
- Frequent, smaller meals
- Educate to avoid heavy activity after eating
- Limit use of antacids and laxatives
- Others

Nervous System Changes and Alzheimer's Disease

- Normal nervous system physiological changes
 - Reduction in nerve conduction speed
 - Reduction in cerebral circulation
- Major s/s of nervous system changes
 - Confusion
 - Loss of balance
 - Falls
 - Others
- Nursing interventions
 - Pace teaching and do not rush
 - Encourage visitors
 - Can make pt feel more homey → less confusion risk
 - Enhance sensory stimulation
 - Look for cause of any confusion
 - Encourage slow rising from sitting down
 - Pt should get up slowly → stand still for a min → slowly move/walk



← for orthostatic hypotension

Alzheimer's Disease

- Def: gradual loss of cognitive function
- 5th leading cause of death in older adults
- Disturbance in behavior and effects
- No cure
- Risk factors:
 - Age
 - Environmental
 - Dietary
 - Inflammatory disease hx
 - Genetics
 - Neurotransmitter changes
 - Vascular abnormalities
 - Others
- Clinical manifestations
 - Early:
 - Forgetfulness
 - Subtle memory loss
 - Difficulty working or with social activities
 - Depression
 - Suspicion and paranoia
 - Hostile
 - Late:
 - Cognitive deficits

- A parkinson's pt has serious speaking & breathing issue, what is your top concern?

- Fall prevention and adaptive measures at home
- Make sure pt is adhering to **nutritional needs like dietary restriction**
- Manage **aspiration and dysphagia**

Vision Changes

- Physiological changes:
 - Inability to tolerate **glare**
 - Hard time telling **color**
 - Decreased ability to focus on **close objects**
 - Hard time adjusting to **light sensitivity**
- **Major s/s of vision changes**
 - Poor night sight
 - Inability to read **with/without corrective lenses**
 - Complains to **glare**
- Nursing interventions
 - Educate use of **glasses and lens**
 - Educate to not drive at night
 - Others



Hearing Changes

- Physiological changes:
 - **Tympanic membrane thinning** and loss of resiliency
 - Inability to listen to **high frequency sounds**
- **Major s/s of hearing changes**
 - Inappropriate responses to what others say
 - Strains forward to listen
 - Others
- Nursing interventions
 - Assess if pt heard what you said and repeat as needed
 - Make sure pt understood what you said
 - Check for **non-verbal cues**
 - Make sure to re-explain if pt didn't hear the doctor
 - Educate **hearing aids**
 - Others



Taste and Smell Changes

- Physiological changes: decrease of both abilities
- **Major s/s of taste and smell changes:** putting too much salt or sugar
- **Nursing interventions**
 - Use of lemon, spices, and herbs instead of salt and sugar
 - Educate **smoking cessation** -it can actually hasten loss of taste and smell



SLEEP

- 57% of older pts report **sleep issues**
 - Many causes: noise, pain, and nocturia
- Older adults usually sleep for **7 hrs** and sleep **lighter**



- Stress is a high cause of sleeping troubles
 - Highly individual experience
 - Success as a younger adult is associated with **positive image and less stress when aging**
 - Nursing interventions: assess for **cues since some pts don't want to tell you their problems** (ex: depression)

LIVING ARRANGEMENTS

- Options:
 - **Living at home/with family**
 - Depends on **functional ability of pt**
 - Focus on **home health**
 - **Continuing Care Retirement Communities**
 - Somewhat independent
 - Pt needs to be able to do **day-to-day activities**
 - Like single apartments
 - Skilled nursing interventions when pts need it
 - **Assisted Living Facilities**
 - Minor independence
 - **Usually older pts go here when physical and cognitive changes require supervision or assistance with ADLs**
 - Expensive
 - Not much independence compared to other options
 - **Long-term Care Facility**
 - **Usually pts come here when they have major health issues that need ongoing care**
 - ✓ Does not mean they are acutely ill
 - Medicaid is accepted
 - Can include hospice

