

## Wellness Issues, Stressors, Diagnostic Studies & Pharmacology



Gerontological Nursing

## Normal Changes of Aging

We will look at body composition and digestion, absorption, and metabolism of nutrients.

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## Changes in Body Composition

- Sarcopenia (excessive loss of lean muscle mass) is a result of
  - - Disability or disease
  - - Sedentary lifestyle
  - - Decreased anabolic hormone production
  - - Increased cytokine activity
  - - Decreased nutrition
- Bone mineral density (BMD)

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## Oral and Gastrointestinal Changes

- Edentulism
- Saliva production declines (xerostomia)
  - Taste and swallowing are hindered

## Oral and Gastrointestinal Changes

- Atrophic gastritis
- Achlorhydria (lack of hydrochloric acid)
  - Absorption of B<sub>12</sub> and iron is impaired
    - Reduced gastric production of intrinsic factor can also impair B<sub>12</sub> absorption

## Oral and Gastrointestinal Changes

- Appetite dysregulation
  - Cholecystokinin (CCK) production *increases* with age and can cause early satiety
  - Anorexia of aging

## Oral and Gastrointestinal Changes

- Constipation reduces intake and can be caused by
  - Slowed intestinal peristalsis
  - Inadequate intake of fluid and fiber
  - Illness or medications
  - Sedentary lifestyle
- Thirst dysregulation
- Sensory changes

## Altered Nutritional Adequacy

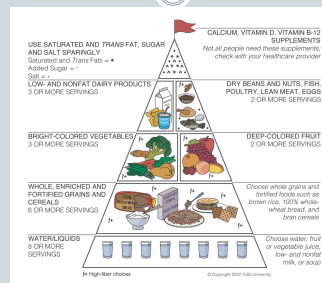
- May be caused by
  - More sedentary lifestyle
  - Social isolation
  - Changes in economic status
- Summary

Increase	Decrease
Lean body mass	Saliva production
Metabolic rate	Thirst production
Bone mineral density	Taste and smell
CCK and early satiety	Gastric acid

## Impact of Chronic Disease on Nutritional Status

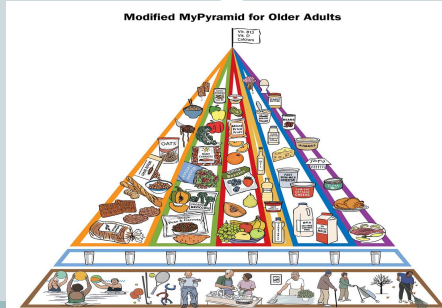
- Changes in nutritional needs
- Therapeutic diets
- Changes in nutrient utilization and absorption
- Medication side effects
  - Impact on appetite and taste
  - Decreased saliva
  - Gastrointestinal side effects

FIGURE 5-1 TUFITS Modified Food Guide Pyramid for persons over 70 years of age. Source: Russell, R. M., Rasmussen, H., & Lichenstein, A. H. (1999). *Journal of Nutrition*, 129, 751-753.



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## Nutritional Needs of Older Adults



## Estimated Energy Requirements (EER)

- The EER is adjusted for age to account for losses in lean muscle mass
  - Men more than 30 years of age adjust calories downward by 7 calories/decade
  - Women than 30 years of age adjust by 10 calories/decade more

### Routine Recommendations

- **Nutrients with routine recommendations**
  - Vitamin D
  - Calcium
  - B<sub>12</sub>

### Water

- RDA 1 to 1.5 ml/calorie of energy intake
- Approximately 9 cups per day for women and 13 cups a day for men
- Minimum of 1500 ml per day recommended
- Alcohol and caffeinated beverages have a temporary diuretic effect but are included in fluid calculations
- Anuria requirements

### Anthropometric Measures

- **Height**
  - Standing or approximated lying or arm/leg calculations
- **Weight**
  - Standing independently or with bed or chair scales

### Anthropometric Measures

- **BMI: wt(kg)/ht<sup>2</sup>(m) or wt(lbs) x 703/ ht<sup>2</sup>(in)**
  - <22 undernutrition (higher mortality)
  - >25 overweight (risk for morbidity)
- **Body fat measurements**
  - Calipers
  - Bioelectrical impedance
  - Near infrared devices
- **Muscle mass**
  - Midarm circumference in conjunction with skinfold measurements

### Laboratory Values

- **Albumin**
  - < 3 to 3.5 mg/dl mild malnutrition
  - Half-life 21 days
- **Prealbumin**
  - Half-life 2 to 3 days
- **Transferrin**
  - Affected by anemic states
  - Half-life 8 days
- **MCV**
  - High indicates possible B<sub>12</sub> or folate deficiencies

### Skin Assessment

- **Turgor**
- **Lesions**
- **Wound healing**
- **Color variations**
- **Dryness and cracking**
- **Oral mucous membranes for hygiene, coatings, and fissures**

## Eating or Drinking Assessment

- Dysphagia
- Positioning
- Need for adaptive equipment

## Dining Environment Assessment

- Small frequent meals
- Avoid distractions and delays
- Pay attention to smells, sounds, sights
- Include family members

## Review of Medications

- Review of medications potentially causing
  - Anorexia
  - Depression
  - Early satiety
  - Taste alterations
  - Lethargy
  - Appetite suppression

## Nutritional History

- Dietary recalls
  - Twenty-four-hour recall
  - Three-day food record
- Dietary intake is often overestimated by caretakers

## Nutrition Assessment Tools

- Nutritional Screening Initiative (NSI)
  - DETERMINE checklist
- Mini Nutritional Assessment
- Subjective Global Assessment
- The nutritional component of the MDS

## Causes of Unintentional Weight Loss

- Insufficient intake
- Increased losses
- Iatrogenic practices
- Hypermetabolism
  - Chronic illnesses (tremors from PD, COPD)
  - Fever
  - Wounds
  - Infection
  - Fractures

## Consequences of Undernutrition

- **Impact quality and quantity of life, and morbidity and mortality**
  - Poor wound healing
  - Skeletal muscle loss
  - Functional decline
  - Altered immune response
  - Altered pharmacokinetics
  - Increased risk of institutionalization

## Nursing Interventions

- Individualized nutritional care plans
- Feeding assistance
- Altering the physical environment
- Liberalizing restrictive diets
- Collaborating with registered dietitians
- Making appropriate referrals
- More aggressive interventions (feeding tubes and appetite stimulants) should be consistent with healthcare wishes and advance directives

## Medical Nutritional Therapy

- **Weight loss and sodium restriction may benefit**
  - Sleep apnea
  - Osteoarthritis
  - Hypertension

## Medical Nutritional Therapy

- **Prompting, environmental alterations, and meal preparation may benefit the cognitively impaired**
- **Taste deficits**
  - Provide saltier or sweeter foods
- **Visual deficits**
  - Use the face of a clock for plate food locations

# Pharmacology

## OLDER ADULTS

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## Aging and Drug Therapy

- Older persons are at a greater risk for adverse drug events than younger persons because of differences in the body's utilization of drugs.
- A person's biological age alone is a poor predictor of how an older person will react to a medication .

## Aging and Drug Therapy

- More appropriate predictors of medication response include
  - General state of health
  - Number and types of other medications taken
  - Liver and renal function
  - Presence of co-morbidities or other diagnosed diseases
- Physiological responses to medications may also depend on the race or ethnic background of the older person.

## Aging and Drug Therapy

- Chronic conditions may alter
  - Pharmacokinetics (what the body does to the drug)
  - Pharmacodynamics (what the drug does to the body)

## Changes with Aging

- Decrease in body water (as much as 15%) and an increase in body fat
  - Increased concentration of water-soluble drugs (e.g. alcohol)
  - More prolonged effects of fat-soluble drugs
- Decreased hepatic blood flow
  - Results in increased toxicity when older persons take usual doses of "first-pass effect" drugs because a smaller portion of these drug concentrations would be detoxified immediately by the liver
- Decreases in serum albumin levels
  - Lead to altered binding capacity
  - May cause increased serum levels of the "free" or unbound proportion of protein-bound drugs
  - May result in toxic levels of highly bound drugs because more unbound drug is available to produce its effects

## Adverse Drug Events (ADE's)

- Cognitive effects
- Anticholinergic effects
- Gastric and esophageal effects
- Falls
- Med Watch
  - <http://www.fda.gov/medwatch/>

## Promoting Medication Effectiveness & Safety

- Goes beyond the 5 rights
- Unnecessary drugs (Box 6-6)
- Gradual dose reductions (GDR)
- Polypharmacy avoidance
  - Use of the same pharmacy to fill all prescriptions
  - Notification to all prescribing clinicians of drugs used
  - Obtaining a complete history of all drugs used, including
    - Prescribed medications
    - Vitamins
    - OTC medications
    - Dietary supplements
    - Herbal remedies

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## Beers Criteria

- Commonly used consensus criteria related to inappropriate medications
- Developed in 1997, and adopted in 1999 by the Centers for Medicare and Medicaid Services for the regulation of medications in nursing homes

## Omnibus Budget Reconciliation Act OBRA 87

- Legislated the appropriate use of medications in institutionalized older persons
  - Use of chemical restraint
  - Use of unnecessary drugs
- Antipsychotic drugs should not be used unless necessary to treat a specific condition that is diagnosed and documented in the clinical record.

## Antipsychotic Drugs

- Use of antipsychotic drugs is inappropriate for these conditions
  - Wandering
  - Poor self-care
  - Restlessness
  - Impaired memory
  - Anxiety
  - Depression (without psychotic features)
  - Insomnia
  - Unsociability
  - Indifference to surroundings
  - Fidgeting
  - Nervousness
  - Uncooperativeness
  - Agitated behavior when not a danger to self or others

## Black Box Warning

"Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death compared to placebo. Analyses of seventeen placebo-controlled trials (modal duration of 10 weeks) in these patients revealed a risk of death in the drug-treated patients of between 1.6 to 1.7 times that seen in placebo-treated patients. Over the course of a typical 10-week controlled trial, the rate of death in drug-treated patients was about 4.5%, compared to a rate of about 2.6% in the placebo group. Although the causes of death were varied, most of the deaths appeared to be either cardiovascular (e.g., heart failure, sudden death) or infectious (e.g., pneumonia) in nature. These drugs are not approved for the treatment of patients with dementia-related psychosis."

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## Benzodiazepines

- Daily use of both long- and short-term acting benzodiazepines
  - Should be limited to less than 4 continuous months
  - Should be limited unless an attempt at gradual dose reduction is unsuccessful
  - Dose reductions should be considered after 4 months

## Multiple Medications

- Multiple medications increase the chance of
  - Drug-drug interactions
  - ADEs and ADRs
  - Errors of dosing
- Encourage the discontinuation of one drug when another is added.

## Appropriate Prescribing

- Drugs should be used only with clear
  - Diagnoses
  - Symptoms
- One drug should not be used to treat the side effects of another drug
  - Better to change the offending drug
  - Decrease the dosage in order to decrease the side effects

### ADR Clues

- **ADR clues may include**
  - Difficulties in the activities of daily living
  - Cognitive changes
  - Falls
  - Anorexia, nausea
  - Weight changes

### Changes in Mood

- **Changes in mood, such as anxiety and depression, can result from**
  - Antihypertensives (e.g., beta blockers)
  - Antiparkinsonian agents
  - Steroids
  - NSAIDs
  - Narcotic analgesics
  - Antineoplastic agents
  - CNS depressants
  - Psychotropics

### Check Each Drug

- **Check each drug for its anticholinergic profile**
- **Review each drug for:**
  - Interactions with other drugs
  - Interactions with herbal medicines
  - Interactions with vitamins or foods
  - Allergies
  - Duplicate therapy (from more than one prescriber, from patient's OTC medications containing the same or similar ingredients as prescribed medications)

### Compliance Leads to Better Patient Outcomes

- **The nurse often can enhance medication compliance by**
  - Reducing the impact of some drug side effects
    - Adequate intake of fiber and fluid reduces constipation
    - Diuretics can be scheduled to reduce interruption of activities and sleep
    - Liquids or the use of lozenges can help with dry mouth
- **Compliance should be assessed initially and on an ongoing basis.**

### Measures to Manage Medications Correctly

- **Conduct a "brown bag" assessment**
  - Bring all medications including OTCs
  - Check
    - Outdated preparations
    - Unused or unfinished prescriptions
    - Overlap or duplication of medications

### Promoting Compliance

- **Written materials**
  - Fifth-grade level or lower
  - Instructions should include
    - Adverse effects
    - What to do if a dose is missed
    - including family member or caregiver



## Nonpharmacological considerations

- Identify nonpharmacological therapies that may be useful as alternatives to medications.
  - Constipation
  - Insomnia
  - Heartburn
  - Anxiety
  - Pain

## Issues Related to Drug Therapy

- Healthcare fraud
- Medication costs
- Internet pharmacies' legitimacy
  - NABP VIPPS - display means meets all state and federal requirements
- Sharing others' medications
- Use of imported medications
- Use of outdated medications

## Resources for Drug Coverage

- Senior Health Plans
- Medicare Part D
- Serving the Health Information Needs of Elders (SHINE)
- American Association of Retired Persons (AARP)
- Benefits Check Up from the National Council on the Aging
  - <http://www.benefitscheckup.org/>

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## Chapter 7

# PSYCHOLOGICAL AND COGNITIVE FUNCTION

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## Age-Related Changes

- Normal age-related changes include declines in abilities to
  - Perform information processing
  - Divide attention between two tasks
  - Switch attention rapidly from one auditory input to another
  - Maintain sustained attention or perform vigilance tasks
  - Filter out irrelevant information
  - Perform visuospatial tasks
  - Perform word finding
  - Perform abstraction tasks
  - Maintain mental flexibility

## Stable Functions

- Personality
- Short-term memory
- Language
- Accumulation of wisdom
- Life satisfaction – until age 65

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## Tasks of Later Life

- Adjusting to decreased physical strength and health
- Adjusting to retirement and reduced income
- Adjusting to death of a spouse
- Establishing an explicit association with one's group
- Adapting to social roles in a flexible way
- Establishing satisfactory physical living arrangements

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## Psychological Adjustments

- Examples of common events requiring psychological adjustments
  - Widowhood
  - Confronting negative attitudes of aging
  - Retirement
  - Chronic illness
  - Functional impairments
  - Decisions about driving a car
  - Death of friends and family
  - Relocation from home to assisted living
- The longer a person lives, the more likely events will occur that require coping and adaptation.

## Cognitive Impairment

- Cognitive impairment may be associated with physical illnesses
  - Stroke
  - Heart disease
  - Parkinson's disease
  - Endocrine disorders
  - Cancers
  - Epilepsy
  - B<sub>12</sub> deficiencies
  - Chronic pain
  - Viral illnesses

## Stress and Coping

- High levels of stress and poor coping can lead to poor psychosocial functioning and impair mental health
  - Diminished economic resources
  - Unanticipated events (death of a spouse or pet)
  - Many hassles in one day
  - Poor health status
  - Major life events occurring in close proximity
  - Unrealistic appraisal of a situation

## Nursing Actions

- Assist older persons in identifying stressors and rating their levels of stress
- Educate the older person and family about stress theory and the stress cycle
- Help the older person identify successful coping mechanisms used in the past
- Assist the older person in examining current coping mechanisms and behaviors
- Alter or eliminate negative or maladaptive mechanisms
- Reinforce and strengthen positive coping mechanisms
- Investigate community resources, support groups, stress-reduction clinics, and other stress relievers

## Stress Busters

- Biofeedback
- Massage therapy
- Progressive muscle relaxation
- Distraction: calming music, movies, reading
- Guided imagery with audiotapes
- Exercise (Tai Chi, Yoga, Water aerobics)
- Breathing exercises
- Therapy

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## Mental Health Risk

- Minorities are at greater risk of poor mental health because of
  - Increased segregation
  - Poverty
  - Poor quality education
  - Discrimination
  - Healthcare disparities

## Depression in the Elderly

- Presenting symptoms
- Stigma
- Physical illnesses associated with depression
  - Stroke
  - Heart attack
  - Cancer
  - Parkinson's Disease

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## Risk Factors for Suicide in the Elderly

- Age
- Gender
- Race
- Depression (or other psychiatric illnesses)
- Alcoholism (substance abuse)
- Previous attempt

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## Problems Related to Alcohol Use in the Elderly

- Malnutrition
- Anxiety
- Falls
- Social isolation
- Headaches
- Cirrhosis
- Osteomalacia
- Decline in cognitive function
- Interactions with medications

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## Nursing Interventions For Mental Health Issues

- Reassurance
- Assessment of family members
- Reminiscence (Life review)
- Therapeutic communication
- Referrals
  - Support groups – for patients and caregivers
  - Self-help Groups
  - Neuropsychological Testing

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## Nursing Interventions for Depression and Suicide

- Safe and supportive environment
- Initiating suicide self-restraint contracts
- Encouraging appropriate self-care behaviors
- Identifying and encouraging effective coping strategies
- Encouraging hopeful attitudes

### Complimentary and Alternative Therapies

- Ginkgo biloba
- Valerian root
- St. John's wort

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# Sleep

## AND THE OLDER ADULT

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### Importance of Sleep

- Proper sleep architecture and adequate total sleep time are necessary for proper functioning.

### Sleep and Aging

- Age-related changes in sleep include
  - Greater difficulty falling asleep
  - More frequent awakenings because of reduced slow wave sleep
  - Decreased amounts of nighttime sleep, especially deep sleep
  - More frequent daytime napping
  - Increased time spent trying to sleep as sleep becomes less efficient

### Causes of Sleep Disruption

- Advanced age and female gender
- Stress and strains
- Social isolation
- Depression, anxiety
- Substance/alcohol abuse
- Grief
- Menopause
- Medications
- Chronic diseases
- Pain

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### Sleep Deprivation

- Sleep deprivation can result in
  - Harmful physical and psychological changes
  - Daytime fatigue
  - Irritability
  - Impaired learning ability
  - Delayed healing
  - Visual and auditory hallucinations

## Sleep Disturbances

- Sleep disturbances can exacerbate
  - Behavioral problems
  - Traffic accidents
  - Memory lapses
  - Emotional instability
  - Decreased daytime functioning

## Sleep and Aging

- Age-related changes in the nervous system can affect sleep
  - May be at the chemical, structural, and functional levels
  - May result in a disorganization of sleep and disruption of circadian rhythms
    - Declines in the cerebral metabolic rate and cerebral blood flow
    - Reductions of neuronal cell counts
    - Structural changes, such as neuronal degeneration and atrophy

## Sleep Disruptions Common in Dementia

- Breakdown of the normal sleep–wake cycle
- Short periods of fragmented sleep
- Reduced stage 3 and REM sleep
- No stage 4 sleep

## Dementia May Also Cause

- Social isolation
- Boredom
- Nursing home placement
- Excessive daytime napping
- Periods of agitation or restlessness

## Urinary Problems

- Nighttime production of urine can equal or exceed daytime production in the elderly
- Diuretics
- Benign prostatic hypertrophy
- Unrecognized UTI

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## Treatment for Sleep Apnea

- Weight reduction
- Sleeping on the side rather than the back
  - Wear a tennis ball in a pocket sewn on the back of a nightshirt
- Avoiding sleeping pills and alcohol before sleeping
- Avoiding smoking
- CPAP
- Surgery

## Sleep Restriction Therapy

- Using the bed for sleep and sex only
- Getting out of bed if unable to fall asleep
- Keeping regular sleep time routines
- Avoiding daytime naps

## Sleep Medications

- Benzodiazepines
  - Typical side effects of include
    - Falls
    - Tolerance
    - Dependency
    - Rebound insomnia
    - Daytime sleepiness
- Sedating antidepressants can cause
  - Postural hypotension
  - Anticholinergic side effects

## Sleep Medications

- Z-hypnotics
  - Ambien (zolpidem)
  - Sonata (zaleplon)
  - Lunesta (eszopiclone)
- Melatonin Receptor Agonists
  - Rozerem (ramelteon)

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## OTC Sleep Aids

- OTC sleep aids contain antihistamines are **not recommended** (diphenhydramine, Benadryl™), due to
  - Decreased respiratory drive in the elderly
  - Daytime sleepiness
  - Dizziness
  - Anticholinergic side effects
    - Blurred vision
    - Increased risk of fall and injury

## Natural or Herbal Sleep Aids

- Herbal or natural remedies include
  - Melatonin
  - Chamomile tea
  - Valerian root
  - A small evening snack (natural tryptophan)

## Nursing Interventions

- Individualize nighttime care
- If sleep disturbances are caused by underlying medical problems
  - Investigate and treat nighttime pain
  - Treat depression and anxiety disorders
  - Encourage sleep hygiene
  - Correct environmental problems
  - Recommend dietary and lifestyle changes
  - Encourage daytime activities
  - Discourage long naps

### In Long-Term Care Facilities

- Establish consistent nighttime routines
- Reduce noise and light disruption
  - Turn down televisions and radios and ringers on phones.
  - Avoid using intercoms and beepers during sleep hours.
  - Turn night lights on at the hour of sleep and turn off overhead lights
- Keep residents busy and occupied during the daytime with exercise
- Do not put residents to bed immediately after supper
- Provide restful evening activities
- If residents are awake and noisy during the night, assist them from bed to a lounge or recreation area

## Pain Management

### IN THE ELDERLY

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### Untreated Pain

- Untreated pain can cause
  - Hyperalgesia
  - Hypertension, tachycardia, and even coronary ischemia
  - Depression, anxiety, decreased socialization
  - Sleep disturbance
  - Impaired ambulation
  - Increased healthcare use and costs

### Chronic Pain

- Chronic pain can lead to
  - Labeling
  - Negative images and stereotypes
  - Long-standing psychiatric problems
  - Futility in treatment
  - Drug-seeking behavior

### The Psychological Burden of Pain

- The psychological burden of pain can
  - Decrease participation in rehabilitation and self-care activities
  - Slow recovery from illness
  - Lower quality of life

### Conduct a Baseline Pain Assessment

- Baseline vital signs
- Ability to walk, stand, or move about in bed
- Baseline agitation level
- Appetite and eating patterns
- Sleep patterns
- Elimination habits
- Cognitive function and mood

## For Cognitively or Verbally Impaired Patients

- Obtain baseline information from a family member
- Do more frequent assessments
- Observe for nonverbal signs of pain
  - Facial expression
  - Vocalizations
  - Guarded movements
  - Bracing or tense body language
  - Mental status change
  - Change in behavior or interpersonal interactions
  - Activity pattern changes

## Pain Mannerisms in Cognitively Impaired Older Persons

- Moaning or groaning at rest or with movement
- Failure to eat, drink, or respond to presence of others
- Grimacing or strained facial expressions
- Guarding or not moving body parts
- Resisting care or noncooperation with therapeutic interventions
- Rapid heart beat, diaphoresis, change in vital signs

## The Goal of Ideal Pain Management

- Relieves both acute and chronic pain
- Uses both pharmacological and nonpharmacological techniques
- Minimizes side effects

## Pharmacological Management

- Non-Opioid Analgesics
- Opioid Analgesics
- Adverse effects
  - Constipation
  - Sedation
  - Respiratory depression
  - Nausea and vomiting
  - Myoclonus
  - Pruritis

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## Adjuvant Drugs

- Adjuvant drugs for pain relief are used to
  - Relieve discomfort
  - Potentiate the effect of the pain medication
  - Decrease the dosage of opioid required for adequate pain control
  - Reduce the side effects associated with higher doses of opioids

## Pain Medication Administration

- Chronic pain
  - Oral dosing is the preferred route
  - Most effective when it is administered round the clock
  - Long-acting or sustained-release forms of medication improve control
- Acute pain
  - Breakthrough pain relief should be available
  - IV or IM is preferred route
  - Patient-controlled analgesia (PCA) is effective for acute pain following surgery but less effective in those who are cognitively impaired (dementia)



## Nonpharmacological Methods of Pain Control

- Pain education programs
- Socialization or recreation programs (movies, art therapy, therapeutic use of music)
- Behavior modification (imagery, hypnosis, relaxation, biofeedback)
- Physical therapy (massage, ultrasound, exercise, hot or cold packs)
- Neurostimulation (acupuncture, transcutaneous nerve stimulation)

## Medication Assessment

- Medication assessment of older adults with pain should include
  - Use of over-the-counter medications
  - Use of herbal remedies
  - Prescription medications
  - Identification of medications that may
    - Be ineffective
    - Might interact with other drugs or supplements
    - Cause troubling side effects

## Patient and Family Teaching

- The Nurse can educate the patient and family to monitor pain sensation and intensity.
- Family members should
  - Recognize signs of pain
  - Keep a diary of pain
  - Keep a diary of responses to interventions

## Violence

### AND ELDER MISTREATMENT

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## Elder Mistreatment

- Physical abuse
- Sexual abuse
- Emotional/psychological abuse
- Neglect
- Abandonment
- Financial/material exploitation
- Self-neglect
- Institutional mistreatment

## Elder Abuse

- Risk factors
  - Age
  - Sex
  - Race
  - Socioeconomic status
  - Low educational level
  - Stressful event
  - Impaired physical or cognitive function
  - History of domestic violence
  - Depression, mental illness, substance abuse

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## Elder Abuse

- According to the NEAIS, more than 1.5 million older adults experience abuse and/or neglect in domestic settings
  - Half of the cases were neglect
  - 35% were psychological abuse
  - 30% were financial exploitation
  - 25% were physically abused

## Institutional Mistreatment

- One survey of nursing home staff members revealed
  - 36% reported having witnessed at least one incident of physical abuse by another staff member in the previous year
  - 81% had observed at least one incident of psychological abuse
  - 10% admitted to performing an act of physical abuse
  - 40% admitted to psychological abuse
- Patient aggressiveness was found to be the main precipitating factor
- Emerging area of study is resident to resident abuse

## Theories of the Etiology of Elder Abuse

- **Psychopathology of the abuser**
  - Caregivers who have preexisting conditions that impair their capacity to give appropriate care
- **Transgenerational violence**
  - Part of the family violence continuum
- **Learning theory**
  - Learned abuse growing up
- **Situational theory also known as “caregiver stress”**
  - Care burdens outweigh the caregiver’s capacity
- **Isolation theory**
  - Mistreatment is prompted by a dwindling social network

## Assessment

- Caregivers of older adults should be assessed
  - For caregiver stress
  - For substance abuse
  - For a history of psychopathology
  - Using the Caregiver Strain Index (CSI), which may aid assessment
  - Separate interviews should be conducted for the caregiver and the patient
    - Inconsistencies might increase the suspicion of abuse

## Potential Signs of Mistreatment

- Injuries in multiple stages of healing
- Frequent ER visits
- Delays in seeking treatment for injuries
- Disheveled appearance and poor hygiene
- Malnutrition
- Burns
- Pressure ulcers
- Diagnostic or lab test results inconsistent with history

## Interventions

- **Documentation**
- **Mandated Reporting**
  - Adult Protective Services
    - <http://www.cdss.ca.gov/agedblinddisabled/PG1298.htm>
- **Caregiver Role Strain**
  - Disease management
  - Aging changes
  - Maximizing healthcare services
  - Respite services
  - Behavioral management
  - Caregiver support groups

## CARE AT THE END OF LIFE

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### Nursing Uniquely Qualified to Provide End-of-Life Care

- **Holistic focus**
  - Patient needs
  - Family needs
  - Multidisciplinary team
- **Provide care that is**
  - Comprehensive
  - Effective
  - Compassionate
  - Cost effective

### Nurse's Role

- **Role of the nurse is to provide care through illness experience**
  - Coordinate
  - Assess
    - Physical
    - Psychological
    - Social
    - Spiritual
  - Design and direct
    - Collaborate with patient, family, and interdisciplinary team
  - Evaluate

### Death Is a Natural Process and Not a Medical Failure

- **Help patient die comfortably and with dignity**
  - Pay attention to pain and symptom control
  - Offer relief of psychosocial distress
  - Coordinate care across settings with high-quality communication between healthcare providers
  - Prepare the patient and family for death
  - Clarify and communicate goal of treatment and values
  - Support and educate during the decision-making process including the benefits and burdens of treatment (National Consensus Project for Quality Palliative Care, 2004)

### Nurses Who Care for the Dying

- **Are well educated**
- **Have appropriate supports in the clinical setting**
- **Develop close collaborative partnerships**
  - Palliative care service providers
  - Hospice programs

### Nurses Need to Be Aware of Own Feelings about Death

- **Better meet holistic needs of the patient and family**
  - Emotional
  - Spiritual
  - Social
  - Physical
- **Clarify personal beliefs**
- **Meaning of hope shifts**
  - Striving for cure → Striving for relief of pain or suffering
  - There is no "correct" way to die

## Common Fears of the Dying Person

- Death itself
- Thoughts of a long or painful death
- Facing death alone
- Dying in a long-term care facility or hospital
- Loss of body control, such as bowel or bladder
- Not being able to make decisions concerning care
- Loss of consciousness
- Financial costs and becoming a burden to others
- Dying before having a chance to put personal affairs in order

## Most Americans Would Prefer Dying at Home

- However most do not
  - Hospitals = 50%
  - Nursing homes = 20%
  - Home (or home of loved one) = 20%
  - Other settings (i.e., inpatient hospice) = 5%

## Time Spent Away from Home

- About 50% over age 65 spend time in nursing homes
- More than 50% over age 85 die in nursing homes
- 43% over age 65 reside in long-term facilities before dying

## How Well Does the Current Healthcare System Do in Caring for Dying People?

- Survey says
  - Excellent = 3%
  - Very good = 8%
  - Good = 24%
  - Fair = 33%
  - Poor = 25%
- There is room for improvement!

## Barriers to Provision of Excellent End-of-Life Care

- Failure of healthcare providers to acknowledge limits of medical technology
- Lack of communication among decision makers
- Disagreement about goals of care
- Lack of training about effective pain control
- Providers discomfort with sharing bad news
- Lack of understanding about comprehensive end-of-life programs

## Palliative Care

- Supportive care during the dying and bereavement process emphasizes
  - Quality of life
  - Living a full life up until moment of death
  - Philosophy of care

## Hospice Care

- Focus on the whole person
  - Mind
  - Body
  - Spirit
- Support and care
  - Patients
  - Family and caregivers
    - Continues after death of loved one

## Hospice Care

- Multidisciplinary team of professional caregivers
  - Nurse
    - Manages pain and controls symptoms
    - Assesses patient and family' s ability to cope
    - Identifies available resources for care of patient
    - Recognizes patient' s wishes
    - Assures that support systems are in place
  - Physician
  - Pharmacist
  - Social Worker
  - Others

## Hospice Setting

- Freestanding
- Hospital
- Home health agencies with home care hospice
- Home
- Nursing home or other long-term care settings

## Inadequate Care at End of Life

- Inadequate care at end of life may be the result of
  - Disparity in access to treatment
  - Insensitivity to cultural differences
    - Attitudes about death
    - Attitudes about end-of-life care
      - African Americans prefer aggressive life-sustaining treatments
      - Mexican Americans, Korean Americans, and Euro Americans prefer less aggressive treatments
  - Mistrust of the healthcare system

## Religion and Cultural Beliefs

- Buddhist
- Catholic
- Jehovah' s witness
- Judaism
- Mormons'
- Muslim

Gerontological Nursing

## Nurse' s Role in Treatment of Pain

- Initial and ongoing assessment of levels of pain
- Administration of pain medication
- Evaluation of effectiveness of pain management plan

## Difficulty Communicating at End of Life

- Difficulty communicating at end of life may be the result of
  - Delirium
  - Dementia
  - Aphasia
  - Motor weakness
  - Language barriers

## Characteristics Indicating Pain

- Not eating or drinking well
- Decreased movement
- Inability to engagement in meaningful conversations with others
- Isolation from the world
  - Save energy
  - Cope with the sensation of pain

## Pain Treatment

- Pain treatment is based on
  - Accurate pain assessment
  - Systematic
  - Ongoing

## Reactions to Pain

- Do you usually seek medical help when you believe something is wrong with you?
- Where does it hurt the most?
- How bad is the pain? (may use the facility pain indicator, such as smiley face, or ask patient to rate the pain on a scale of 1-10, etc.)
- How would you describe the pain? (sharp, shooting, dull, etc)
- Is the pain accompanied by other troublesome symptoms such as nausea, diarrhea, etc.?
- What makes the pain go away?
- Are you able to sleep when you are having the pain?
- Does the pain interfere with your other activities?
- Tell me what you think is causing your pain.
- What have you done to alleviate the pain in the past? (ELNEC, 2003)

## Pain During the Dying Process

- **Acute**
  - Sudden onset
  - Usually associated with single cause or event
- **Chronic**
  - Associated with long-term illness
  - Always present
  - Varies in intensity
  - Tolerance to pain develops
  - Associated with
    - Depression
    - Poor self-care
    - Decreased quality of life

## Pain During the Dying Process

- **Neuropathic pain**
  - Nerves are damaged
  - Burning, electrical, or tingling sensations
  - Deep and severe
  - Difficult to relieve
  - Treatment
    - Anticonvulsants
    - Antidepressants
    - Opioids
    - Surgical intervention is radical for uncontrolled pain

## Pain During the Dying Process

- **Nocioceptive pain**
  - Tissue inflammation or damaged tissue
  - Cardiac ischemia
  - Treatment
    - Generalized pain relief via titration of drugs
      - Acetaminophen
      - NSAIDS
      - Opioids as last choice

## Pain During the Dying Process

- **Unrelieved pain during dying process**
  - Hastens death
    - Increases physiological stress
    - Decreases mobility
    - Increases work of breathing
    - Increases myocardial oxygen requirements
  - Causes psychological distress to patient and family
    - Suffering
    - Spiritual distress

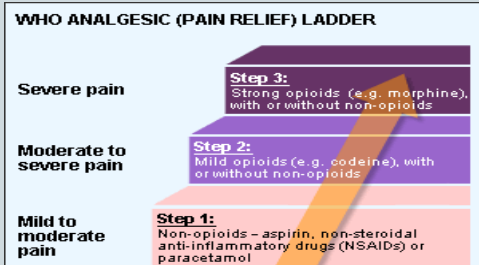
## Pain Medication

- **Administer pain medication routinely**
  - Prevent breakthrough pain and suffering
    - Long-acting drugs provide consistent relief
      - Chronic pain
    - Short-acting or immediate release agents for prn use
      - Acute pain

## Pain Control at the End of Life

- **Non-opioids—for mild to moderate pain**
    - Acetaminophen
    - NSAIDs
  - **Opioids**
    - Codeine
    - Morphine—gold standard
    - Hydromorphone
    - Fentanyl
    - Methadone
    - Oxycodone
- Note: Do NOT use merperidine or propoxyphene with older persons.**

## Pharmacological Management: Cancer Pain



Gerontological Nursing

## Pain Control at the End of Life

- **Adjuvant analgesics**
  - Enhance effectiveness of other drug classes
    - Muscle relaxants
    - Corticosteroids
    - Anticonvulsants
    - Antidepressants
    - Topicals
  - Useful for treatment with lower doses and less side effects

### Routes of Administration

- **Oral**
  - For patients who can swallow
  - Requires higher dosage
- **Oral mucosa or sublingual**
  - For patients with difficulty swallowing
  - May require more frequent administration
- **Rectal**
  - For patients with difficulty swallowing or problems with nausea and vomiting
  - Patient needs to be able to reposition easily

### Routes of Administration

- **Transdermal**
  - Delivers 72 hours of pain medication
- **Topical**
  - For pain as a result of herpes zoster, arthritis, or local invasive procedures
- **Parenteral**
  - For patients who cannot swallow
- **Epidural or intrathecal**
  - Use if unable to achieve pain control by other methods

### Managing Adverse Reactions

- **Multiple approaches to manage adverse reactions to pain medication**
- **Identify when pain is most severe**
  - Ask patient for description
    - What does it feel like?
    - When does it occur?
    - What helps relieve it?
- **Initiate constipation treatment at time opioids are started**

### Alternative Pain Management Approaches

- Acupuncture
- Massage therapy
- Reiki therapy
- Chiropractors
- Herbal medicine
- See clinical materials in syllabus - Integrative Modalities

### The Family and the Death Process

- **Discuss the death process and reassure those present**
  - Support family decisions to be present or to leave
  - Reinforce that the dying process is as individualized as process of living

### Core Principles for End-of-Life Care

- **Respect the dignity of patients, families, and caregivers**
- **Display sensitivity and respect for patient and family wishes**
- **Use appropriate interventions to accomplish patients' goals**
- **Alleviate pain and symptoms**
- **Assess, manage, and refer psychological, social, and spiritual problems**
- **Offer continuity and collaboration with others**



### Core Principles for End of Life Care

- Provide access to therapies (including complementary therapies) that may improve the quality of the patient's life
- Provide access to palliative care and hospice services
- Respect the rights of patients and families to refuse treatment
- Promote and support evidence-based clinical practice research  
(Adapted from Cassell & Foley, 1999)

### Personal Hygiene Is a Top Priority

- Provide oral hygiene several times a day
- Lack of dentures makes speech and swallowing difficult
- Disease processes contribute to halitosis and thrush
- Eye care promotes comfort

### Anorexia and Dehydration Can Be Normal

- Patients may choose to stop eating or drinking
- Dehydration → decreased lung secretions + oliguria
- Anorexia → ketosis + peaceful state of mind + decreased pain

### Skin Integrity

- Monitor skin changes
  - Edema
  - Bruising
  - Dryness
  - Venous pooling
- Avoid shearing forces
- Reposition frequently

### Bowel and/or Bladder Incontinence

- Provide protective pads
- Provide barrier creams
- Encourage change of position
- Avoid indwelling catheters

### Anxiety at the End of Life

- Monitor the need for more medication at the end of life
- Use medication for comfort and to relieve suffering

### Terminal Delirium

- Confusion, restlessness, agitation, day/night reversal
- Visual, auditory, olfactory hallucinations
- Lethargy, periods of lucidity, unconsciousness, finally comatose state
- Distressing time for the family
  - Remind family that the patient may still be able to hear
  - Encourage the family to “let go”
  - Give terminal patient permission to die
  - Let patients know
    - They are loved
    - They will be missed
    - Thank them for loving you

### Type and Level of Care at the End of Life

- Comfort measures only (CMO)
- Advance directives
- Use of feeding tubes for artificial nutrition and hydration (ANH)
- Do not resuscitate (DNR)
- Euthanasia/Physician-assisted suicide

### When Patient Is Unable to Make Decisions

- Consider
  - Diagnosis
  - Treatment burden or benefit
  - Prognosis
  - Expressed verbal preference
  - Presence of family member or others to include in decision
- Provide ongoing reevaluation

### Body Changes Indicating Impending Death

- Circulation
  - Mottling of lower extremities
- Pulmonary
  - “Death rattle”
  - Cheyne-Stokes respirations
- Skin
  - Clammy
  - Dusky, gray coloration
- Eyes
  - Discolored
  - Deeper set
  - Bruised appearance

### Pronouncement of Death

- No carotid pulses
- No pupillary light reflexes
- No heart sounds
- No breath sounds

### Postmortem Care

- Remove all tubes
- Lay on back with arms to sides
- Replace soiled dressings
- Pad the anal area in case of drainage
- Gently wash body to remove discharge
- Place body on back with head/shoulders elevated on a pillow
- Grasp eyelids and gently close eyes
- Replace dentures
- Put on clean gown and clean sheets
- Remove all medical equipment from site and tidy room

### Expressions of Grief

- Numbness and shock
- Emotional turmoil or depressive type symptoms
- Reorganization or resolution

### Caring for the Caregiver

- What have I done to meet my own needs today?
- Have I laughed today?
- Did I eat properly, rest enough, exercise, and play today?
- What have I felt today?
- Do I have something to look forward to?