

# Chapter 13

## Promoting Healthy Adaptation to Aging

# Chapter 13

## Lesson 13.1

# Learning Objectives

## Theory

- 1) Compare the biologic theories of aging
- 2) State how a person might behave in light of the psychosocial theories of aging
- 3) Identify four factors that contribute to longevity
- 4) Discuss physical changes that occur as adults get older

# Learning Objectives

## **Clinical Practice**

- 1) Identify at least six signs and symptoms of normal aging
- 2) Design an educational program to help older adults maintain physical health

# Overview of Aging

- Aging: a continual process of biologic, cognitive, and psychosocial change that begins at conception
- Your perception of aging influences your definition of being old
- Americans are living longer now than they did two generations ago
- Overcoming myths about aging can be a challenge for nurses

# Myths About Old People

- Old people are sick
- They can't learn new things
- It is too late for lifestyle changes to improve health
- Genetics are the main factor in longevity
- They are a drain on society
- Old people aren't sexual
- Old people are senile
- Most are isolated from their families
- Most old people live in nursing homes
- Old people are poor
- They are unhappy

# Theories of Aging

- Biologic theories

- Biologic clock theory

- Cells programmed to live a certain amount of time, then break down and die

- Free-radical theory

- Cells are damaged by toxins in the environment, including the waste products from metabolism

# Theories of Aging (cont'd)

- Biologic theories

- Wear-and-tear theory

- Organs eventually wear out, like machinery

- Immune system failure theory

- System loses ability to protect body from disease and becomes more susceptible to diseases that eventually kill us

- Autoimmune theory

- Body no longer recognizes itself and begins to attack itself and break down

# Theories of Aging (cont'd)

- Psychosocial theories
  - Disengagement theory
    - Normal for older people to withdraw from each other
  - Activity theory
    - People who are active and interested continue to enjoy life and live longer
  - Continuity theory
    - Individuals' basic personalities remain constant; they cope with aging similar to how they coped with other stages of life

# Longevity

- Life span is 115 to 130 years
- Longevity has changed since 1900
- Average life span
  - 47 years in 1900
  - 77.9 years in 2004
- Healthy lifestyle, health care, nutrition, education, gender make a significant difference in longevity

# Demographics

- In 2000, 35 million persons (12.4% of the population) were older than 65 years
- By 2030, 66 million persons, or 25.6% of the population, will be older than 65 years
- Young old is 65 to 74 years; middle old is 75 to 84 years; very old is 85 years and older
- Centenarians are becoming more common:
  - 72,000 in 2000
  - Projected 129,000 by 2010

# Physical Changes

- Benign senescence
  - Normal physical changes of aging
  - Begins occurring early in adulthood
  - Often goes unnoticed until a problem develops
- Cardiovascular
  - Increased heart size, decreased cardiac output, less elastic blood vessels

# Physical Changes (cont'd)

- Respiratory
  - Thickened alveolar walls, weakened respiratory muscles, decreased vital capacity
- Musculoskeletal
  - Thinned intervertebral disks, decreased bone calcium, smaller muscle mass, less elastic ligaments and tendons

# Physiologic Changes of Aging

- Integumentary
  - Thinner, drier skin; loss of subcutaneous fat, slower rate of hair and nail growth
- Urologic
  - Decreased bladder capacity and tone
  - Loss of nephrons, decreased sphincter control

# Physiologic Changes of Aging (cont'd)

- Neurologic

- Presbyopia; cataracts; decreased peripheral vision; presbycusis; decrease in touch, smell, and taste receptors; slowed reaction time; balance may be affected

- Endocrine

- Slowed production of all hormones, decreased metabolic rate, delayed insulin response

# Physiologic Changes of Aging (cont'd)

- Gastrointestinal
  - Decreased secretion of saliva and other digestive enzymes, slowed peristalsis, slowed liver and pancreatic functions, reduced absorption of nutrients
- Reproductive
- Decreased hormone production; atrophy of ovaries, uterus, and vagina; benign prostatic hypertrophy; slowed sexual responses

# Health Concerns

- Most people older than 75 have at least one chronic health problem
  - Hypertension—most common (51%)
  - Arthritis—second most common (48%)
  - Heart disease—third most common (31%)
  - Obesity—may contribute to arthritis and hypertension
  - Other—anemia, diabetes, cancer, malnutrition, cirrhosis, mental illness
  - Dementia (degeneration of brain tissue) in a small percentage of older adults

# Health Promotion Behaviors

- Eat a healthy diet
- Add seasonings to counter loss of taste
- Take a daily multivitamin
- Participate in physical activity regularly
- Get physical examinations regularly
- Do not smoke
- Limit alcohol use

# Question 1

Biologic theories are based on cellular function and body physiology. Which biologic theory proposes that cells are damaged by toxins in the environment?

- 1) Free radical theory
- 2) Wear-and-tear theory
- 3) Biologic clock
- 4) Immune system failure theory

# Question 2

Longevity has been increasing. In 1900, the average length of life in the United States was 47 years. In 2004, the projected average life span was 77.9 years. All of the following are factors contributing to longer lives *except*:

- 1) people are healthier now than they were 100 years ago.
- 2) happy people generally live longer.
- 3) people are better educated and actively involved in their own health care.
- 4) health care drugs have had little to do with the increased life span because all drugs have side effects that over time decrease the life span.

# Question 3

Most people older than the age of 75 have at least one chronic health concern. Which of the following is *not* a health concern of the older adult?

- 1) Hypertension
- 2) Arthritis
- 3) Heart disease
- 4) Menopause

# Chapter 13

## Lesson 13.2

# Learning Objectives

## Theory

- 5) Explain Schaie's theory of cognitive development in the older adult
- 6) Explain Erikson's stage of psychosocial development in the older adult

# Learning Objectives

## Clinical Practice

- 3) State three ways the nurse could help older adults maintain cognitive health
- 4) Identify nursing problems related to changes in psychosocial health
- 5) Guide the older adult's family members in recognizing signs that the older person needs assistance

# Cognitive Aspects of Aging

- Schaie's reintegrative stage of development
  - Older adults selective about how they spend their time
- Intelligence can be maintained into advanced years
- Speed of thinking may be slow but thinking processes remain intact
- Vision or hearing deficits are not cognitive dysfunction

# Memory Issues

- Short-term memory loss: some older adults may have problems remembering recent events
- Long-term memory usually remains intact
- Severe memory losses and dementias may be the result of circulatory changes, malnutrition, or other underlying problems

# Employment and Retirement

- Ability and desire to keep a job an individual decision, depending on the cognitive ability of the older adult
- Some people eager to leave a regular job and may retire in their 50s or early 60s
- Other people enjoy working and want to continue beyond a traditional retirement age

# Health Promotion Behaviors

- Encourage a positive attitude
- Hobbies, religious and service groups, and volunteerism
- Using the brain keeps the neural connections active and healthy
  - Reading, doing puzzles, using a computer, and writing

# Psychosocial Aspects

- Stage of Ego Integrity vs. Despair (Erikson)
- Older adults satisfied with past life usually happy
- Families important to the older adult
- Married older adults live longer than single adults; 43% of women older than 65 are widows
- Most older adults live within 40 miles of at least one of their children

# Living Arrangements

- Many prefer to live in their own home
- 54.7% live with a spouse, child, or other relative
- Only 4.5% of people older than 65 live in long-term care facilities
- 18% of people older than 85 live in long-term care facilities

# When a Parent Needs Help

- May be difficult for adult children to admit that a parent needs help
- Discuss possibilities before a crisis occurs; include siblings in the discussions
- Locate important information
  - Financial, medical, and insurance information
- Safety is a basic need; observe for changes

# Signs That an Older Person Needs Help

- Neglected personal hygiene, irregular dressing, soiled clothing
- Significant weight loss
- Home neglect
- Inappropriate behavior
- Frequent falls
- Social isolation
- Altered relationship patterns
- Inability to find the right words
- Unpaid bills, hoarding money
- Confusion about medications
- Making unusual purchases

# Question 4

Linda is a nurse who is trying to teach her mother, an older adult, ways to improve her life. She tries to encourage her mother to do all of the following *except*:

- 1) improve her diet.
- 2) practice preventive health care.
- 3) maintain a positive attitude.
- 4) decrease physical activity.