

Origin: Chapter 2- Theories of Aging, 1

Chapter: 2

Client Needs: D4

Cognitive Level: Comprehension

Difficulty: Moderate

Integrated Process: Nursing Process

Objective: 2

Page and Header: 15, Genetic Theories

1. Which of the following statements most accurately conveys an aspect of the error theory of aging?
 - A) Perpetuation of DNA mutations results in organ and system malfunction.
 - B) Age-related dysfunction of organs, tissues, and body systems results in mutation of body DNA.
 - C) The number of cell divisions is genetically predetermined.
 - D) Errors in the function of various organs contribute to changes in the genetic code of various body cells.

Ans: A

Feedback:

The error theory of aging proposes that genetic mutations are perpetuated through the aging process, resulting in organ malfunction and eventual decline in body function. Organ malfunction results from, but does not cause, the genetic mutations in question. A genetic predetermination of the number of cell divisions is associated with the programmed theory of aging.

Origin: Chapter 2- Theories of Aging, 2

Chapter: 2

Client Needs: D4

Cognitive Level: Comprehension

Difficulty: Moderate

Integrated Process: Nursing process

Objective: 2

Page and Header: 15, Genetic Theories

2. The error theory of aging proposes a cause-and-effect relationship between the genetic activity of body cells and the effects of aging. Place the following steps in the error theory of aging in the correct chronological order. Use all the options.

- A) Organ, tissue, and system malfunction
- B) Perpetuation of mutation during cell divisions
- C) DNA mutation
- D) Overall decline in body functions
- E) Decline in body functions

Ans: C, B, E, A, D

Feedback:

The error theory of aging proposes that DNA mutations occur on a single-cell level and are perpetuated in subsequent cell divisions. The overall number of mutant cells in the body increases and causes deleterious effects on tissues and systems and eventual decline in body function.

Origin: Chapter 2- Theories of Aging, 3

Chapter: 2

Client Needs: D4

Cognitive Level: Comprehension

Difficulty: Difficult

Integrated Process: Teaching/learning

Objective: 2

Page and Header: 14, Evolutionary Theories

3. A nurse is explaining to an older adult client that many of the changes in his body that are currently causing him frustration may have their origins in genetic changes that may have in fact benefited him during his younger years. Which of the following theories of aging underlies the nurse's explanation?
- A) Disposable soma theory
 - B) Free radical theory
 - C) Mutation accumulation theory
 - D) Antagonistic pleiotropy theory

Ans: D

Feedback:

Antagonistic pleiotropy theory proposes that genetic mutations that are problematic in later life may be rooted in mutation that played a beneficial role earlier in life. This perspective is not a component of the disposable soma theory, free radical theory, or mutation accumulation theory.

Origin: Chapter 2- Theories of Aging, 4

Chapter: 2

Client Needs: D4

Cognitive Level: Comprehension

Difficulty: Moderate

Integrated Process: Nursing process

Objective: 2

Page and Header: 14, Free Radicals and Lipofuscin Theories

4. An 80-year-old female who enjoys good health explains to her primary care provider that she attributes her health status to her regular intake of berries, fruit juices, and green tea, which she states “help cleanse the damaging molecules out of my body.” Which of the following theories of aging underlies the client's health behaviors?
- A) Free radical theory
 - B) Biogerontology
 - C) Disposable soma theory
 - D) Cross-linking theory

Ans: A

Feedback:

The free radical theory of aging attributes damage to the accumulation of free radicals that may be countered by the intake of antioxidants. This is not an explicit component of the disposable soma or cross-linking theory of aging. Biogerontology is the study of the relationship between aging and disease.

Origin: Chapter 2- Theories of Aging, 5

Chapter: 2

Client Needs: D4

Cognitive Level: Application

Difficulty: Moderate

Integrated Process: Teaching/learning

Objective: 2

Page and Header: 15, Autoimmune Reactions

5. A nurse is discussing an older adult client's apparent increased susceptibility to infection with his family. Which of the following statements by the nurse would be most congruent with current thought around the autoimmune role in the aging process?
- A) "Changes that we call 'mutations' in your father's cells make his organs more vulnerable to chronic illness and germs."
 - B) "Older adults often have more difficulty fighting off infections because of their weaker immune systems, and their bodies can even attack themselves."
 - C) "Diseases such as arthritis, which we term 'autoimmune,' make older people more likely to catch viruses and other bugs."
 - D) "Our bodies seem to have an 'expiry date,' after which we are far more likely to get infections and develop chronic illness."

Ans: B

Feedback:

Decreased immune response coupled with increased autoimmune activity is implicated in many of the effects of the aging process. The salience of mutations is associated with genetic theories of aging and autoimmune activity is not considered the direct cause of the decline in thymus and bone marrow activity. A predetermined cell life span is associated with the programmed theory of aging.

Origin: Chapter 2- Theories of Aging, 6

Chapter: 2

Client Needs: C

Cognitive Level: Application

Difficulty: Moderate

Integrated Process: Teaching/learning

Objective: 3

Page and Header: 16, Disengagement Theory

6. A hospital clinical educator is espousing the disengagement theory of aging when teaching staff how best to meet the needs of older clients. Which of the nurse's teaching points best captures the disengagement theory of aging?
- A) "Older adults often benefit from a gradual and controlled withdrawal of their own interests from society's interests."
 - B) "The disengagement between an older adult's abilities and desires can lead to frustration and, ultimately, to illness."
 - C) "The lack of synchronicity between older adults' immune systems and their environments can be the root of many problems."
 - D) "It is imperative that we ensure older adults remain engaged with interests and events beyond themselves."

Ans: A

Feedback:

Disengagement theory postulates that disengagement between the individual and society is beneficial to both parties. It does not propose that this process of withdrawal be prevented nor that it necessarily leads to frustration or illness. The immune system is not a central component of the theory.

Origin: Chapter 2- Theories of Aging, 7

Chapter: 2

Client Needs: C

Cognitive Level: Application

Difficulty: Moderate

Integrated Process: Teaching/learning

Objective: 3

Page and Header: 17, Activity Theory

7. Which of the following directives by the head nurse at a long-term care facility is most reflective of the activity theory of aging?

- A) “We need to facilitate older adults' desire to step back from the responsibilities and roles they had in earlier years.”
- B) “It's hard to overestimate the importance of regular, physical exercise in maintaining health and healthy aging.”
- C) “We need to remember that the psychological roles and characters of our residents change profoundly in later years of life.”
- D) “We have to treat our residents like younger people and keep them engaged in meaningful acts.”

Ans: D

Feedback:

The activity theory asserts that an older person should continue a middle-aged lifestyle, denying the existence of old age as long as possible, and that society should apply the same norms to old age as it does to middle age and not advocate diminishing activity, interest, and involvement as its members grow old. Stepping back from roles is associated with disengagement theory, and psychological roles and character are not thought to change radically in later life. Physical exercise is not a central component of activity theory.

Origin: Chapter 2- Theories of Aging, 8

Chapter: 2

Client Needs: C

Cognitive Level: Analysis

Difficulty: Difficult

Integrated Process: Nursing process

Objective: 3

Page and Header: 18, Developmental Tasks

8. Which of the following tasks are components of Erikson's description of the old age tasks of reconciling ego integrity with despair? Select all that apply.

- A) An 80-year-old man is struggling to determine his identity apart from his lifelong career as a business leader.
- B) A 79-year-old woman has established habits that promote her financial independence in spite of a lack of savings.
- C) An 80-year-old man revels in his large, happy family rather than focusing on his mobility limitations resulting from Parkinson disease.
- D) A 77-year-old man is trying to determine whether his life has had deep significance and meaning.

Ans: A, C, D

Feedback:

Deriving satisfaction from oneself rather than occupational roles, finding pleasure in spite of physical limitations, and determining meaning in the life one has lived are all aspects of Erikson's outcome of ego integrity or despair. Financial independence is not a central component of this outcome.

Origin: Chapter 2- Theories of Aging, 9

Chapter: 2

Client Needs: C

Cognitive Level: Application

Difficulty: Easy

Integrated Process: Nursing process

Objective: 4

Page and Header: 20, Box 2-2

9. Which of the following actions by a nurse who works with older adult clients in an assisted living facility is most likely to inhibit healthy aging?
- A) Discussing current events with clients who read and watch television.
 - B) Placing a bib on each client during meal times to ensure clients maintain a clean appearance.
 - C) Challenging clients to learn new skills and develop preexisting talents.
 - D) Facilitating introductions between new and existing clients.

Ans: B

Feedback:

While the nurse's action may have a laudable rationale, using a bib and feeding clients who may not require either action is incongruent with promoting function and preventing helplessness. Discussing current events and facilitating new skills and relationships promote well-being.

Origin: Chapter 2- Theories of Aging, 10

Chapter: 2

Client Needs: C

Cognitive Level: Application

Difficulty: Moderate

Integrated Process: Nursing process

Objective: 3

Page and Header: 18, Developmental Tasks

10. A nurse notes that a 90-year-old male client on a geriatric medical unit of the hospital has been talking about death frequently. Given that the nurse has good rapport with client, what is the nurse's most appropriate response?
- A) "Try to focus more on the positive benefits of healing rather than what might happen."
 - B) "Remember that in this day and age many people can live far beyond 90 years of age."
 - C) "I've noticed you've brought up the issue of dying a lot. How do you feel about that?"
 - D) "You'll find that aiming for health rather than thinking about death will have positive results."

Ans: C

Feedback:

Preparing for death has been identified as a developmental task for later life and would be an appropriate topic for discussion given the partnership that exists between the nurse and the client and the client's desire to broach the subject.

Origin: Chapter 2- Theories of Aging, 11

Chapter: 2

Client Needs: B

Cognitive Level: Analysis

Difficulty: Difficult

Integrated Process: Nursing process

Objective: 1

Page and Header: 19, Applying Theories of Aging to Nursing Practice

11. Nurses need to understand the aging process in order to help their patients:

- A) Live longer with their long-term disabilities
- B) Maintain youth and delay the onset of old age
- C) Accept the limitations imposed by genetic tendencies toward cellular degeneration
- D) Postpone the negative consequences of the aging process

Ans: D

Feedback:

The promotion of positive health practices increases the chances that an individual can delay or deter the impairments and declines that frequently accompany the aging process. Living long in a disabled state is not the most desirable objective. Maintaining youth is not an achievable goal. Accepting limitations is not necessary for many seniors and not life enhancing for many others.

Origin: Chapter 2- Theories of Aging, 12

Chapter: 2

Client Needs: B

Cognitive Level: Analysis

Difficulty: Moderate

Integrated Process: Nursing process

Objective: 2

Page and Header: 13, Biological Theories of Aging

12. Mrs. H and Mrs. J are the same age. While in the doctor's waiting room, they discuss their ailments and their beliefs about aging. Mrs. H argues that Mrs. J must be older because she has more ailments. The nurse settles the argument by stating a cornerstone of all biological theories of aging. Which of the following statements did the nurse most likely make?

- A) Aging is a predictable cellular process.
- B) Cells undergo a finite number of divisions.
- C) No two individuals age identically.
- D) Body systems decline at the same rate.

Ans: C

Feedback:

Individual variability is fundamental to all biological theories. Aging is not totally predictable, nor is it necessarily cellular in some biological theories. Body systems are often seen to decline at different rates.

Origin: Chapter 2- Theories of Aging, 13

Chapter: 2

Client Needs: D4

Cognitive Level: Comprehension

Difficulty: Moderate

Integrated Process: Nursing Process

Objective: 3

Page and Header: 15, Genetic Theories

13. Which of the following statements is evidence that supports the programmed theory of aging?

A) The life spans attained by parents and their offspring are negatively correlated.

B) Mutations perpetuate themselves through each cycle of cell division.

C) In cultures, cells go through a finite number of cell divisions before dying.

D) In cultures, cells from older donors divide faster than those from younger donors.

Ans: C

Feedback:

Studies of in vitro cell proliferation have demonstrated that various species have a finite number of cell divisions. Life spans of parents and offspring are positively correlated. Mutation perpetration is a tenet of the error theory, not the programmed theory, of aging. Although longer life spans correlate positively with numbers of cell divisions in vitro, the rate of cell division is not affected.

Origin: Chapter 2- Theories of Aging, 14

Chapter: 2

Client Needs: D4

Cognitive Level: Analysis

Difficulty: Difficult

Integrated Process: Nursing process

Objective: 2

Page and Header: 14, Cross-Linking Theory

14. Which of the following statements form components of both the error theory of aging and the cross-linking theory of aging?

A) Free radicals cause mutations in cells.

B) Senescence is environmentally controlled at the cellular level.

C) Changes in DNA lead to organ malfunctions.

D) Genetic programming determines life expectancy.

Ans: C

Feedback:

Both the error theory and the cross-linking theory assert some change in DNA that interferes with normal cell functioning. Such changes may be caused by free radicals or any of many other mutagens. Although the aging of cells may be environmentally influenced, it is not thought to be externally controlled. That genetic programming determines life expectancy is a basic tenet of the programmed theory of aging.

Origin: Chapter 2- Theories of Aging, 15

Chapter: 2

Client Needs: D4

Cognitive Level: Comprehension

Difficulty: Moderate

Integrated Process: Nursing process

Objective: 2

Page and Header: 14, Free Radicals and Lipofuscin Theory

15. Which of the following statements underlie both the error theory of aging and the free radical theory of aging?
- A) Biochemical damage accumulates over time, leading to cell death.
 - B) The rate of cellular death is genetically programmed.
 - C) The aging body produces fewer growth and repair hormones.
 - D) Environmental agents such as radiation and heavy metals damage DNA.

Ans: A

Feedback:

That the rate of cell death is genetically programmed is a basic tenet of the programmed theory of aging. That the aging body produces fewer growth and repair hormones is a neuroendocrine theory. Although radiation and heavy metals may damage DNA, they are not free radicals, and they need not be the cause of the mutations assumed by the error theory.

Origin: Chapter 2- Theories of Aging, 16

Chapter: 2

Client Needs: D4

Cognitive Level: Application

Difficulty: Moderate

Integrated Process: Nursing process

Objective: 2

Page and Header: 15, Autoimmune Reactions

16. The nursing staff at a nursing home works closely with the staff in the Endocrinology Department at a local hospital. This relationship is maintained for the welfare of the nursing home residents, because a failing immune system in the elderly might account for:
- A) A decline in the rate of growth hormone production
 - B) The increased incidence of cancer among the aged
 - C) The oxidative activity of free radicals
 - D) Changes in brain activity and nervous system function

Ans: B

Feedback:

Compromises in the immune systems of the elderly may lead to a failure to recognize and destroy cancerous cells. The immune system is not involved in the production of growth hormones. The immune system does not determine the action of free radicals, although it may be involved in seeking out and destroying cells damaged by free radical activity. There is no known association between diminished immune activity and changes in the brain or nervous system action.

Origin: Chapter 2- Theories of Aging, 17

Chapter: 2

Client Needs: D4

Cognitive Level: Knowledge

Difficulty: Easy

Integrated Process: Nursing process

Objective: 2

Page and Header: 15, Autoimmune Reactions

17. Although the immune system is affected by the aging process, the elderly are not the only individuals who have autoimmune disorders. These occur in populations of all ages because autoimmune disorders involve:
- A) An attack of antibodies on body cells
 - B) An overproduction of T cells in bone marrow
 - C) A decrease in the weight of the thymus gland
 - D) An increase in the amount of lipofuscin in the blood

Ans: A

Feedback:

In autoimmune disorders, the immune system attacks and destroys the body's own cells (as opposed to those of invading, disease-causing microorganisms). There is no overproduction of T cells. Although the weight of the thymus gland decreases with age and the amount of lipofuscin increases, such changes are not characteristic of autoimmune disorders.

Origin: Chapter 2- Theories of Aging, 18

Chapter: 2

Client Needs: B

Cognitive Level: Knowledge

Difficulty: Easy

Integrated Process: Teaching/learning

Objective: 2

Page and Header: 16, Radiation Theories

18. A magazine geared toward elderly women contains an advertisement for an anti-wrinkle cream purported to remove wrinkles caused by the drying effects of years of soap use. Knowledgeable nurses can keep their elderly female clients from being duped by this advertisement by explaining that the wrinkling of facial skin in old age results primarily from:
- A) Changes in the endocrine glands
 - B) Cellular mutations arising from toxic chemicals
 - C) Repeated exposure to ultraviolet light
 - D) A diet high in fats and refined sugars

Ans: C

Feedback:

Repeated exposure to ultraviolet light causes solar elastosis, the wrinkling that results from the replacement of collagen by elastin. Toxic chemicals, nutrition, and endocrine changes are not known to produce the wrinkling of the skin seen in old age.

Origin: Chapter 2- Theories of Aging, 19

Chapter: 2

Client Needs: B

Cognitive Level: Application

Difficulty: Moderate

Integrated Process: Teaching/learning

Objective: 2

Page and Header: 16, Nutrition Theories

19. Mr. B, age 72, has a history of heart disease. He insists that his high-fat diet is permissible, however, because he takes a daily supplement of gugulipid, an herb purported to reduce blood cholesterol levels. In talking with the patient, what should Mr. B's nurse do first?
- A) Suggest that Mr. B ask his doctor for a prescription medication to reduce cholesterol levels
 - B) Review with Mr. B the benefits associated with limiting dietary fat
 - C) Introduce Mr. B to the additional benefits associated with fish oil supplements
 - D) Advise Mr. B to stop using gugulipid, as herbal supplements are not regulated by the FDA

Ans: B

Feedback:

The first duty of Mr. B's nurse is to promote positive health behaviors, which means encouraging the patient to limit his fat intake. Herbal supplements are unregulated, and their health benefits may be questionable. Whether fish oil supplements or prescription medications are advisable in this case merits further investigation.

Origin: Chapter 2- Theories of Aging, 20

Chapter: 2

Client Needs: C

Cognitive Level: Knowledge

Difficulty: Easy

Integrated Process: Nursing process

Objective: 3

Page and Header: 16, Disengagement Theory

20. Ms. E, an 80-year-old, is gradually withdrawing from society and wants society to gradually withdraw from her. She believes that this mutual withdrawal will free her from societal roles and give society the means for transferring power from the old to the young. Ms. E's grown children are concerned and say her belief has no scientific basis. On which of the following theories of aging can Ms. E say she bases her belief?
- A) Activity theory
 - B) Developmental tasks theory
 - C) Disengagement theory
 - D) Continuity theory

Ans: C

Feedback:

Disengagement theory views aging as a process in which society and the individual gradually withdraw, or disengage, from each other, to the mutual satisfaction and benefit of both.

Origin: Chapter 2- Theories of Aging, 21

Chapter: 2

Client Needs: B

Cognitive Level: Application

Difficulty: Difficult

Integrated Process: Nursing process

Objective: 3

Page and Header: 17, Activity Theory

21. A state committee is looking to improve the lives of the state's elderly. It wants to recommend that health care facilities that cater to the elderly population be required to base their practices on the activity theory of aging. Which of the following may be one problem with implementing the activity theory of aging?
- A) The assumption that older people want to maintain their middle-aged lifestyle
 - B) The reluctance of the elderly to give up their occupational roles at retirement age
 - C) The decline in mental acuity that accompanies physical impairment in most cases
 - D) Declining health, loss of roles, and shrinking circle of friends of most elderly

Ans: A

Feedback:

The activity theory suggests that the elderly should maintain their middle-aged lifestyle to the greatest extent possible, a goal not all elderly persons will embrace. The reluctance of many elderly persons to give up their middle-aged roles is consistent with the theory. Relatively small numbers of the elderly experience a significant decline in mental acuity. Declining health, loss of roles, and a shrinking circle of friends are problems the activity theory seeks to minimize.

Origin: Chapter 2- Theories of Aging, 22

Chapter: 2

Client Needs: C

Cognitive Level: Knowledge

Difficulty: Easy

Integrated Process: Nursing process

Objective: 3

Page and Header: 17, Continuity Theory

22. Mr. D was friendly and active as a young adult. Now, as a 75-year-old, he enjoys visiting with his neighbors and attending a variety of sporting and cultural events. Mr. D's behavior is most consistent with which theory of aging?

- A) Activity theory
- B) Developmental tasks theory
- C) Disengagement theory
- D) Continuity theory

Ans: D

Feedback:

The continuity theory suggests that personality and basic patterns of behavior remain unchanged as an individual ages. This is not a central component of the other noted theories.

Origin: Chapter 2- Theories of Aging, 23

Chapter: 2

Client Needs: B

Cognitive Level: Analysis

Difficulty: Moderate

Integrated Process: Teaching/learning

Objective: 4

Page and Header: 20, Box 2-2

23. Nurse Z takes ample time to explain all medical options to her elderly patients and to ensure they have the information they need to make informed decisions about their care. What is Nurse Z's best reason for taking these actions?

- A) Full disclosure deters malpractice suits and negligence claims
- B) The activity theory of aging requires maintenance of lifestyle
- C) Information is an effective strategy for stress management
- D) Empowerment has a positive effect on health status

Ans: D

Feedback:

Maximum control and decision making can have a positive effect on morbidity and mortality, although they do not necessarily reduce stress and are not inherent in the activity theory of aging. Even though legal considerations apply, the health of the patient is the first priority for nurses.