Module # 1: Introduction to Aging
Geriatrics, Palliative Care and Interprofessional Teamwork Curriculum

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# Geriatrics, Palliative Care and Interprofessional Teamwork Curriculum

## Module # 1: Introduction to Aging

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I. Overview

The United States, like many countries in the world, is undergoing a longevity revolution. There are several factors leading to current increasing numbers of older Americans, including the aging of the Baby Boomers, a decline in mortality rates, higher post-war fertility rates, improved medical technology, and increased life expectancy.

Not only is the population aging, but most older adults can expect to develop one or more chronic illnesses with which they may live for many years, often with physical and psychological symptom distress and progressive functional dependence and frailty. The growing number and proportion of older adults will therefore place increasing demands on the public health system and on medical and social services.

Chronic diseases exact a particularly heavy health and economic burden on older adults due to associated long-term illness, diminished quality of life, and greatly increased health care costs. Although the risk of disease and disability clearly increases with advancing age, poor health is not an inevitable consequence of aging. Geriatricians use the term “healthy agers” to describe the large population of highly functional community-dwelling older adults. Even in the face of serious and chronic illness, these individuals remain physically and mentally active and socially engaged with family and friends.

II. Learning Objectives

1. Discuss the demographic imperative for increased care of the elderly.
2. Identify the implications of an aging society on health care resources.
3. Define “geriatrics”.
4. Define “ageism”.
5. Describe the three major dimensions of aging.
6. Identify two theories of aging.
7. Discuss prevalent myths and stereotypes about aging.
III. The Demographic Imperative For Increased Geriatric Care

A. The U.S. population is aging. The older age group (65+) is growing rapidly and there is an increased need for practitioners with geriatric training.

1. As of 2003, 35.9 million people reached 65 years of age. This was an increase of 9.5% from 1993.1

2. A child born in 2002 could expect to live 77.3 years, 30 years longer than a child born in 1900. This is due primarily to reduced death rates for children and young adults, and, to some extent, reduced death rates for older persons since 1980.

3. There is a difference between life span and life expectancy. Life span refers to the maximum survival time for a species. In the case of human beings, this is about 120 years. Life expectancy is the average number of years of life from a particular age, say birth or age 65. This changes over time (as noted in 2) because of changes in medical care, sanitation, and other factors.2

4. The fastest growing population segment is the oldest-old. In 1900, there were about 122,000 people 85 years old and older, less than 1% of the total population. By 1990, the oldest-old numbered 3.0 million persons. By the year 2050, those 85 and older will represent almost 5% of the population.

5. By 2030, the number of older Americans will have more than doubled to 71.5 million, or one in every five Americans. By 2050, that number will grow to 80 million Americans over 65, with 18 million over 85 years of age.

6. There were 50,639 people aged 100 or more in 2003, which is a 36% increase from 1990.

7. Members of minority groups are projected to represent 26.4% of the older population in 2030, up from 16.4% in 2000.
IV. Implications Of An Aging Society On Healthcare Resources

a. Most older persons have at least one chronic condition. The most frequent conditions occurring among the elderly in 2002 were:
   a. Hypertension – 49%
   b. Arthritis – 36%
   c. Heart disease – 31%
   d. Cancer – 20%
   e. Sinus problems – 15%
   f. Diabetes – 15%

b. The increasing size of the oldest-old age cohort (85 years and older) has major implications because individuals in this age group tend to have more activity limitations, experience more chronic conditions, and require more services than the younger old.

c. Health care utilization is higher among older adults than among younger persons. In 1995 when the 65 and over population included 33.5 million persons, or 12.8% of the total population, older people accounted for over a third of the total personal health care dollars. Health care usage generally increases with advancing age. In 1996, the average annual expenditure on health care, which includes both out-of-pocket expenses as well as expenses covered by insurance, was $5,864 for those aged 65-69, $9,414 for those aged 75-79, and over $16,000 for those 85 and older. ³

d. Another major implication is the cost of caregiving for older adults. While most family members desire to care for relatives, the economic impact of informal caregiving is enormous. About 44 million adults provide unpaid assistance and support to older people and those with disabilities in the community. In 2000, the national economic impact of informal caregiving had a value of $257 billion, far outweighing the costs of nursing home care ($92 billion) and home health care ($32 billion). ⁴
V. What is Geriatrics?

A. Geriatrics is the **branch of medicine** that deals with the diagnosis and treatment of diseases and problems specific to the aged. Geriatricians are physicians who focus on the care of older people. Geriatricians are specially trained and focus on improving the function of older people in a proactive manner, not just treating illnesses and diseases as they occur. They are also trained to work with other primary care practitioners to enhance the health care status and quality of life of older people. 5

B. Geriatrics is an **interdisciplinary field**, placing value on all health professionals. Due to the multiple conditions and illnesses that older people may have, an interdisciplinary team approach is necessary. (See Module 2, Interdisciplinary Teamwork.)

C. A cornerstone of geriatrics is **assessment**. Geriatric assessment is multidimensional and has been found to be effective in multiple studies. (See Module 3, Psychosocial and Strength Based Assessment and Module 4, Functional Assessment and Geriatric Syndromes.)

D. **Gerontology** is a closely related field and refers to the scientific study of the biological, psychological, and sociological phenomena associated with old age and aging. Scientists and educators in the field of aging are referred to as “gerontologists”.

VI. Fallacies And Stereotypes About Old Age

A. **Ageism** is defined as the denial of basic human rights of older persons. It is a widespread prejudice that negatively impacts on older people. Examples of “ageism” are negative media, images, unequal treatment in the workforce, abuse, and lack of access to appropriate medical care. 6

B. There are many **myths and fallacies** about older people.

1. Biological Fallacies
   a. Older people are not attractive.
   b. Older people require less sleep.
   c. There is not much an older person can do with a chronic health condition.
   d. Urinary incontinence is to be expected when we are older.
   e. Drug misuse and abuse are not problems in the older population.
   f. Many older people are in nursing homes.

2. Psychological Fallacies
   a. Older people are more rigid and resistant to change.
   b. Older personality changes with age.
c. Aging brings a decline in intellectual abilities and learning.
d. Memory loss is inevitable in later life.
e. Older people have no interest in, and are incapable of sex.
f. It is normal for an older person to be depressed.

3. Social Fallacies
   a. Most older people are lonely and want to live with their children.
   b. Older people are often abandoned by their families.
c. Medicare pays for most long-term nursing home and in-home care costs.
d. Poverty no longer exists among the elderly.
e. People become more religious as they age.

VII. Dimensions And Theories Of Aging

A. Physiological aging refers to changes with the passage of time in the structure and processes of tissues, major organs and systems of the body that can ultimately affect our health, behavior, functional capacity, and survival.

B. Social aging includes the transitions into and out of roles, expectations about behavior, societal allocation of resources and opportunities, negotiations about the meaning and implications of chronological age, and the experience of individuals traveling the life course and negotiating life stages.

1. Psychological aging processes include changes in personality, mental functioning and sense of self during our middle and older years. Some changes are part of normal aging and others are the result of physiological changes in the way the brain works. However, personality does not undergo major changes with age and memory and cognitive decline is not inevitable.

2. There are many theories of aging.

   a. Social theories include:
      i. Disengagement theory which posits that the mutual disengagement of older people from society and society from the elderly is mutually beneficial. Retirement, for instance, is a normative, expected phase of disengagement enabling older people to move into a period of leisure and enabling younger people to move into the labor force.
      
      ii. Activity theory, on the other hand, posits that it is important for older people to stay engaged in society through the assumption of new roles and pursuits in the later years.
b. **Physiological theories** include:

i. **Error theories** of aging such as the free radical theory which posits that cell damage accumulates over time and destroys cells.

ii. **Programmed theories** of aging include telomerase theory. Telomerase is an enzyme that repairs and replaces part of the telomere lost during cell replication. Telomeres usually shorten with each replication and, with aging, they reach a shortened point at which no replication occurs.
VIII. References


2. The UCSF Academic Geriatric Resource Center Online Curriculum, www.ucsfagrc.org (retrieved 7/24/06)

3. Ibid.


Learning Resource A

The Facts on Aging Quiz

1. The majority of old people (65+) are senile (have defective memory, are disoriented, or demented).
   ___ True      ___ False

2. The five senses (sight, hearing, taste, touch, and smell) all tend to weaken in old age.
   ___ True      ___ False

3. The majority of old people have incomes below the poverty line (as defined by the federal government).
   ___ True      ___ False

4. The majority of old people have no interest in, or capacity for sexual relations.
   ___ True      ___ False

5. Lung vital capacity tends to decline in old age.
   ___ True      ___ False

6. The majority of old people feel miserable most of the time.
   ___ True      ___ False

7. Physical strength tends to decline in old age.
   ___ True      ___ False

8. The majority of old people works or would like to have some kind of work to do (including housework and volunteer work).
   ___ True      ___ False
9. At least one-tenth of the aged are living in long-stay institutions (such as nursing homes, mental hospitals, homes for the aged, etc.).

   ___ True    ___ False

10. Old people tend to become more religious as they age.

    ___ True    ___ False

11. Aged drivers have fewer accidents per driver than those under 65.

    ___ True    ___ False

12. Older workers usually cannot work as effectively as younger workers.

    ___ True    ___ False

13. Over three-fourths of the aged are healthy enough to carry out their normal activities without help.

    ___ True    ___ False

14. The majority of old people are unable to adapt to change.

    ___ True    ___ False

15. The majority of old people say they are seldom irritated or angry.

    ___ True    ___ False

16. Old people usually take longer to learn something new.

    ___ True    ___ False

17. Depression is more frequent among the elderly than among younger people.

    ___ True    ___ False

18. The health and economic status of old people will be about the same or worse in the year 2010 (compared to young people).

    ___ True    ___ False
19. Older people tend to react slower than young people.
   ___ True    ___ False

20. In general, old people tend to be pretty much alike.
   ___ True    ___ False

21. The majority of old people say that they are seldom bored.
   ___ True    ___ False

22. Over 20% of the population is now age 65 or over.
   ___ True    ___ False

23. The majority of old people are socially isolated.
   ___ True    ___ False

24. Old workers have fewer accidents than younger workers do.
   ___ True    ___ False

25. The majority of medical practitioners tend to give low priority to the aged.
   ___ True    ___ False

Learning Resource B

The 'Facts on Aging' Quiz: Answer Key

1. False 14. False
2. True 15. True
3. False 16. True
4. False 17. False
5. True 18. False
6. False 19. True
7. True 20. False
8. True 21. True
9. False 22. False
10. False 23. False
11. True 24. True
12. False 25. True
13. True
Learning Resource C

Breaking Down Old Myths

Myth #1: *To be old is to be sick.*

**Facts:**

- Only 5% of the elderly population lives in nursing homes.
- Elderly may have chronic diseases but they still function quite well.
- Only 23% of elderly claim to have a disability.

Myth #2: *You can’t teach an old dog new tricks.*

**Facts:**

- The less people are challenged, the less they perform.
- Elders therefore need to stay mentally active and stimulated. The 3 key factors predicting strong mental functioning in old age are
  1. Regular physical activity
  2. A strong social support system
  3. A belief in one's ability to handle what life has offer (underscores why myth is harmful)
- Conditions of successful learning are different for older people than for the young.
- Learning institutions are not flexible particularly concerning the elderly.

Myth #3: *The horse is out of the barn.*

**Facts:**

- Bad habits do not always produce irreparable damage.
- It is never too late to start good lifestyle habits of diet and exercise.

Myth #4: *The secret to successful aging is to choose your parents wisely.*

**Facts:**
• Heredity is a factor, but environment and behavior choices strongly influence how well an elderly person functions.

**Myth #5: The lights may be on, but the voltage is low.**

**Facts:**

• Sexuality does decrease with age but there are tremendous individual differences among the elderly.

• The definition of sexuality and intimacy needs to be redefined and broadened.

**Myth #6: The elderly don’t pull their own weight.**

**Facts:**

• The belief that the elderly are unproductive is false. Robert Kahn at the University of Michigan found in his studies (as cited in T. Franklin Williams, “A New Scope on Retirement”) of productive activity (defined as “any that might be remunerated under certain circumstances”) that “on average, ‘retired’ people are making more contributions in terms of dollar value than they are receiving in support from society, at least up to age 75”.

• The measures for productivity are wrong; paid employment should not be the only measure. Senior citizens are volunteering in droves. An Elderlearning Survey, designed as part of the research for a book, *Elderlearning*, by Lois Lamdin with Mary Fugate, found that 72 percent of the respondents reported volunteer activities, with 43.1 percent of them volunteering either full-time or at least one to three days per week.

• There is job discrimination against the elderly.