Aging Demographics
It is beneficial for nurses to understand the rapidly shifting demographics of the aging population to competently plan and provide services to older adults.

People in the U.S. are living longer, with the number of people aged 65 years and older growing exponentially. Life expectancy has increased for both men and women. A child born in 1900 had a life expectancy of 47 years; a child born in 2013 can expect to live 78.2 years. Improved medical care and preventative measures have increased life expectancy and have produced a major shift in the leading causes of death, from infectious diseases and acute illnesses to chronic diseases and degenerative illnesses. Today 34 million people are over 65 years of age, accounting for approximately 13% of the total population. Since 1900, the percentage of Americans ≥ 65 has tripled. The Baby Boomers (those born between 1946 and 1964) have entered their senior years and will cause a dramatic increase in the older population through 2030. The projection is that in the year 2030 older adults will represent nearly 20% of the total U.S. population.

Minority Aging
Populations of older adult minorities in the U.S. are also increasing dramatically. Non-Hispanic Whites accounted for nearly 84% of U.S. older adult population in 2000 but are projected to decrease to 64% by 2050. Today African Americans make up 8.4% of the older population, Asians comprise 4%, and Hispanics (of any race) account for 6.8%. Projections indicate that by 2050 the composition of older adults will be 61% non-Hispanic White, 18%
Hispanic, 12% Black, and 8% Asian. The older Hispanic population is projected to grow the fastest. The older Asian population is also expected to experience a large increase to 7 million by 2050.

Marital Status
Older men are more likely to be married than older women and after age 75, most older women are not married. Over 72% of men aged 65–74 were married compared with 42% of women in the same age group. According to Even among the oldest-old, most men are married.

Living Arrangements
Differences in life expectancy contribute to the reality that most older men live with their spouse whereas less than half of the older women do. Older African American, Hispanic, and Asian women are likely living with family members other than their spouse. Older non-Hispanic white women and black women are more likely to live alone.

Slightly more than 4% (1.5 million) of older adults reside in health care facilities. The likelihood of residing in a nursing home, however, increases dramatically with age, a result of these individuals’ increased need for support in maintaining the activities of daily living.

Financial Status
Although the numbers are decreasing, living in poverty is a real concern for older Americans. In 1959, 35% of older adults over 65 years of age lived below the poverty threshold, today 10% of older adults fall in the poverty level. Women and minorities are affected most by poverty. The major income sources for older adults is Social Security; about half of all seniors derive income from assets, slightly more than a quarter have private pensions, and approximately a quarter of seniors derive income from employment.

Living with Chronic Illness
As a result of advances in health care during the past century, nurses are increasingly caring less for people dying from infections and accidents, major sources of mortality at the turn of the century. Today nurses are caring for older adults with chronic illnesses, which are a significant source of morbidity and mortality. Over 50% of older adults have three or more chronic diseases (American Geriatric Society Expert Panel on the Care of Older Adults with Multimorbidity, 2014) and these significantly can impact independence and activities of daily living. The leading chronic conditions in persons age 65 years and older, in order of prevalence, are:

- Arthritis
- High blood pressure
- Hearing impairments
- Heart conditions
- Visual impairments (including cataracts)
- Deformities or orthopedic impairments
- Diabetes mellitus
- Chronic sinusitis
- Hay fever and allergic rhinitis (without asthma)
- Varicose veins


Adopting healthy lifestyles—getting regular physical exercise, maintaining a healthy diet, avoiding tobacco use—and receiving regular health-care screening (e.g. for breast, cervical, and colorectal cancers, for diabetes, and for depression) can dramatically reduce a person’s risk of chronic illnesses.

Adopting better lifestyle habits, in conjunction with many of the complementary modalities available to older adults, offers tremendous potential in improving quality of life for older adults, as well as decreasing co-morbidities (e.g. immobility, pain) associated with chronic illnesses (for an in-depth review see the AHNA module Safe Integration of Complementary and Alternatives in Geriatric Care).

Geriatric Syndromes
As older adults age their bodies undergo numerous physiologic changes. These physiologic changes are not identical in every individual. (For a review of common physiologic changes in aging consult The Hartford Institute of Geriatric Nursing resources at: http://consultgerirn.org/topics/normal_aging_changes/want_to_know_more) These changes not only contribute to and affect the development of chronic diseases but also the manifestations and impact of the diseases in affected individuals.

Older adults with an increased number of chronic illnesses are at risk for one or more of the following geriatric syndromes. Nursing care to older adults with these syndromes is aimed at minimizing morbidity and mortality while concurrently maintaining dignity and quality of life. The following are common geriatric syndromes found in older adults:

**Delirium**
Delirium is confusion of sudden onset accompanied by an altered level of consciousness. Symptoms can fluctuate throughout the day. Common causes of delirium in older adults are infections, metabolic disorders and medication reactions. For some older adults, delirium can be the first sign that an acute condition is present.

Persons with dementia (chronic impaired cognition) can develop a delirium when experiencing a physical health problem. Delirium in these individuals can be manifested by a worsening or confusion, agitation, and increased behavioral problems.

**Dementia**
Dementia is a clinical syndrome of cognitive deficits that involves both memory impairments and a disturbance in at least one other area of cognition. These cognitive deficits are generally progressive and irreversible.

- Dementia affects about 5% of individuals 65 and older
- 4–5 million American's have Alzheimer's disease (AD)
- 13.5 million are projected to have AD by the year 2050
- Global prevalence of dementia is about 24.3 million, with 6 million new cases every year
- In addition to disruptions in cognition, dementia is commonly associated with changes in function and behavior.

There are several types of dementia, and they vary in onset and rate of progression of symptoms. It is important to conduct a thorough assessment to identify other potential causes of dementia rather than assume it is Alzheimer’s disease. Also, it is important to educate caregivers and consumers that cognitive impairment is not a normal outcome of aging.

**Depression**
Depression is not a normal part of growing old but rather a treatable medical illness that impacts many older Americans over age 65. Depression manifests with several symptoms including sad mood for 14 days or more, depressed or irritable mood, frequent crying, loss of interest and pleasure (in family, friends, hobbies, sex), weight loss or gain (especially loss), sleep disturbance (especially insomnia), fatigue/loss of energy, psychomotor slowing/agitation, diminished concentration, feelings of worthlessness/guilt, suicidal thoughts or attempts, hopelessness, and psychosis (i.e., delusional/paranoid thoughts, hallucinations).

- Depression, both major depressive disorders and minor depression, is highly prevalent in community-dwelling, medically-ill, and institutionalized older adults.
- Depression is not a natural part of aging or a normal reaction to acute illness hospitalization.
- Consequences of depression include amplification of pain and disability, delayed recovery from illness and surgery, worsening of drug side effects, excess use of health services, cognitive impairment, malnutrition, and increased suicide- and nonsuicide-related death.
- Depression tends to be long lasting and recurrent. Therefore, a wait-and-see approach is undesirable, and immediate clinical attention is necessary. If recognized, treatment response is good.
- Somatic symptoms may be more prominent than depressed mood in late-life depression.
- Mixed depression and anxiety features may be evident among many older adults.
• Recognition of depression is hindered by the coexistence of physical illness and social and economic problems common in late life. Early recognition, intervention, and referral by nurses can reduce the negative effects of depression.

**Falls**

A fall is an unexpected event in which the individual comes to rest on the ground, floor, or lower level. Falls among older adults are not a normal consequence of aging; rather, they are considered a geriatric syndrome most often due to many interacting intrinsic and extrinsic factors. Nearly one-third of older adults living in the community fall each year in their home. The highest fall incidence occurs in the institutional long-term-care setting (i.e., nursing home).

The increased risk of falling in older adults may be due to a number of age related changes such as altered visual acuity, decreased reaction time, decreased balance and muscle strength, demineralization of bone, and increased incidence of orthostatic hypotension.

**Pain**

*Pain* is defined as "an unpleasant sensory and emotional experience" and also as "whatever the experiencing person says it is, existing whenever he says it does." These definitions highlight the multidimensional and highly subjective nature of pain. Pain is usually characterized according to the duration of pain (e.g., acute versus persistent) and the cause of pain (e.g., nociceptive versus neuropathic). These definitions have implications for pain management strategies. Pain assessment must be regular, systematic, and documented in order to accurately evaluate treatment effectiveness, and heavily weigh the client’s self-report.

- Approximately 50% of community-dwelling elders have pain
- Approximately 85% of nursing home residents experience pain
- The prevalence of pain is twice as high among older adults (those older than 60 years) than among younger individuals
- More than 80% of older adults have chronic medical conditions that are typically associated with pain, such as osteoarthritis and peripheral vascular disease
  - Older adults often have multiple medical conditions, both chronic and/or acute, and may suffer from multiple types and sources of pain
- Pain has major implications for older adults’ health, functioning, and quality of life

**Sensory Changes**

The majority of older adults will experience some changes in their sensory capacity (vision, hearing, smell, taste and peripheral sensation) as a normal part of aging. Some sensory changes, for example changes in hearing, can severely impact an older person's communication skills.

Thirty percent of those over age 65 have some level of visual impairment. Cataracts are the fifth most common chronic condition in adults over age 75 and cause vision to be cloudy. Other diseases in older adults that alter vision are macular degeneration, glaucoma, diabetic retinopathy, hypertensive retinopathy, temporal arteritis and detached retina.

Hearing loss is the third leading chronic condition affecting adults over 75 years of age. Common causes of hearing loss in older adults are presbycusis (sensorineural hearing loss), conductive hearing loss, central auditory processing disorder, tinnitus and Meniere's disease.

The sense of smell and ability to identify odors decreases due to normal changes in aging. Common changes in taste include a decreased ability to detect foods that are sweet. Most changes in taste are thought to occur due to decreased sense of smell, medications, diseases and tobacco use.

Diseases that alter smell and taste seen more frequently as people age include conditions causing burning mouth syndrome (e.g., Vitamin B12 deficiencies, allergies, salivary dysfunction and diabetes), peripheral sensation loss (e.g. peripheral neuropathy, diabetic neuropathy) and acute sensory loss (e.g., stroke, nerve entrapment).

The reduction in tactile sensations causes older adults to be less aware of pressure, contributing to the higher risk of skin breakdown in this population.

**Urinary Incontinence (UI)**
Urinary incontinence is not a normal consequence of aging. UI is the involuntary loss of urine sufficient to be a problem. UI affects approximately 17 million Americans. More than 35% of older adults admitted to the hospital develop UI. In addition to medications, constipation/fecal impaction, low fluid intake, environmental barriers, diabetes mellitus, and stroke, immobility, impaired cognition, malnutrition, and depression are factors specific to identifying older adults at risk for UI in the hospital setting. Complications of UI include falls, skin irritation leading to pressure ulcers, social isolation, and depression. Nurses play a key role in the assessment and management of UI. Complications of UI include skin irritation leading to pressure ulcers, social isolation, falls, and depression.

There are several types of UI including:
- Stress UI: associated with activities that increase intra-abdominal pressure, e.g. coughing, sneezing
- Urge UI: associated with a strong desire to void—urgency
- Overflow UI: due to over distention of the bladder, and may be caused by an under active detrusor muscle or outlet obstruction leading to over distention and overflow
- Functional UI: caused by nongenitourinary factors, such as cognitive or physical impairments that result in an inability for the individual to be independent in toileting
- Transient UI: characterized by the sudden onset of potentially reversible urinary symptoms (e.g. urinary tract infection)

A thorough evaluation of the cause of UI is essential to determining the best approach to reversing this condition and/or strategies to assist (e.g., bladder retraining, prompted voiding, use of adult briefs). UI should not be accepted as a normal consequence of aging.

### Medications

The older population consumes a large number of medications:
- 25–40% of all medications in U.S. are written for older persons
- 40–50% of all over-the-counter medications are consumed by elderly persons
- Community dwelling elderly consume 6 medications daily on average

This is a serious situation in that the greater the number of medications used the higher the risk of adverse reactions and complications. In addition, other factors contribute to the risk of adverse reactions, including:
- age-related physiologic changes which affect the absorption, distribution, metabolism, and excretion of medications
- polypharmacy
- problems with medication adherence related to lack of funds to fill prescriptions, complicated regimens, side effects, cognitive impairment, functional impairments, etc.
- inappropriate prescription writing (e.g., failure to adjust dosage based on age, prescribing a drug that interacts with one already used)
- inadequate patient teaching
- self medication for age related symptoms
- failure of patient or caregiver to recognize signs of adverse reactions

### Living with Chronic Conditions

The nature of chronic conditions, the unique manner in which they may present in various persons, and the effects of advanced age require that care and goals be highly individualized. Unlike the care of acute conditions in which most nursing actions involve the activities of diagnosing, treating, and curing, chronic care nursing actions involve assisting the individual with the goals of (Eliopoulos, 2014):
- maintaining or improving self-care capacity
- caring for the condition effectively
- boosting the body's healing abilities
- preventing complications
- delaying deterioration and decline
- achieving the highest possible quality of life
- dying with peace, comfort, and dignity

The different focus of chronic care means that progress may be evaluated differently than it would be with acute care.
In addition to conventional Western medical approaches (e.g., allopathic medications and surgeries), other treatment modalities abound. The National Center for Complementary and Alternative Medicine, a division of the National Institute of Health, conducts research testing the safety and effectiveness of complementary treatments (used together with conventional medicine) and of alternative treatments (used in place of conventional medicine). Many of these have already proven to be effective and hold tremendous promise in treating chronic illnesses in older adults. Types of complementary and alternative modalities include:

- Acupuncture
- Aromatherapy
- Ayurveda
- Biofeedback
- Chiropractic
- Dietary supplements
- Electromagnetic fields
- Homeopathy
- Massage
- Naturopathy
- Osteopathy
- Reiki
- Therapeutic Touch
- Traditional Chinese medicine
- Yoga

Nurses interested in the newest research findings, such as the study on osteoarthritis and acupuncture, may view them at http://www.nlm.nih.gov/medlineplus/complementaryandalternativemedicine.html. (For additional information on CAM use in older adults refer to the AHNA module Safe Integration of Complementary and Alternatives in Geriatric Care).

Older adults, by adopting healthy lifestyle changes (e.g., physical activity, good nutrition, maintaining a healthy weight, and avoiding tobacco use), are able to contribute to reducing the adverse effects of chronic diseases and aging.

Advance Directives
Death is a reality for all people yet, very few have enacted an advance directive. These documents of a person’s preferences prove to be critical in acute and chronic illness, and even more so in planning end-of-life care. The absence of these documents at end-of-life is often a source of distress to families and nurses. Types of advance directives include wills and trusts, advance directives, and several types of power of attorney. These documents should be discussed and completed whenever possible well in advance of an end-of-life crisis. For additional information about the different types of advance directives and their purposes nurses can consult Getting Your Affairs in Order (National Institute on Aging) at http://www.nia.nih.gov/health/publication/getting-your-affairs-order

Elder Abuse
Many older adults are victims of elder abuse (physical, sexual, emotional, or financial abuse and neglect). Older adults may not report their mistreatment due to embarrassment, concern as to changes in their living arrangements that could result, or fear of retaliation from their abusers. Nurses are often the health care providers who initially come in contact with the victims of elder abuse. Recognizing the signs and symptoms of elder abuse is the first step in accessing help and safety for the victim. A summary of the signs and symptoms, as well as steps to be taken to report elder mistreatment, can be found at the National Center on Elder Abuse, http://www.ncea.aoa.gov/ncearoot/Main_Site/index.aspx

Family Caregiving
Many acute and chronic illnesses render older adults dependent, requiring families and friends to care for them. Increased numbers of these individuals are being cared for by family and friends, and these caregivers are at risk of
having the caregiving burdens impact their physical, emotional, and social well-being. Nurses are able to provide ongoing support to caregivers in a variety of ways. Some families require emotional support, educational materials, or referrals. Many agencies offer advice and assistance to caregivers including the National Family Caregivers Association http://www.nfcacares.org/ and the Administration of Aging http://www.aoa.gov/  

Immunizations  
Pneumonia and influenza remain among the top ten causes of death for older adults. Immunizations protecting older adults from these two infectious diseases remain the number one preventative modality. For a complete U.S. Center for Disease Control recommended schedule for immunizations for adults, refer to http://www.cdc.gov/vaccines/  

Oral Health  
Oral health is an important and frequently neglected area of health care. Drinking fluoridated water, using fluoride toothpaste, and getting routine dental care are ways to prevent oral health problems. Oral health problems cause pain and difficulty speaking, and impair chewing, swallowing, and maintenance of optimal nutrition. Poor oral health results in gingivitis, periodontal disease, dental caries, and subsequent bone loss. Consult the American Academy of Periodontology for recommendations on care at http://www.perio.org/consumer/smileforlife.htm  

Palliative Care  
Palliative care is an emerging system of health care with an aim of meeting the expanding need for services based on the exponential growth in older adults. Palliative care organizations include the National Hospice and Palliative Care Organization at http://www.nhpco.org/templates/1/homepage.cfm, and the Center for the Advancement of Palliative Care (CAPC) at http://www.capc.org.  

Safety  
Many older adults face numerous safety hazards in their homes, exposing them to increased risk of injury. Home health nurses can provide a thorough check of a home environment, identifying safety hazards (e.g., unsecured floor rugs or loose railings) and rectifying hazards (e.g., replacing frayed cords and checking fire detectors) which will significantly decrease the injuries and deaths related to home safety hazards. For complete information, as well as a home safety checklist, refer to the Consumer Product Safety Commission's Safety for Older Consumers Home Safety Checklist at http://www.cpsc.gov/  

Sexuality  
Numerous physical changes, as well as the effects of chronic disease and medications, affect the older adult’s ability to enjoy sex. Despite this, many older adults continue to desire sexual satisfaction into advanced age. Additionally, intimacy with another person may or may not include sex. Sexual satisfaction and concerns should be part of the comprehensive assessment of older adults. Nurses may need to provide education and counseling regarding the effects of diseases and medications on libido and sexual function and assist older adults correcting or managing problems that interfere with sexual activity. Consult the National Institute on Aging’s Sexuality in Later Life at http://www.niapublications.org/agepages/sexuality.asp  

Conclusion: Living in Harmony with Chronic Conditions  
In addition to effectively managing the disease, an important aspect of chronic care is achieving healing. With chronic conditions healing doesn't mean cure, but rather, developing a lifestyle in which one lives in harmony with the condition. A true holistic approach is essential as the needs of the body, mind, and spirit must be considered.  

Websites with Information for Adopting Healthy Lifestyles  

### Information for Elders and Families


### Organizations

- **Administration of Aging**: http://www.aoa.gov
- **Alliance for Aging Research**: http://www.agingresearch.org
- **Alzheimer's Association**: http://www.alz.org
- **Alzheimer's Disease & Related Disorders**: http://www.alzheimers.org
- **American Association of Retired Persons**: http://aarp.org
- **American Cancer Society**: http://www.cancer.org
- **American Geriatrics Society**: http://www.americangeriatrics.org
- **Centers for Disease Control and Prevention**: http://www.cdc.gov/aging
- **Fifty-Plus Lifelong Fitness**: http://www.50plus.org
- **National Council on the Aging**: www.ncoa.org/index.cfm?bType=ie4
- **National Institute on Aging**: http://www.nia.nih.gov
- **National Institute on Aging (Senior Health)**: http://www.nihseniorhealth.gov
- **National Institute of Health Information Center**: http://www.nia.nih.gov

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