COURSE #39101 — 3 CONTACT HOURS RELEASE: 02/01/22 REVIEW: 02/01/25 EXPIRATION: 01/31/26

Caring for the Geriatric Patient

HOW TO RECEIVE CREDIT

- Read the enclosed course.
- Complete the questions at the end of the course.
- Return your completed Evaluation to NetCE by mail or fax, or complete online at www.NetCE.com. (If you are a Florida nurse, please return the included Answer Sheet/Evaluation.) Your postmark or facsimile date will be used as your completion date.
- Receive your Certificate(s) of Completion by mail, fax, or email.

Faculty

Alice Yick Flanagan, PhD, MSW, received her Master's in Social Work from Columbia University, School of Social Work. She has clinical experience in mental health in correctional settings, psychiatric hospitals, and community health centers. In 1997, she received her PhD from UCLA, School of Public Policy and Social Research. Dr. Yick Flanagan completed a year-long postdoctoral fellowship at Hunter College, School of Social Work in 1999. (A complete biography appears at the end of this course.)

Allan G. Hedberg, PhD, received his Master's in psychology from Northern Illinois University and his PhD in clinical psychology from Queen's University in Ontario, Canada. He has practiced clinical psychology in mental health centers, hospitals, and rehabilitation units as well as in private practice since 1969. More recently, he has maintained an active consultation service to patients and staff of nursing homes and assisted living facilities in the Central Valley of California. (A complete biography appears at the end of this course.)

Faculty Disclosure

Contributing faculty, Alice Yick Flanagan, PhD, MSW, has disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Contributing faculty, Allan G. Hedberg, PhD, has disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Division Planner

Jane C. Norman, RN, MSN, CNE, PhD

Director of Development and Academic Affairs

Sarah Campbell

Division Planner/Director Disclosure

The division planner and director have disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Audience

This course is designed for nurses in a variety of practice settings who work with older patients.

Accreditations & Approvals

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A complete Works Cited list begins on page 17.

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About the Sponsor

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Course Objective

The purpose of this course is to provide nurses with an overview of the physical and psychosocial considerations necessary when providing care to geriatric patients.

Learning Objectives

Upon completion of this course, you should be able to:

1. Outline the clinical presentation and approach to treatment for age-related diseases such as osteoporosis, osteoarthritis, anemia, and geriatric failure to thrive.
2. Identify signs of mild cognitive impairment and dementia, and differentiate between dementia and conditions that mimic dementia in the elderly patient.
3. Define elder abuse and the different forms of elder abuse.
4. Describe the approach to care near the end of life.

EVIDENCE-BASED PRACTICE RECOMMENDATION

Sections marked with this symbol include evidence-based practice recommendations. The level of evidence and/or strength of recommendation, as provided by the evidence-based source, are also included so you may determine the validity or relevance of the information. These sections may be used in conjunction with the course material for better application to your daily practice.

INTRODUCTION

The aging process can become a very challenging time in a person's life. Geriatric patients may have psychologic, sociologic, and physical changes resulting from aging, and it is often difficult for the aging person to understand and accept the changes that are taking place, to maintain a positive level of functioning for as long as possible, and to compensate for ongoing losses. Age-sensitive practice is crucial and will continue to grow more important as the nation's demographic shifts and life expectancy increases. The older segment of the population is extremely diverse in terms of the span of developmental, social, and psychologic needs. Resilience and potentiality rather than decline and deficits should be emphasized throughout all assessments and interventions.

AGE-RELATED DISEASE

Biologic and physiologic changes are part of aging. The losses in the physical arena for the elderly can be numerous, which may then compound and/or have implications in social and psychologic arenas. Studies have shown that brain tissues atrophy due to natural cell degeneration, with the volume of the brain decreasing by 15% or more between adolescence and old age [1]. The health status of older persons with vision and hearing loss is poorer compared with those without vision or hearing loss [2]. In a study of more than 1,000 elders, 53.7% of those with impaired vision also had hypertension, compared with 43.1% of those without impaired vision. Of those with impaired hearing, 27.6% experienced heart disease, compared with 18.6% of those without a hearing loss [2]. Interestingly, the rates double when persons have both hearing and vision impairment. Almost one-fifth (19.9%) of persons with both impairments had experienced a stroke, while only 8% with no sensory loss had experienced a stroke [2].

With the increase in life expectancy, there is also an increase in the incidence of acute and chronic illnesses, such as cardiovascular diseases and hypertension. As a part of the aging process, the composition of vascular structures changes, affecting how peripheral arteries dilate and constrict [3]. The result is often hypertension, which affects 1.28 billion adults worldwide [4]. Epidemiologic studies have noted that 31.1% of adults worldwide have hypertension [3].

A variety of diseases occur primarily in geriatric patients. However, it is important not to use age as the only criterion to determine the type of treatment for chronic disease among the elderly. Frail elders should be assessed and treatment tailored for their specific needs [5].

OSTEOPOROSIS

Osteoporosis is the most common type of metabolic bone disease. It results either from the body's inability to form new bone or from an increased resorption of formed bone. Essentially, when there is an imbalance between osteoblastic and osteoclastic activity, skeletal problems arise. Risk factors, such as advanced age, family history, race, estrogen deficiency, tobacco use, steroid use, low calcium intake, physical inactivity, and low body weight, contribute to this condition [6].

Primary, age-related, or low-turnover osteoporosis results from decreasing bone mineral density and bone quality with age. Normal aging processes decrease gonadal function, and physical activity is usually less strenuous. Everyone reaches a peak bone mass around the third decade of life, usually between 25 to 30 years of age. The maximum bone mineral density achieved by any individual depends upon genetic factors, nutrition, endocrine status, and physical activity. Bone density then gradually decreases as the individual ages. This primary type of osteoporosis is due to decreased bone formation without declining osteoclastic action. The molecular changes that lead to this type of osteoporosis are not clear at this time; however, micrographs of bone show loss of trabecular plates in cancellous bone [7].

Postmenopausal osteoporosis causes most of the skeletal difficulties in the adult female population. Again, these molecular processes are not well understood. It is known that declining estrogen levels cause an increase in osteoclastic activity with a resulting imbalance between skeletal formation and resorption [8]. Estrogens act on nuclear receptors of both osteoblasts and osteoclasts. Deficiency of estrogen leads to, among other effects, the upregulation of osteoprotegerin ligand gene transcription and increased production of macrophage colony stimulating factor, both of which result in increased osteoclastic activity [9].

Osteoporosis is often a silent disease without obvious indications that it is present. However, there are some signs and symptoms that may accompany the development of the condition, including [8; 10]:

- Decreasing height (patients may lose 10–15 cm in height due to collapsing vertebrae)
- Back pain (typically in the lower thoracic and lumbar areas [T5–L5])
- Development of a kyphosis or curvature of the upper back (Dowager hump)
- Fracture occurring with minimal trauma
- Low body weight and weight loss of more than 1% per year in the elderly
- Suspicion of vitamin D deficiency (e.g., due to low intake or little exposure to sunshine)

Any of these findings in a patient should lead to an evaluation for osteoporosis.

Routine bone mineral density screening has been recommended for women 65 years of age and older, regardless of risk, and for women younger than 65 years of age with clinical risk factors for fracture [7; 11; 12; 13]. The International Society for Clinical Densitometry and the National Osteoporosis Foundation also have recommended routine screening for men 70 years of age and older, regardless of risk factors, and for men younger than 70 years of age when concerns exist about the patient's risk factor profile [7; 11]. The U.S. Preventive Services Task Force has determined that the evidence is insufficient to recommend routine screening for osteoporosis in men [13].

According to National Osteoporosis Foundation guidelines, postmenopausal women and men 50 years of age and older who present with any of the following should be considered for treatment [7]:

- Hip or vertebral (clinical or morphometric) fracture
- T-score at the femoral neck or spine of <-2.5 (after evaluation has excluded secondary causes)
- Low bone mass (T-score between -1.0 and -2.5 at femoral neck or spine) and 10-year probability of hip fracture >3% or 10-year probability of major osteoporosis-related fracture >20%

These recommendations are also supported by the American Association of Clinical Endocrinologists [15]. Although the guidelines are helpful, it is important to remember that treatment should be considered on an individual basis, because T- and Z-scores are only part of a patient's workup [7; 16].

Numerous treatment options exist, including [7]:

- Diet/supplementation
- Exercise
- Medications

OSTEOARTHRITIS

Osteoarthritis is a leading cause of activity limitation and absenteeism among working-age adults and is associated with a significant decline in function among older individuals. Osteoarthritis is by far the most common type of arthritis and is one of the leading chronic diseases in the United States, affecting an estimated 32.5 million individuals 25 years of age and older and nearly 50% of people by 65 years of age [17; 18]. It is the leading cause of chronic disability in individuals older than 70 years [19].

Historically, osteoarthritis has been considered a disease of articular cartilage, but research has indicated that the condition involves the entire joint organ [19; 21]. The loss of articular cartilage has been thought to be the primary change, but a combination of cellular changes and biomechanical stresses causes several secondary changes, including subchondral bone remodeling; the formation of osteophytes; the development of bone marrow lesions; changes in the synovium, joint capsule, ligaments, and periarticular muscles; and meniscal tears and extrusion [22; 23]. These changes lead to structural and functional changes in the joint, causing pain, disability, and psychologic distress [21].

The diagnosis of osteoarthritis at most joints is made primarily on the basis of clinical findings, with imaging studies and laboratory tests more useful for ruling out other diagnoses rather than for confirming the diagnosis of osteoarthritis [27].

There is currently no curative therapy for osteoarthritis, and treatments to alter or arrest the disease process are few and mostly ineffective [22; 23]. Thus, management is focused on decreasing pain and increasing function. The optimal management of osteoarthritis encompasses both nonpharmacologic and pharmacologic measures, beginning with basic modalities and following a so-called pyramid approach as the disease progresses or symptoms do not respond. Several factors should be considered when selecting treatment modalities, including risk factors (e.g., age, comorbidity, overweight/obesity), the level of pain and functional limitations, signs of inflammation, and degree of structural damage. Operative treatment for osteoarthritis should be delayed until all possible nonoperative options have been exhausted [22; 30]. In general, the indications for operative treatment are debilitating pain and major limitations in function and activities of daily living [22; 23].

ANEMIA

The incidence of anemia increases with age, and anemia can be common in the elderly patient. However, it should not be accepted as a part of normal aging. Growing scientific evidence suggests that the consequences of untreated geriatric anemia are significant, with poor outcomes associated with geriatric patients with anemia and increased morbidity and mortality over five years [35; 36].

Conceptually, the causes of anemia can be divided into four main categories: blood loss, hemolysis, bone marrow factor deficiency or suppression, and splenic sequestration, each of which may occur alone or concomitantly. A complete patient history will provide information regarding chronic illness, history of anemia, specialty consults, and history of blood transfusions. Elderly patients with dementia may be unable to provide an accurate medical history. In these cases, caregivers and family may be good sources of information. If certain tests and diagnostics have already been completed, they may not need to be repeated.

Elderly patients with anemia may have vague, nonspecific symptoms, and because the symptoms are non-specific, they are often overlooked or of limited help in differentiating between the types of anemia. Older patients are at greater risk for falls, cognitive decline, fatigue, and weakness as a result of advanced age, making the identification of anemia even more difficult [37]. Patients with mild anemia may remain asymptomatic. New-onset, easy fatigue, increased weakness, and shortness of breath are useful clues. Other symptoms may include tachycardia, bradycardia, dyspnea, chest pain, dizziness, headache, cold hands and feet, restless legs syndrome, and tarry stools. On occasion, patients may complain of visible changes in or discomfort of the tongue or lips, indicative of atrophic glottis and cheilitis. The severity of symptoms is dependent on the rapidity of onset, degree of anemia, physical status, and age of the patient [38]. Because anemia may be multifactorial, complete evaluation is necessary.

Treatment of anemia in elderly patients is largely dependent upon the etiology and the clinical signs and symptoms of the disease. For the most part, treatment of the underlying cause should result in improvements in hemoglobin levels. However, for the many patients for whom the cause is unknown, treatment is controversial. Decisions regarding the treatment plan should be individualized and based on a variety of factors, including patient goals, functional status, and presence of comorbidities [38]. Although treatment with erythropoietin-stimulating agents may result in significant improvements in hemoglobin levels, this approach has not been fully studied in patients with unexplained anemia and there is no evidence of pharmacologic treatment improving elderly patients' quality of life, physical function, or disability [40]. Due to the low risk of adverse effects, lifestyle interventions are often a first approach, including improvements in diet and vitamin supplementation. In most patients with mild disease, this may be sufficient.

GERIATRIC FAILURE TO THRIVE

Undesired weight loss in the elderly causes a reduced quality of life and contributes to serious illness. Elderly residents of nursing facilities who lose 5% of their body weight in one month are 4.6 times more likely to die within one year [41]. Poor prognosis is also associated with low prealbumin and cholesterol levels. Malnutrition in the elderly can result in pressure sores, functional decline, longer rehabilitation, and multiple medical complications.

Failure to thrive is defined by the Institute of Medicine as "weight loss of more than 5%, decreased appetite, poor nutrition, and physical inactivity, often associated with dehydration, depression, immune dysfunction, and low cholesterol" [41]. It is not a single disease or medical condition. Rather, it is a multidimensional problem that requires a multidisciplinary approach for its treatment. The four chief characteristics of geriatric failure to thrive are impaired physical function, malnutrition, depression, and cognitive impairment [43]. Failure to thrive is commonly used as a nonspecific diagnosis when a patient loses weight due to an unknown cause. After the diagnosis is made, it stimulates further assessment and interventions. Each of the domains of geriatric failure to thrive should be evaluated to determine areas in which the elder is having difficulty.

According to the Hartford Institute for Geriatric Nursing, substantial weight loss should warrant further investigation by nurses and health care providers and should not be dismissed as a normal consequence of aging.

(https://hign.org/consultgeri/resources/symptoms/unintentional-weight-loss. Last accessed January 28, 2022.)

Level of Evidence: VI (opinions of respected authorities/consensus panels) and V (care report/program evaluation/narrative literature reviews)

Practitioners often order extensive diagnostic workups for geriatric patients, which do not always reveal a reversible cause. It is a challenge to differentiate disease states common for older patients versus "normal aging." Furthermore, large amounts of Medicare dollars are paid to hospitals at the very end of the patient's life [44]. This raises the ethical dilemma of providing "futile care" that is cost intensive and yields few benefits.

Despite costly, time-intensive medical evaluations, 25% to 35% of patients with geriatric failure to thrive have no obvious medical cause for this weight loss [41; 45]. If weight loss is attributed to the normal aging process, this can prevent early interventions from being employed.

When developing a treatment plan, it is important to take a holistic and interdisciplinary approach in order to address all of the domains of geriatric failure to thrive [43]. Input from medical specialists, nursing staff, social workers, and physical, speech, and occupational therapists should be considered.

Treatment efforts addressing only the physical effects of geriatric failure to thrive will most likely not achieve the desired results. For patients with both acute and chronic illnesses, acute infections and conditions should be resolved before a long term plan is implemented.

During periods of acute illness, an elderly patient can experience a decline in function, and resolution of the acute condition may return the patient to his or her baseline. Common acute illnesses that cause physical and cognitive function deficits in older adults include urinary tract infection, pneumonia, dehydration, and exacerbation of congestive heart failure or chronic obstructive pulmonary disease. Extended periods of bed rest also prove detrimental and can cause severe debility. Delirium can develop, requiring the use of physical or chemical restraints. Acute medical conditions also increase nutritional requirements at a time when nutritional intake is often reduced secondary to poor eating. After the acute issue is resolved, medical treatment may be provided for any other conditions present. Optimization of treatment of chronic illnesses is crucial in the care of patients with failure to thrive.

FALLS

Mobility is affected by muscle atrophy associated with advanced age. Muscle strength, for example, can decline 30% to 40% between 30 and 80 years of age [46]. This can lead to falls, which are common among the elderly. Thirty percent of those 65 years of age and older have fallen within the last 12 months, and 50% of persons older than 80 years of age have experienced a fall in the last 12 months [46]. The causes of these falls vary and include environmental factors, sensory losses, medical factors, and psychiatric conditions, such as depression or cognitive impairments [46; 47]. Most falls among the elderly occur in the morning. This is not surprising given that the majority of activity and movement occur during this time [48]. Loss of ambulatory mobility is also common after hospitalization among older adults. This phenomenon, known as hospital-associated disability, is present in previously independent and ambulatory adults who have impaired mobility upon hospital discharge. It occurs among 16% to 65% of adults 65 years and older [49]. Infrequent ambulation and bed rest are the most commonly cited causes [49].

Falls often precipitate fractures in individuals with low bone mineral density. They occur for a variety of reasons and may involve multiple factors (e.g., problems with balance, mobility, vision, lower extremity weakness, and/or blood pressure circulation). Falls are a major contributor to hip fractures and have also been associated with an increased risk of spine, wrist, pelvis, and upper arm fractures. Preventive measures should include regular vision checks, elimination of medications that may cause dizziness, low blood pressure, or confusion, and elimination of environmental obstacles (e.g., removing throw rugs, installing night lights). Another important fall prevention measure is physical activity, which may help to improve muscle strength and balance. Physical activity, performed an average of three times each week for a duration of 30 to 45 minutes, should be encouraged in the elderly [8].

SEXUAL DYSFUNCTION

Sexual dysfunction is a highly prevalent condition. Among U.S. adults 18 to 59 years of age, an estimated 31% of men and 43% of women have sexual function concerns. Sexual problems are most prevalent in older men and young women [50; 51; 52]. However, postmenopausal women may experience sexual pain related to physiologic changes resulting from diminished estrogen.

Female Sexual Dysfunction

Older women may be anxious and have diminished sexual response from believing myths related to "normal" sexual behavior with aging. Women with erroneous beliefs may place unrealistic expectations on self (e.g., "Normal women always orgasm from vaginal penetration") or partners (e.g., "Not getting instantly erect means you are no longer attracted to me") [53].

Genitourinary syndrome of menopause affects up to 45% of postmenopausal women [54]. Independent of dyspareunia, female sexual dysfunction can develop in women with genitourinary syndrome of menopause from recurrent urinary tract infections (and resultant interruptions of daily functioning), reduced libido, and impaired mood and social interactions from nocturia-induced sleep loss. Urinary urgency and concerns over possible incontinence can render sex unpleasant due to fear of odor, embarrassment, shame, or loss of self-esteem. Women may develop anxiety or depression over symptoms they associate with aging and age-related bodily changes [55]. The loss of vulvovaginal tissue elasticity, vaginal wall thinning, and decreased vaginal lubrication with vaginal atrophy increase the risks of micro-tears, genital lesions, and sexually transmitted infections during intercourse [55].

Male Sexual Dysfunction

Male sexual dysfunction broadly includes sexual pain and/or diminished or loss of sexual desire/interest, arousal, function, or orgasm, and diagnosis requires patient distress in addition to impairment [56]. The conditions most associated with elderly men include erectile dysfunction and hypoactive sexual desire disorder.

Age is strongly linked to erectile dysfunction, due to increased oxidative stress, penile endothelial dysfunction, vascular changes, and decline of circulating steroids [57; 58]. The prevalence of erectile dysfunction is 1% to 10% in men younger than 40 years of age, 2% to 9% in men 40 to 49 years of age, 20% to 40% in men 60 to 69 years of age, and 50% to 100% in men 70 years of age or older [59; 60; 61]. In male hypoactive sexual desire disorder, problems with sexual desire are reported by 6% of younger men (18 to 24 years of age) and 41% of older men (66 to 74 years of age). It is a persistent problem in 1.8% of men [56].

Following assessment and diagnosis, management options should be discussed with the patient to seek the best solution. Options are now available such that, regardless of etiology, every man who wishes to be sexually active can do so. Patients benefit when education, sexual counseling, and/or psychologic therapy is combined with pharmacotherapy.

DEPRESSION AND SUICIDE

Major depression or persistent depressive disorder (dysthymia) with an age of onset after 65 years is referred to as late-onset depression. It is characterized by a greater presence of apathy and less lifetime presence of personality pathology than depression of earlier onset. Older patients tend to exhibit more vegetative signs and cognitive disturbance and complain less of dysphoria. In this population, major depression may be misattributed to physical illness, dementia, or the aging process itself [62].

Depression in the elderly is widespread, often undiagnosed, and usually untreated. Several factors contribute to missed diagnoses of depression in the elderly, including differences in presenting symptoms, stereotyping, provider and organizational barriers, and polypharmacy [63]. Older adults are less likely than younger adults to report feelings of dysphoria such as sadness, unhappiness, or irritability, suggesting that the standard diagnostic criteria for depression may be more difficult to apply to older adults or that older adults are disinclined to disclose such feelings [62; 64].

Similar to other subgroups, depressed elderly often present with nonspecific somatic complaints such as insomnia, appetite disturbances, lack of energy, fatigue, chronic pain, constipation, and musculoskeletal disorders [63]. Stigma also contributes to the denial among elderly patients of the psychologic symptoms of depression and refusal to accept the diagnosis. This appears to be particularly the case with older men, who also have the highest rates of suicide in later life [62; 65].

Healthcare professionals are not immune from harboring the stereotypes of the elderly often found among society in general. These can include attitudes that a depressive response to interpersonal loss, physical limitation, or changing societal role is an inevitable and even normal aspect of aging [66; 68; 69]. The elderly may view their suicidal thoughts as age-appropriate [70]. When held by patients and family members, these erroneous beliefs can lead to under-reporting of symptoms and lack of effort on the part of family members to seek care for patients [68; 69]. When held by clinicians, these beliefs can result in delayed or missed diagnoses, less effective treatment, or suicide in the elderly patient. Studies have shown that a great majority of geriatric suicide cases have visited a physician within one month of their suicide [66; 70].

The elderly account for roughly 19.3% of suicides but only 16.5% of the population [71]. Suicide rates rise with age for men, especially after 65 years of age with nearly 87% of elderly suicides occurring among men [71]. The overall rate of elderly suicide is 17.16 per 100,000. However, the rate is 38.68 per 100,000 among elderly white men and 57.78 per 100,000 among white men older than 85 years of age, a rate that is more than 1.5 times the rate for men of all ages. In contrast, the suicide rate of women declines after 60 years of age [71].

Although undiagnosed and/or untreated depression is the primary cause of suicide in the elderly, suicide completion is rarely preceded by only one factor. Risk factors for suicide in this population include a previous suicide attempt; mental illness; physical illness or uncontrollable pain; fear of a prolonged illness; major changes in social roles, such as retirement; loneliness and social isolation (especially in older men who have recently lost a loved one); and access to means, such as firearms in the home [71].

THE AGING BRAIN

In America, more than 10,000 people turn 65 years of age every day. By 2050, it is projected that there will be more people older than 60 years of age than young people [72]. The number of people 65 years of age or older will increase more than two-fold to almost 94.7 million by 2060, representing more than 20% of the American population [72]. Indeed, a population shift is occurring in the United States.

Research indicates that neural mismatches begin to appear in individuals as young as 40 years of age, resulting in increased vulnerability to distraction [73]. By 65 years of age, one-fourth of the population struggles with a failing memory and a range of mild cognitive problems. Most notable is the "senior moment" of forgetting a person's name; this is known as paraphasia. As cognitive and biologic changes take place, aging persons are forced to learn compensatory skills to continue functioning as best they can for as long as possible.

Further, by 85 years of age, 34.6% of men and women will experience symptoms of dementia or Alzheimer disease [74]. After 65 years of age, the number of cases doubles every five years. There are additional factors, aside from age, that increase the risk of developing Alzheimer disease. For example, a family history of dementia is a contributing factor to the rate and degree of decline. It also appears that individuals whose mothers had Alzheimer disease are more at risk for the disease than those whose fathers had Alzheimer disease [75]. Patients with a maternal history of Alzheimer disease have an altered level of amyloid and free radicals, the proteins involved with oxidative stress [75].

Normal signs of aging can be distinguished from the more advanced signs of mild cognitive impairment (MCI), dementia, and Alzheimer disease. Normal aging may include the following behavioral changes or losses:

- Forgetting names of people one rarely sees, such as a former neighbor
- Forgetting parts of an experience, such as parts of a vacation with a friend

- Occasionally misplacing an item, such as car keys or a cell phone
- Extreme mood changes related to a relevant or appropriate cause, such as recalling the death of a spouse
- Temporarily being unable to recall a specific fact while telling a story or a past event or experience
- Change and loss of interest in various age-related activities

Nonetheless, the normal brain is an aging brain, and steps should be taken to maintain or improve everyday functioning. The following steps can be taken to improve the brain's functioning throughout one's life [76; 77]:

- Stay physically active.
- Stop smoking or never start.
- Avoid excess alcohol.
- Engage in cognitive training.
- Maintain social networks.
- Protect the brain from toxic exposure and closed head injury.
- Eat a nutritious and balanced diet.
- Ingest the daily required minimum of vitamins, minerals, omega fatty acids, water, fruits, and vegetables.
- Sleep six to eight hours each night.
- Engage in an array of social, intellectual, spiritual, and physical activities.
- Maintain a positive attitude about life events and circumstances.
- Engage in an active life of service to others.
- Control stress and learn to cope well with daily stressful events.
- Keep personal belongings and things well organized.
- Focus on the goals of what one desires to pursue and achieve.
- Treat any psychologic problem early, such as attention deficit hyperactivity disorder, depression, and substance abuse.

THE PROGRESSIVE DEMENTIA PROCESS

Mild Cognitive Impairment

Through the process of aging and traumatic events, mild signs of neurologic dysfunction may begin to show. MCI is a spectrum of mild but persistent memory loss that lies between normal age-related memory loss and diagnosed dementia and Alzheimer disease. The memory deficits are beyond those expected for the person's age, and the individual persistently forgets meaningful information that he or she wants to remember. However, other cognitive functions may be normal, there is little loss of ability to work or function in typical daily activities, and there are no other clinical signs of dementia. MCI affects 15% to 20% of the aging population [74]. The presence of MCI may be the factor that influences the course of dementia toward Alzheimer disease. The signs of MCI go beyond those described as normal signs of aging. This level of impairment may last for a short time or for years.

In one study of older individuals without dementia, 16% had signs of MCI [78]. Of these, 69% had amnestic MCI and 31% had nonamnestic MCI. The prevalence of MCI increased with age and was greater in men, those who were never married, and those with an *ApoE3/4* or *ApoE4/4* genotype. Another study found that MCI was less prevalent among those with higher educational and income levels [79]. Further, there is some evidence that brain atrophy may be slowed in those with MCI with high doses of homocysteine-lowering B vitamins [80]. The fact that women are less likely than men to have MCI suggests that they may transition from normal cognition to dementia at a later age and more abruptly.

While progressive, the first step on the pathway to dementia is not always memory loss. Impairments of other cognitive skills, such as map reading, working jigsaw puzzles, and other visuospatial skills mediated in the right hemisphere of the brain, may be early signs of cognitive impairment [81]. Researchers have found that financial decision making and arithmetic functions decline one to three years earlier than memory functions [82]. Other signs were related to executive and attentional skill decline. Such research findings are important to the process of early detec-

tion of MCI, which can lead to earlier initiation of treatment and preventative measures for more advanced cognitive impairment. Early intervention among high-risk populations is an urgent area of research and experimental studies.

Dementia

Dementia is a progressive and profound disruption in brain function and intellectual capacity. The primary signs include problems with memory, language, spatial-temporal reasoning, judgment, emotionality, thought disorder, and personality. Dementia is a subtle progressive loss of cognitive functioning, with memory loss as its hallmark impairment, particularly loss of short-term memory. The ability to concentrate, make judgments, problem solve, and engage in abstract thought processes is also impaired. Personality and mood changes distinct from previous experiences are likely to develop, such as depression, apathy, elation, and anger. Impulse control becomes a major impairment with associated difficulties in social and physical relationships. Finally, grandiose and persecutory delusions are fairly common, especially in the more advanced stages of dementia [83]. It is possible for a young person to have dementia, but this is usually a result of a neurologic traumatic event or major illness with neurologic corollaries.

Dementia is a physical illness as well. It progressively shuts down the body as the brain is attacked. The first signs of dementia are generally related to reduced physical agility and strength, not just cognitive skills. Dementia can continue for years, but in the advanced stages, life expectancy is similar to that seen with advanced terminal cancer [84].

While 60% to 80% of cases of advancing dementia are categorized as the Alzheimer type, other disorders may fall within the broader classification of dementia [74]. These include but are not limited to [74; 85]:

- Vascular dementia: Rapid onset secondary to multi-infarct events
- Huntington disease with dementia: Progressive inherited breakdown of the central nervous system in early adulthood affecting movement, cognition, and emotions
- Human immunodeficiency virus (HIV) with dementia: Slow-onset dementia related to the progressive HIV infectious process affecting speed of motion, memory coordination, socialization, affect, and thought processes
- Parkinson disease with dementia: Dementia beginning about one year after the diagnosis of Parkinson disease has been affirmed
- Dementia with Lewy bodies: Characterized by visual hallucinations, an impairment of visuospatial/constructional functioning with a rapid onset and rapid decline, and often Parkinsonian motor dyscontrol and cognitive loss
- Frontotemporal degeneration: Generally related to a traumatic impact to the frontal lobe, as in a motor vehicle accident, fall, or a career in boxing or similar sports with a repetitive cranial impact
- Mixed dementia: Characterized by the hallmark abnormalities of more than one type of dementia—most commonly Alzheimer disease combined with vascular dementia
- Creutzfeldt-Jakob disease: Degenerative neurologic disorder associated with early development of dementia and the presence of prions, a type of infectious protein

There are also many reversible conditions that can mimic dementia [74]. For this reason, dementias should be fully assessed and diagnostically clarified [86]. Specific disorders known to cause pseudodementias include but are not limited to:

- Reactions to medications
- Metabolic disturbances
- Vision and hearing deficits
- Nutritional deficiencies
- Endocrine abnormalities
- Infections
- Subdural hematoma
- Brain tumors and hydrocephalus
- Atherosclerosis

Likewise, there are irreversible conditions known to play a significant and contributing role in dementia onset. These fall into three primary nosologic categories: systemic changes, neuropathologic changes, and underlying basic diseases. It is essential that a competent diagnostic evaluation is conducted to sort out these conditions and determine if dementia is diagnostically present or if dementia is a symptomatic trait of another medical or physical condition. The following sample of physical conditions may or may not present with dementia:

- Closed head trauma
- Brain tumors
- Hydrocephalus
- Developmental disability
- Infections
- Chronic depression
- Deficiency diseases (e.g., vitamin B12 deficiency)
- Exposure to toxins, drugs, and metals
- Metabolic disorders
- Vascular disorders (e.g., cerebrovascular accident and transient ischemic attacks)
- Degenerative diseases of the central nervous system
- Huntington disease
- Anoxia
- Acquired immunodeficiency syndrome (AIDS)
- Multiple sclerosis
- Drug-induced psychotic state
- Congestive heart failure
- Diseases of unknown origin
- Thyroid dysfunction
- Creutzfeldt-Jakob disease
- Korsakoff syndrome

An annual screening system is under development for the early detection of dementia [88]. It is proposed that this type of screening might be incorporated into an annual physical examination or incorporated into wellness screening programs. The results of a screening assessment would indicate if a referral for neuropsychologic assessment or further evaluation is needed. A baseline would need to be established at 65 or 70 years of age to ensure that a reasonably accurate profile could be established, and false positives minimized.

Alzheimer Disease

Alzheimer disease is an advanced type of dementia named for German physician Alois Alzheimer, who first identified the neuritic plaques and neurofibrillary tangles now recognized as the classic signs of Alzheimer disease. It is thought that these brain changes and conditions result from the destruction of neurons that produce acetylcholine in the cerebral cortex. With Alzheimer disease, the brain is believed to have a loss of nerve cells in certain areas and a corresponding reduction in the levels of neurotransmitters. Alzheimer disease is rapidly progressive, and its pattern and progression is individualistic [87].

As noted, the primary symptoms of dementia are mild-to-moderate impairments in memory, reasoning ability, and judgment, and the same symptoms are present in Alzheimer disease but to a greater degree. Alzheimer disease also often includes personality changes, bouts of agitation and combativeness, falling, wandering, and depression. The risk of self-harm from accidents and falls becomes progressively more likely. According to the Alzheimer's Association, the warning signs of Alzheimer disease are [67]:

- Life is disrupted by memory loss.
- Planning and problem solving are a challenge.
- Familiar tasks are more difficult to complete.
- Time and place are common issues of confusion.
- Visual images and spatial relationships are problematic.
- Speaking and writing become difficult.
- Items are easily misplaced, and steps are hard to retrace.

- Judgment is poorly misguided.
- Work and social events are generally avoided.
- Mood and personality show signs of change.
- Behavioral agitation and becoming out of control at times
- Linguistic fixity (i.e., repeating words or phrases for lengthy periods)

However, it is important to remember that the signs and progression of the disease vary greatly among patients. Eventually, all patients with Alzheimer disease will require constant care with activities of daily living. Wandering and sundowning are frequent problems. It is vital that lost patients are found within 24 hours, as after this period the odds are strong that they will develop a serious illness, be injured, or die, as patients with Alzheimer disease are essentially unable to ask for help.

Many people with dementia will not progress to Alzheimer disease. However, of all those with dementia, 60% to 80% develop the pattern of Alzheimer disease [74]. Alzheimer disease is more prevalent in women than men. Of the 6.2 million people 65 years of age and older with Alzheimer disease in the United States, 3.8 million are women and 2.4 million are men. Among people 65 years of age and older, 12% of women have Alzheimer disease and other dementias, compared with 9% of men [74]. The number of new cases of Alzheimer disease increases dramatically with age. In 2018, approximately 66,000 new cases of Alzheimer disease are expected to occur among individuals 65 to 74 years of age. This number increases to 173,000 among those 75 to 84 years of age, and to 245,000 among those 85 years of age and older, with the annual number of new cases projected to double by 2050 [74].

Among individuals 70 years of age, 61% of those with Alzheimer disease are expected to die before age 80, compared with 30% of those without the disease [74]. Alzheimer disease is also a condition with catastrophic impact and complex care needs. In 2020, more than 11 million Americans provided 15.3 billion hours of unpaid care to individuals with Alzheimer disease and other dementias [74]. In 2019, it was estimated that 1.62 million deaths were attributed to dementia, a number that is anticipated to increase exponentially in the future [42].

Total home care with hired caretakers or placement in a nursing home is necessary as Alzheimer disease progresses to higher levels of impairment. While family members may wish to be the sole caretakers, the level of care needed very often reaches a point that is beyond their level of ability, stamina, and time. If the family is unable to provide the needed care themselves, they may make arrangements for care provided in a loving and compassionate manner by a third party, such as a friend, a home health care provider, or a nursing home. The individual providing the day-to-day care is less important than the quality of care provided relative to the patient's needs and level of functioning.

As the progression of Alzheimer disease is rapid, it is important to consider if any family member has any "unfinished business" that should be constructively addressed early in the disease process. Devoting time to being a care provider is reasonable when there is a clear sign that long overdue forgiveness, past hurts, or neurotic attachments have been resolved. If there are issues that are unaddressed, this may result in further injury in addition to historical hurts and dysfunctional relationships. While the care level may look reasonable, it may really be subtly destructive. Neurotic attachments are all too common and create a host of care problems.

Dementia with Lewy Bodies

An estimated 1.4 million people in the United States have Lewy body dementia, a total of approximately 4% to 16% of all dementia cases [39]. Lewy body dementia is not readily diagnosed, as it presents with symptoms closely aligned to Alzheimer disease and/or Parkinson disease. If inaccurately diagnosed, a proper care plan will not be formulated and the patient and his or her family will be unable to prepare for the disease's progression.

Lewy bodies, named for F.H. Lewy, who first described the condition in 1914, result from a buildup of alpha-synuclein protein in neurons in the brain [34]. This is distinct from the beta-amyloid protein fragments (plaques) and twisted strands of tau proteins (tangles) found in Alzheimer disease [34]. Dementia with Lewy bodies is associated with dysfunction of the lower brain, brainstem, and subcortical, paralimbic, limbic, and cortical structures vital to movement and cognition. The severity of symptoms fluctuates over time, with improvements and regressions [87]. However, this dementia will eventually progress to catastrophic disability and death, as with Alzheimer disease.

The most common signs and symptoms of dementia with Lewy bodies are visual hallucinations, spontaneous parkinsonism, narcoleptic sensitivity, a tendency to act out vivid and frightening dreams, and fluctuations in cognition, alertness, clarity of thought, and attention [33].

Patients with dementia with Lewy bodies have more difficulty with visual perception and memory, processing speed, and attention/concentration [39]. Visual tasks are more likely to be distorted than in most patients with Alzheimer disease. Visual distortions tend to show up early in the dementia process, including distortions in writing, drawing, and misjudging distances. Brighter light may reduce visual hallucinations, as will removing reflective or patterned surfaces (e.g., mirrors, wallpaper with designs) and having the patient stare directly at the hallucination [33]. Hallucinations are often not acknowledged by the family; healthcare providers must ask about them directly, especially early in the dementia process.

To assess dementia with Lewy bodies, a standardized and validated screening tool, such as the ALBA Screening Instrument (ASI) or the Lewy Body Composite Risk Score , should be used. Neuroimaging may be useful to distinguish dementia with Lewy bodies from vascular dementia [14; 20].

Treatment to reduce symptoms may be indicated. Acetylcholinesterase inhibitors are the medications of choice, including donepezil, rivastigmine, and galantamine. This class of medication has been shown to improve attention, sleep, ambulation, motor coordination, and visual hallucinations for patients with dementia with Lewy bodies [39]. The medication regimen should be re-evaluated every six months and altered or maintained as the relative benefits indicate [32]. Due to neuroleptic sensitivity and reduced dopamine, typical neuroleptic or antipsychotic medications, such as haloperidol, ziprasidone, and olanzapine, should be avoided as much as possible for the treatment of psychotic symptoms. If such medication is used, patients will experience increased or worsened symptoms and become more rigid.

ELDER ABUSE

Abused and neglected elders, who may be mistreated by their spouses, partners, children, or other relatives, are among the most isolated of all victims of family violence. In a meta-analysis conducted in 2017, 11.6% of participants (community dwelling adults 60 years of age or older) were victims of emotional abuse in the past year, 2.6% physical abuse, 0.9% sexual abuse, 4.2% potential neglect, and 6.8% current financial abuse by a family member [24].. The estimated annual incidence of all elder abuse types is 2% to 10%, but it is believed to be severely under-measured. According to one study, only 1 in 25 cases of elder abuse are reported to the authorities [24; 25].

The prevalence rate of elder abuse in institutional settings is significantly greater, with a 2019 meta-analysis indicating that among residents, psychological abuse occurred in 33.4%, physical abuse in 14.1%, financial abuse in 13.8%, neglect in 11.6%, and sexual abuse in 1.9% [25].

It is important to understand that the needs of older patients will increase, as will the numbers of elder victims of violence. Because elder abuse can occur in family homes, nursing homes, board and care facilities, and even medical facilities, healthcare professionals should remain keenly aware of the potential for abuse. When abuse occurs between elder partners, it is primarily manifested in one of two ways, either as a long-standing pattern of marital violence or as abuse originating in old age. In the latter case, abuse may be precipitated by issues related to advanced age, including the stress that accompanies disability and changing family relationships [31].

One should recognize that the domestic violence dynamic involves not only a victim but a perpetrator as well. For example, an adult son or daughter who lives in the parents' home and depends on the parents for financial support may be in a position to inflict abuse. This abuse may not always manifest itself as violence but can lead to an environment in which the elder parent is controlled and isolated. The elder may be hesitant to seek help because the abuser's absence from the home may leave the elder without a caregiver [31]. Because these elderly victims are often isolated, dependent, infirm, or mentally impaired, it is easy for the abuse to remain undetected. Healthcare professionals in all settings should remain aware of the potential for abuse and keep a watchful eye on this particularly vulnerable group.

EVIDENCE-BASED PRACTICE RECOMMENDATION

The U.S. Preventive Services Task Force concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for abuse and neglect in all older or vulnerable adults.

(https://jamanetwork.com/journals/jama/fullarticle/2708121. Last accessed January 11, 2019.)

Strength of Recommendation: I (Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.)

END-OF-LIFE CONSIDERATIONS

As a result of ongoing advances in medicine, the trajectory of illness for many diseases has shifted, yielding an increasing number of patients needing palliative care throughout the continuum of care and, especially, at the end of life. High-quality palliative care focuses on the physical, psychosocial, and spiritual well-being of the patient as well as the family. Palliative care at the end of life is delivered most effectively through hospice.

Because palliative care focuses on the physical and psychosocial needs of the patient and his or her family, the patient's and family's perspectives are vital considerations in developing high-quality palliative care programs. An early survey of patients with life-limiting diseases identified five priorities for palliative care: receiving adequate treatment for pain and other symptoms, avoiding inappropriate prolongation of life, obtaining a sense of control, relieving burden, and strengthening relationships with loved ones [29]. In another study, a spectrum of individuals involved with end-of-life care (physicians, nurses, social workers, chaplains, hospice volunteers, patients, and recently bereaved family members) echoed these findings, with the following factors being noted as integral to a "good death:" pain and symptom management, clear decision making, preparation for death, completion, contributing to others, and affirmation of the whole person [28].

The priorities set by patients and healthcare professionals were considered carefully in the structuring of clinical practice guidelines for high-quality palliative care developed by the National Consensus Project for Quality Palliative Care. These guidelines are organized according to eight domains [26]:

- Structure and process of care
- Physical aspects
- Psychologic and psychiatric aspects
- Social aspects
- Spiritual, religious, and existential aspects

- Cultural aspects
- Care of the patient nearing the end of life
- Ethical and legal aspects

In the last days, the goals of the healthcare team are to ensure a peaceful death for the patient and to support the family during the dying process and throughout grief and mourning. The focus for the patient is management of symptoms and emotional and spiritual ease, and the focus for the family is education to prepare them for the dying process.

Implicit Bias in Health Care

The role of implicit biases on healthcare outcomes has become a concern, as there is some evidence that implicit biases contribute to health disparities, professionals' attitudes toward and interactions with patients, quality of care, diagnoses, and treatment decisions. This may produce differences in help-seeking, diagnoses, and ultimately treatments and interventions. Implicit biases may also unwittingly produce professional behaviors, attitudes, and interactions that reduce patients' trust and comfort with their provider, leading to earlier termination of visits and/or reduced adherence and follow-up. Disadvantaged groups are marginalized in the healthcare system and vulnerable on multiple levels; health professionals' implicit biases can further exacerbate these existing disadvantages.

Interventions or strategies designed to reduce implicit bias may be categorized as change-based or control-based. Change-based interventions focus on reducing or changing cognitive associations underlying implicit biases. These interventions might include challenging stereotypes. Conversely, control-based interventions involve reducing the effects of the implicit bias on the individual's behaviors. These strategies include increasing awareness of biased thoughts and responses. The two types of interventions are not mutually exclusive and may be used synergistically.

FACULTY BIOGRAPHIES

Alice Yick Flanagan, PhD, MSW, received her Master's in Social Work from Columbia University, School of Social Work. She has clinical experience in mental health in correctional settings, psychiatric hospitals, and community health centers. In 1997, she received her PhD from UCLA, School of Public Policy and Social Research. Dr. Yick Flanagan completed a year-long post-doctoral fellowship at Hunter College, School of Social Work in 1999. In that year she taught the course Research Methods and Violence Against Women to Masters degree students, as well as conducting qualitative research studies on death and dying in Chinese American families.

Previously acting as a faculty member at Capella University and Northcentral University, Dr. Yick Flanagan is currently a contributing faculty member at Walden University, School of Social Work, and a dissertation chair at Grand Canyon University, College of Doctoral Studies, working with Industrial Organizational Psychology doctoral students. She also serves as a consultant/subject matter expert for the New York City Board of Education and publishing companies for online curriculum development, developing practice MCAT questions in the area of psychology and sociology. Her research focus is on the area of culture and mental health in ethnic minority communities.

Allan G. Hedberg, PhD, received his Master's in psychology from Northern Illinois University and his PhD in clinical psychology from Queen's University in Ontario, Canada. He has practiced clinical psychology in mental health centers, hospitals, and rehabilitation units as well as in private practice since 1969. More recently, he has maintained an active consultation service to patients and staff of nursing homes and assisted living facilities in the Central Valley of California. Over this time, Dr. Hedberg has consulted with staff, trained staff, and assisted in the establishment of appropriate programs for elderly patients with special needs, such as Alzheimer's disease.

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