

## Chapter 2

# Depression and Anxiety Across the Age Spectrum

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### Introduction to Anxiety and Mood Disorders and Their Symptoms

Careful consideration of mental illness in differential diagnoses and its inclusion in problem lists and treatment plans improve the effectiveness of care and patient outcomes, especially in the geriatric population. Mental health issues are frequently overlooked in this group because of the overlap of medical symptoms. The unfortunate result is a failure to optimize the treatment of both medical disease and mental illness. The persistent cultural and social belief that mood and anxiety symptoms are part of the normal aging process impedes diagnosis and management of these important and treatable problems. This chapter provides an overview of anxiety and mood disorders and symptoms, with particular attention to changes with aging. The discussion concludes with a review of treatment options and issues related to mental health care in the elderly population.

### *Symptomatology and Key Disorders*

Anxiety and mood disorders are both associated with a wide range of symptoms, some of which may present differently in older as opposed to younger adults.

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Medical professionals in all fields should be familiar with these symptoms and their variable presentations according to age to detect mental health problems early and begin appropriate intervention or treatment.

## **Anxiety**

Anxiety is a psychological and physiologic response to stress manifested in a feeling of dread or worry and associated with increased arousal. It is a biologically adaptive symptom but can graduate to a pathologic disorder if it becomes overwhelming or limits a person's functioning. Anxiety is distinct from fear in that it is a general feeling of ongoing distress as opposed to an acute emotional response to a perceived threat; but both anxiety and fear can manifest in physiologic symptoms, such as increased heart rate, palpitations, sweating, and other symptoms of autonomic arousal. Many medical conditions can cause symptoms of anxiety, and thus, it is necessary to rule them out prior to treatment of any anxiety disorder. Possibly because the typical age of onset of anxiety disorders is quite early (11 years) [1], these disorders in the aging population tend not to be readily recognized and treated. Additionally, anxiety is commonly comorbid with depressive symptoms, with attention predominantly focused on depression, compounding the issue. It is very important for symptoms to be detected and treated as anxiety, as it was recently suggested that even mildly elevated symptoms of worry are associated with future cognitive impairment [2]. However, considerable variation exists in prevalence estimates of most anxiety disorders. More research is needed to further investigate anxiety disorders in the aging population [3].

Key anxiety disorders in older adults include the following:

- Generalized anxiety disorder (GAD) is characterized by chronic excessive worry or anxiety. These feelings must occur most days for six months or more and cause significant impairment. GAD is frequently associated with comorbid psychiatric illness and in the elderly often progresses to depression or to a mixed disorder of both anxiety and depression [4]. Anxiety in older patients tends to follow traumatic events or threats, whereas depression more often follows loss events [5].
- Specific phobias feature an irrational, overwhelming fear of a certain object or situation and cause marked impairment. The patient recognizes that the fear is irrational and commonly avoids phobic stimuli. Exposure to the phobic stimulus can trigger panic attacks. Social phobia is another common phobia, also known as social anxiety disorder, which is specifically associated with an intense fear of social situations.
- Posttraumatic stress disorder (PTSD) is characterized by intense fear, helplessness, and horror after a traumatic event. The patient must have directly experienced or witnessed an event that involved threatened or actual death, injury, or threat to physical integrity. Patients have a persistent avoidance of stimuli associated with the traumatic event, as well as a re-experiencing of the

event that is associated with psychological distress; physiological reactivity to stimulus cues to the event and/or distressing recollections, dreams, and flashbacks. Patients may also have a numbing of general responsiveness or symptoms of hyperarousal. These symptoms must persist for longer than one month.

## Mood

Depression is both a symptom and a disorder, marked by feelings of sadness, guilt, hopelessness, and apathy. It is quite common, as evidenced by its high lifetime prevalence (16.6% according to Kessler et al. [1]). The stereotypical impression of the elderly is that they may be more prone to depression because of loneliness or difficult life changes, but depression is not a normal part of aging and is often a treatable disorder [6]. Studies show that older people are satisfied with their lives and less likely to experience depression than younger adults [7]. However, depression is still a serious problem in the elderly, with consequences both for the individual and for society [8]. It is an important public health issue that leads to increased morbidity and disability [9]. Depression can also be more difficult to diagnose in the older population because some of its symptoms can be mistaken for normal physiologic changes of aging or side effects of medicines more commonly taken in later life.

Key depressive disorders in older adults include the following:

- Major depressive disorder requires the presence of at least one major depressive episode, which is defined by five or more specified depressive symptoms that occur in a single two-week period, one of which must be depressed mood or anhedonia. The symptoms are present a minimum of most of the day on most days and result in clinically significant impairment of the patient's social or work life. Depressive symptoms include depressed mood, anhedonia, loss of interest, change in sleep patterns and/or appetite, guilt, psychomotor retardation, inability to concentrate, decreased energy, and thoughts of suicide. In older adults, depression can present in an atypical fashion. They often complain of more somatic symptoms; and apathy, irritability, and social withdrawal are more common complaints than depressed mood [7]. In fact, elderly patients often deny being depressed. A key feature of major depression in aging is an unrelenting, ruminative focus on a self-perceived cognitive impairment with or without supporting evidence. Major depressive episodes can present with psychosis, in older adults often associated with delirium and/or dementia but also possibly related to sensory impairments (visual or auditory). Patients with both dementia and a mood disorder may present with irritability or elevated mood. As in any patient with major depressive disorder, it is important to rule out somatic causes of the mood disorder. It should also be noted that the highest rate of suicide in the USA is in individuals in the age range of 65 and above.
- Bipolar disorder is a different type of depression that can feature manic, mixed, hypomanic, and depressive episodes, depending on the subtype. A manic

episode is defined by an abnormally elevated, expansive, or irritable mood that lasts continually for at least one week. Symptoms include but are not limited to excessive or pressured speech, a decreased need for sleep, grandiosity, increased activity, racing thoughts, flight of ideas, distractibility, and impulsivity. Ten percent of patients with bipolar disorder develop first-onset mania after age 50. In older adults, this is often because of medical or neurologic disease or the use of steroid medications.

- Dysthymic disorder is another type of mood disorder, characterized by chronic depressive symptoms that are less severe than those of major depression but that last longer.

## **Adjustment**

Adjustment disorders with anxiety or depressive symptoms, commonly diagnosed by specialists following psychosocial stressors, do not meet the criteria for a major depressive episode. There is still much to be learned about the significance of these syndromes, as well as effective treatment [10]. It seems logical that adjustment disorders would be more common in later life because the risk of stressful events and loss of life become greater; however, it appears that many older persons' expectations of major stressors and loss change, leading to a lower prevalence of adjustment disorders with aging. In addition, coping mechanisms develop over the course of a lifetime that can lower the risk of adjustment disorders. Bereavement is a diagnosis that features depressive symptoms. It is considered normal grieving when it occurs within two months of the death of a loved one.

## **Prevalence**

Struggling with a psychiatric disorder at some point over the course of one's lifetime is quite common. Anxiety and mood disorders, in particular, have a high rate overall that decreases with aging. Symptoms of anxiety and depression often occur together and in older adults are commonly subthreshold (do not qualify for a full diagnosis).

## **Lifetime Prevalence and Age of Onset of Psychiatric Diagnoses**

The lifetime prevalence of any *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* [11] diagnosis across all ages is 46.4% [1]. In particular, the lifetime prevalence of anxiety and mood disorders is 28.8 and 20.8%, respectively [1]. The age of onset of anxiety disorders is much earlier (age 11 years) than that of mood disorders (age 30 years), and mood disorders have a wider range

of age at onset than other classes of psychiatric disorders [1]. There has long been an association between symptoms of anxiety and depression [12], but it is still uncertain whether these are distinct entities that may co-occur or whether they are points along the same continuum. Mixed anxiety-depressive disorder (MADD) is a provisional diagnosis in the *DSM-IV* and International Statistical Classification of Diseases and Related Health Problems, Tenth Revision that describes co-occurring, subsyndromal anxiety, and depressive symptoms. A study done in Great Britain showed that, in patients with MADD, 47.9% had both specific depression and anxiety symptoms; and 98.9% had nonspecific somatic symptoms, fatigue, concentration problems, sleep problems, irritability, or worry [13]. Some critics of the provisional diagnosis point out that, although MADD is associated with impaired functioning, the disorder as described has low diagnostic stability over time; and its incidence may be dependent on the defining criteria [14]. However, studies have concluded that patients with the provisional diagnosis of MADD have more severe and chronic pathology than patients with depression or anxiety only, resulting in greater vulnerability [4, 15].

### **Prevalence of Mood and Anxiety Disorders in Older Adults**

National. Although the prevalence of mood and anxiety disorders declines with increasing age, they are still common and require preventive considerations, as well as intervention [7]. Special considerations in the elderly include the prevalence of chronic illness and the effect that medical comorbidities have on psychiatric complaints and vice versa. According to data from the National Comorbidity Survey Replication, the 12-month prevalence rates of any mood disorder and any anxiety disorder in adults ages 55 and older were 4.9 and 11.6%, respectively. Comorbid mood and anxiety disorders have a prevalence of 2.8% in older adults. In general, rates of both mood and anxiety disorders decrease steadily with age, except in the oldest old (age 85 or older); but this age group is the least available for study [7], and selective nonresponse of the most frail is an issue in community-based studies [8]. The most common anxiety disorder in older adults is specific phobia, followed by social phobia, PTSD, GAD, panic disorder, and agoraphobia. Being married or cohabiting is protective against mood and anxiety disorders, and low education level is a risk factor for anxiety in aging. There is a significantly higher risk of anxiety in women [7, 16]. There are no significant changes in prevalence of disorders according to race or geographic location [7]. Some considerations should be kept in mind when reflecting on these data, including possible underreporting of psychiatric illness in the aging population. Potential causes of this include embarrassment associated with the stigma of mental health problems, difficulty recalling symptoms or associating those symptoms with psychological distress, and the underrepresentation of the homeless, institutionalized, and non-English-speaking older-adult populations [7].

Worldwide. Results of a study investigating the prevalence of anxiety among older adults in low- and middle-income countries were comparable to the rates in

high-income countries, with the exception of China, which had a remarkably low prevalence of anxiety. This finding may be because of a cultural stigma associated with mental illness. The highest prevalence of anxiety among older adults was found in Latin America. This study confirmed that the risk factors for anxiety in older adults in the USA parallel those in the other countries surveyed. The most important factors were gender, socioeconomic status, and comorbid physical illnesses. Significant levels of comorbid depression and anxiety were reported, with more than one fifth of the anxiety disorders featuring comorbid depression in all countries surveyed [17].

### **Prevalence of Depressive and Anxious Symptoms in Older Adults**

Although the prevalence of diagnosable mood and anxiety disorders decreases in later life, the elderly population still often experiences subclinical symptoms of anxiety and depression [5]. According to the US Center for Disease Control's (CDC) report, *The State of Mental Health and Aging in America*, 9.2% of US adults age 50 or older and 6.5% of US adults age 65 or older reported "frequent mental distress," defined as 14 or more days of poor mental health over the past 30-day period. Current depression was reported by 7.7% of adults age 50 or older, with 15.7% reporting a lifetime diagnosis of depression [18].

### ***Pathophysiology***

Although anxiety and depressive symptoms may either co-occur or may be distinct, their biological causes are closely linked. Evidence shows that abnormalities of both the serotonin and norepinephrine neurotransmitter systems are present in anxiety and depression [19].

### ***Special Considerations for Older Adults***

There are some important concepts to keep in mind when working with geriatric patients. In the geriatric population, attention should focus on level of functioning and quality of life as well as safety. The physician should take a comprehensive medical history and review all medications to rule out any alternative treatments for psychiatric complaints. Care should also be taken to evaluate cognitive functioning and frontal-lobe impairment. With regard to psychiatric complaints, the patient is often not the complainant, so it is important to find collateral sources of information, such as family members or caregivers. Because of a decreased functional

reserve, when illness strikes the older adult, he or she may be less equipped than the younger adult to bounce back and be more vulnerable to quick deterioration, loss of functioning and difficulty with activities of daily living. Care must be taken to recognize the bidirectional association between medical illness and psychiatric complaints that negatively affects treatment of both and results in a poor prognosis.

With the increasing number of medical problems and chronic disease in the elderly, some physicians expect symptoms of anxiety and/or depression as a natural consequence. The effect of medical comorbidities and chronic pain on anxiety and depression is significant, and the reverse is true as well. Anxiety and depressive symptoms can adversely affect the course and complicate the treatment of chronic medical diseases [6]. For example, in some chronic respiratory diseases, particularly chronic obstructive pulmonary disorder, the presence of anxiety and depression can compound the physical and emotional effects of breathing disorders [20]. This leads to the question, what level of anxiety and depressive symptoms is normal in adults; and how is the treatment of one intertwined in the other? Refer to Chaps. 10, 11, and 17 for further discussion.

### ***Biopsychosocial Model***

The World Health Organization defines *health* as “... a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” [21]. This definition sparked extensive discussion and theories on how to approach health care with a comprehensive, multifactorial viewpoint. Here we will explore the biopsychosocial model and the transformation of thought to a subsequent conceptual model that refocused attention on chronic illness and its association with psychiatric problems.

### **History of the Model**

The theory behind the biopsychosocial model, a concept described by Dr. George Engel in a 1977 article in *Science* [22], was not new at that time by any means. Physicians have a long history of incorporating patients’ background and attitudes toward disease in their diagnosis and clinical decision making. In fact, this type of holistic approach to healing dates all the way back to Hippocrates. At its heart, the biopsychosocial model implies that a person’s biologic tissue changes his/her personal history, and his/her social circumstances all contribute to illness. The notion of “treating sick people and not diseases” [23] was emphasized again and again over time. It is notable that, in Engel’s description of the model, he added the role of the healthcare system as a social factor. At the time of the published description of the model, the so-called biomedical model of disease was falling out of favor, as people suspected the powers of pharmacologic tools focused

solely on altering molecules had a limited ability to cure disease. In fact, people may have been losing faith in the healthcare system itself. Emphasis in Engel's article was placed on the interpretation of the terms *sick* and *well*, and the idea that more factors than just biology played a role in wellness, especially in the way patients viewed their own disease. However, Engel did not diminish the importance of the biomedical in his description. His training background as an internist and the passion for psychoanalysis he later developed seem to have heavily influenced his desire to link somatic illness with life situation and personal development [24].

## **Modernization and Application to Psychiatric Symptoms and Disorders**

In 2003, an article was published that presented a new conceptual model by Wayne Katon. Despite having many similarities to the biopsychosocial model, this model was updated to become more biologically focused in presenting the reciprocal cause-and-effect pattern of chronic diseases on depressive and anxiety disorders and vice versa. It was based on a number of studies showing a link between chronic disease and mental disorders. Patients with any chronic medical condition are more likely than those without to experience depression [25], and the most common reason for new onset of major depression is the diagnosis of either the patient or his or her spouse with a life-threatening illness [26]. Because of the association between mental disorders and poor physical health, psychiatric assessment becomes all the more important in the elderly population [7]. Katon investigated the link between depressive and anxiety symptoms and disorders in patients with various neurologic diseases, diabetes, heart disease, and HIV and realized that depression plays a significant role in the development of some diseases. Depression can also develop as a result of the psychological reaction to disease. There is a causative role between depression and complications related to disease. Finally, depression is known to be a side effect of many medications and treatments. Katon also pointed out that chronic medical illness has a pathophysiologic effect on brain chemistry and function [27].

The cornerstone of Katon's conceptual model is that depression and anxiety affect behavioral risks for chronic disease, which, in turn, lead to chronic disease. Both the disease itself and the depression and anxiety lead to worsening self-care, thereby leading to myriad consequences of chronic illness, like worsened quality of life, functional impairment, and biologic changes and symptoms. The model also highlights the effect on chronic disease of biopsychosocial factors, such as genetic vulnerability, childhood adversity, adverse life events, and maladaptive attachment.

All these factors must be considered in the diagnosis and treatment of comorbid medical disease and mental illness. There is no population to which this model is more applicable than older adults, with their continually increasing rates of comorbid chronic disease. The following discussion of successful aging precedes a further investigation into changes in the above conceptual model with aging.



## **Aging**

This section discusses the concept of successful aging and provides a brief overview of the global impacts of an aging population. Depression and anxiety are discussed in the context of the biopsychosocial model and the evolution of risk factors for the older population.

### ***Successful Aging***

There has long been controversy in the USA surrounding the traditionally negative view of aging and the elderly. Since Robert Butler [28] first coined the term *ageism* in his award-winning book, *Why Survive? Being Old in America*, in 1969, stereotypes of the elderly have run rampant; and scholars and laypeople alike have asked how we can age successfully. In 1998 Doctors Rowe and Kahn published an article called “Successful Aging” addressing these issues. Attention and research are becoming more focused on identifying the factors involved in successful aging and on decreasing related morbidity and mortality [29]. The multidimensional approach involves three main categories: avoidance of disability and disease, maintenance of daily cognitive and physical functioning, and continued social and productive involvement [30].

In the past, the idea that the elderly population represented a burden on society created a stigma associated with aging. Emphasis is now being placed on the positive aspects of aging. A study of a two-factor model of success in aging looked at objective factors (measured by lack of disease, lack of pain, and functional ability) and subjective factors and showed that the two are not independent [31]. According to this model, people can feel they are aging successfully, despite objective factors such as chronic disease and decreased functioning [29]. Frailty as perceived by outsiders is generally not in line with the self-perception of the elderly. As discussed above, the prevalence of depression and anxiety in the aging population is lower than it is in younger adults. Of course, the consideration of other aspects of aging, such as health and disease, and nursing and welfare issues and their effects on industry and the economy, is integral to a balanced assessment [32].

### ***Global Aging Population***

Globally, life expectancies are increasing as a result of improved nutrition, sanitation, medical advances, health care, and economic well-being. The ratio of people in the work force to those who are retired has already and will continue to decrease dramatically [33]. This could lead to drastic economic and social downturns if we do not make changes to allow successful aging. An important impact of the aging

population is an increasing patient load with multiple chronic diseases and, therefore, an increasing number of patients with symptoms of depression and anxiety secondary to their disease processes. Other major risk factors are discussed below.

### ***Depression/Anxiety in Aging: Changes to the Model***

Changes to the model have occurred because many of the risk factors for anxiety and depression, as well as the expectations regarding life events change with age.

#### **Risk Factors**

The risk profiles for depression and anxiety change in older adults, as exposure to these risk factors and their corresponding impacts change with age. Many of these risk factors simultaneously represent major barriers to successful aging, as described above. Studies show a considerable amount of overlap between the risk factors that influence anxiety and depression [8].

#### **Biologic**

Biologic factors include the following:

- Deteriorating physical health and chronic medical illness

A recurring theme in this text, the link between deteriorating physical health and depression and anxiety, cannot be overemphasized in the aging population [25, 26, 34]. Chronic illness, especially multiple comorbid illnesses, can result in both anxiety and a feeling of hopelessness. Respiratory disease, in particular, is further discussed throughout this text.

- Cognitive decline

Older adults with dementia or other mild cognitive impairment experience neuropsychiatric symptoms significantly more often than those without cognitive impairment [35]. These symptoms may include agitation, apathy, depression, delusions, and hallucinations. The negative association between cognitive performance and depressive symptoms was even true in the subclinical range of symptoms [36]. Additionally, evidence shows that cognitively impaired older adults have a greater prevalence of anxiety symptoms than those without cognitive deficits [37]. Cognitive impairment can also have detrimental effects on successful treatment. For example, pharmacotherapy adherence requires that medication be taken on a regular basis, at the correct dose, in an appropriate manner, which requires intact executive functioning and memory [38]. There are

many types of aids available that can help mitigate this aspect of the risk. Both cognitive impairment and symptoms of anxiety and depression are associated with a variety of problems, including caregiver distress and greater supervision time; functional limitations; and, in some cases, earlier institutionalization [35].

- Personal and family history of anxiety and depression

A personal and/or family history of mental illness is traditionally a major risk factor considered in examination and diagnosis of younger adults. However, these factors become less important in the risk profiles in older adults, particularly those whose depression or anxiety first appears late in life. This may be because of the most vulnerable elderly selectively leaving the population pool [5, 39].

## Psychological

Psychological factors include coping with loss of functioning, changes in role function, and end-of-life considerations.

- Coping with loss of functioning

Along with the biologic changes in aging, such as chronic medical conditions and impaired cognition, come changes in ability to function on a day-to-day basis. As patients grow older, they themselves and/or their partners or companions may not be able to do some of the things they used to enjoy. The psychological aspect of this is in how persons cope with this loss of functioning and, sometimes, the loss of autonomy. The risk for depression and anxiety lies in an inability to accept these changes, which can become an inward focus of negativity and disappointment.

- Changes in role function

A common problem that older adults experience is difficulty adapting to a change in their social role. For example, some find that, after a lifetime of work, it can be difficult to transition to retirement. Some people do not know what to do with their extra time; and, more often, the conversion from “breadwinner” can be difficult. Additionally, many people attribute a major part of their identities to their work. Without it, they may leave behind a large portion of their social circle and can feel isolated and lost.

- End-of-life considerations

Older people have variable courses of decline that are different than those of younger adults with terminal diseases, for example. Feelings of fear and anxiety about death are less common in older adults, although they still occur. Many older people do not want to endure pain or prolongation of their declines.

## Social

Social factors include a diminishing social network/loneliness and financial concerns.

- Diminishing social network/loneliness

As people age, the loss of social connections is typical. The social network associated with one's job is diminished or lost with retirement. As physical health problems grow, the ability to keep up with friends or family members may fade as a result of the inability to drive or physically move around well. Confinement to a wheelchair or dependence on a caregiver can severely limit social interactions outside the home. The loss of peers occurs frequently with aging, adding to loneliness in some. This social loss can cause some older adults to realize the brevity of their remaining lives and may lead to depressive or anxiety symptoms [40].

- Financial

There are three major categories of financial concern for the aging population. The first concerns fixed incomes: often, older adults have to adjust to a more limited income than before, one solely from retirement, social security, or pension plans. Physical or psychosocial problems may prevent older adults from working; and sometimes this limited income can become a major burden, especially if they have not encountered it before. Secondly, healthcare costs skyrocket with aging. Costs for other necessities do not necessarily decrease, and the increasing cost of health care with aging may take some people by surprise. Finally, financial abuse of the elderly is a common problem; and, often, they may not have the financial resources to recover from it. Isolation, loss, and loneliness can impact judgment and leave the elderly vulnerable to this abuse.

Further study of these biologic, psychological, and social risk factors, some of which are inevitable as one ages, is crucial to promote understanding and management of the issues that impede successful aging.

## Change in Expectations with Age

Some risk factors change with age as people's expectations of life events change. This may shed some light on the evidence that emotional well-being improves from early to late adulthood [41]. The understanding that major life events occur on a loosely predetermined timeline can result in changes in ease of adaptation to these events for better or worse. For example, the death of a spouse, for a younger adult, is often unexpected, leading to greater risk of psychiatric manifestations than for an older adult. In later life, the death of a spouse in some cases may be expected, which

can alleviate the impact [5, 8]. In addition, aging is associated with a growing preference for positive over negative information [41].

## **Treatment**

This section provides a brief overview of the types of treatment available for mood and anxiety disorders, along with some principles to follow in treating an aging population. For more detail on nonpharmacological and pharmacological treatments of depression and anxiety in chronic respiratory disorders, refer to Chaps. 10 and 11, respectively. Chapter 12 provides a care-based approach to management of psychiatric disorders in chronic respiratory disease.

### ***Types***

Types of treatment include pharmacotherapy, electroconvulsive therapy (ECT), psychotherapy and cognitive behavioral therapy (CBT), and education.

### **Pharmacotherapy**

Older adults are not well represented in clinical pharmaceutical trials. They are often excluded for their age, comorbidities, or both [42]. This leaves physicians to extrapolate from trials with younger adults, resulting in uncertain outcomes [43]. Additional problems related to pharmaceutical treatment of anxiety and depressive symptoms in geriatric patients are their increased sensitivity to side effects, such as sedation, orthostasis, extrapyramidal symptoms, increased fall risk, disinhibition, paradoxical agitation, and the syndrome of inappropriate antidiuretic hormone secretion [44]. Comorbid disease and behaviors can also alter effectiveness of drugs. Nonetheless, many pharmacologic treatments have been shown to positively affect outcomes [45].

- Antidepressants may be used to treat both depression and anxiety. No one antidepressant has been shown to be more effective than another. Medication selection includes consideration of side effects, drug–drug interactions, and cost, among other factors. In the geriatric population, special attention must be paid to drug–drug interactions, as well as the presence of poor sleep, weight loss, and comorbid anxiety with depression. Psychostimulants may be used in depressed older adults if an urgent response is needed.
- Benzodiazepines are an effective treatment for anxiety and are commonly prescribed; however, benzodiazepine use in older adults is associated with serious adverse effects, including increased risk of falls and accidents, heightened risk of

cognitive impairment, and development of tolerance and addiction [3, 43]. Additionally, benzodiazepines are more appropriate for treatment of acute anxiety; while, in the elderly, anxiety symptoms are more often chronic and may be milder, making this choice of treatment inappropriate in many cases.

- ECT is effective in older adults for psychotic depression, refractory depression, and mania. Extreme care should be taken to rule out medical causes of psychiatric symptoms before treating with ECT.
- Behavioral therapy and psychotherapy are important augmentations to pharmacologic treatment. CBT is especially effective in treating anxiety disorders. It should be noted that older adults with cognitive or sensory impairments are less likely to benefit from psychotherapeutic interventions [43].
- Education is a key part of treatment of depression and anxiety in older adults, not only of the patients themselves but also because of their caregivers and the public. This can be used to decrease stigma and other modifiable barriers to mental health issues [38]. Electronic tools are an up-and-coming means of detecting problems and providing education.

## *Principles of Treatment in Aging Literature*

Principles that should be taken into consideration in treating anxiety/depression in older adults include the following:

- “Start low; go slow.” A change in drug clearance can increase sensitivity to pharmaceuticals in the elderly, so it is important to begin with a lower than recommended dose and titrate up slowly until the desired effects are seen. All drugs should be monitored for toxicity.
- Quality of life. Traditionally, physicians have focused on the diagnosis and treatment of disease. This is no doubt of utmost importance, but the focus should change with altered circumstances. In the aging population, especially the oldest old, the highest emphasis should no longer be placed on disease itself but rather on improved quality of life and avoidance of suffering. This is an important principle that separates geriatric medicine from general medicine and holds true in psychiatric treatment as well. Interventions should be tailored to the individual and should center on optimizing quality of life and maximizing functioning [38].
- Shortfalls of treatment. The rate of nonadherence to treatment in the older population is quite high [46]. It follows that a need for more intensive follow-up is required for these patients than for younger patients. However, even with appropriate evidence-based treatment, the negative consequences of anxiety and depression in older adults may not always be avoided. One study showed that only 50% of the burden of anxiety disorders and 35% of the years lived with a mood disorder could be averted [5, 47]. This supports the importance of screening in older adults, especially those at high risk, and early diagnosis of depression and anxiety.

## **Treatment Preferences in Elderly Versus Younger Patients**

Older patients may themselves be the greatest hindrance to treatment of mental health problems. Many older adults have a deep-seated belief in self-reliance. Compared with younger adults, they are less likely to admit mental health problems in either the past or present and are less likely to desire help with any current emotional problems [48]. Adults age 65 and older have the lowest self-perceived need for mental health services of any age group [49]. Although they are as open to physical fitness programs as younger adults, the older population is less amenable than younger adults to the idea of attending counseling or stress-management programs [48]. Often older and younger adults have similar outcomes of treatment for psychiatric problems, but the efficacy of different types of interventions and the tolerability of medication side effects may be different in these populations [43].

Ethnicity may also play a role in resistance to treatment in older adults. Both cultural and racial backgrounds affect attitudes toward mental illness, its cause, and its treatment [50]. Minority elders are less willing than nonminority patients to participate in psychotherapy [51].

Finally, there is a far more pervasive set of preconceptions about pharmacotherapy for mental illness in the old versus young age groups. Some older adults suspect a lack of efficacy or fear adverse effects or addiction [52]. Younger adults have more familiarity with pharmacotherapy, resulting in higher acceptance and adherence to treatment.

## **Access to and Use of Mental Health Care in the Elderly Population**

Two factors affect the delivery of mental health care to older patients: the fact that primary care is the main arena in which older patients receive both medical and mental health care and the existence of stigma associated with treatment for issues of mental health.

### ***Primary Care Versus Mental Health Care***

Both anxiety and depression, whether warranting diagnosis or subthreshold, are underrecognized and undertreated in primary care [5, 53, 54]. One explanation for this is the common somatization of symptoms in older adults [5, 53]. Depressed patients, independent of age, are more likely to look to primary care physicians for somatic symptoms than they are to self-identify mental problems and present to mental health professionals [55]. Thus, in the elderly population, patients are far more likely to be treated for symptoms of anxiety and depression in primary care

than in a mental health setting. Failure to recognize psychiatric symptoms in primary care leads to a lack of appropriate treatment and poor outcomes [53].

Intuitively, one would expect the severity of psychiatric symptoms to have a direct relationship to the frequency of detection of mental illness. The more severe the symptoms, the more likely they will be recognized in a primary care setting [55]. On the other hand, because older adults more often exhibit less severe sub-threshold anxiety and depressive symptoms, there is a tendency to overlook these problems. This is worrisome because late detection of anxiety and depression is associated with poor prognoses.

One factor that seems to raise detection of mental health issues is comorbid medical illness [55]. The higher frequency of doctors' visits may allow a better rate of detection.

There also exists a particular problem with detection of mental health problems among minority populations. Primary care providers are less apt to recognize psychiatric symptoms in African-American and Hispanic patients; in addition, these minorities are much less likely to seek mental health care on their own than non-minority populations [50].

Compared with mood disorders, anxiety disorders result in far fewer referrals to mental healthcare professionals [5]. In the context of the earlier age of onset of most anxiety disorders, one must consider the possibility that both patients and physicians attribute anxiety and avoidance symptoms to personality traits rather than a psychiatric disorder [3]. Additionally, there is a general lack of expertise in geriatric care, leading to the failure to incorporate evidence-based practice into treatment of mental illness in the elderly [43].

## *Stigma of Mental Health Care*

The stigma associated with mental illness remains a major barrier to treatment in older adults [9]. The stigma comes from both external sources (the perceived negative beliefs, attitudes and conceptions about mental illness of the public), as well as internalized negative attitudes about one's own mental problems. Internalized stigma leads to devaluation, shame, and social withdrawal [56]. This stigma, regardless of its origin, leads to a sharp decrease in treatment-seeking behavior [9]. Older adults with psychiatric problems endorse feelings of both public and internalized stigma that lead to a strong reluctance to seek psychiatric care [9]. As earlier discussed, this stigma plays a major role in creating attitudes that contribute to a decreased utilization of dedicated mental health care. In turn, many older adults with psychiatric distress are treated by their primary care practitioners, or not at all. This psychosocial issue is a problem across the spectrum of mental health treatment [9]. However, it stands to reason that, as younger generations become the older population, the stigma associated with psychiatric problems will lessen. Perhaps morbidity and impairment resulting from mental illness will lessen as well, thus relieving the negative effect it has on chronic disease in the elderly.



## Underreporting of Disease

A direct effect of the stigma of mental illness perceived by the older population is underreporting of both psychiatric symptoms and disorders. Many older people are too embarrassed to admit to these problems, both in their primary care physicians' offices as well as in surveys. This results in a lack of diagnosis and an associated failure to treat, as well as underreporting and underfunding of mental health issues [7].

## Caregivers' Attitudes

The attitudes of caregivers of the elderly regarding mental health are important to consider, as caregivers have an increasing influence on decisions impacting patients' care over time. The effect of the stigma of mental illness on caregivers should be assessed, and the caregiver should be included in the treatment plan where possible to promote patient compliance and adherence [38]. This directs our attention once again to the societal issue of stigma of mental health issues and the importance of addressing this problem, which has a large and broad impact. Assessing and addressing the source, as well as the resultant problems of this stigma, could potentially diminish its negative effect on the elderly.

## Consequences

Anxiety and depression in the elderly can have a major impact on the family. Caregivers may succumb to "compassion fatigue" in which their relationship, based on empathy, results in a state of major psychological distress that progresses to social, spiritual, and physical exhaustion [57]. This may result in earlier institutionalization of the elder. Other consequences include family financial trouble, societal economic problems, and a major psychological effect on other members of the family and social circle in addition to the caregiver.

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