Recognizing depression in late life
Recognizing depression in late life, defined as over age 65, is associated with increased mortality and poorer outcomes from physical illness treatment. Depression affects 30% of those with chronic illnesses, including heart disease, diabetes, arthritis, and cancer. Depression is not a normal part of aging but is a growing problem in this population that requires treatment.

With an increasing aging population and the prevalence of chronic illness in those 65 and older, the demand for mental health services will be a critical issue in all aspects of healthcare and particularly primary care, as substantial evidence indicates that older adults are more comfortable seeking help for depressive symptoms from their primary care providers.

The diagnosis of depression is often overlooked in late life and is complicated by many factors from atypical presentation to pharmacologically induced depressive symptoms. Depression significantly affects not only the patient’s quality of life but also the family and community and takes an economic toll as well. Awareness of predisposing and precipitating factors, atypical presentation of symptoms, and the need for treatment in this population are critical.

Keywords: aging process, chronic illness, late-life depression, older adults, pharmacologic and nonpharmacologic management

Abstract: Depression presents differently in older adults than in younger adults and frequently occurs with many chronic illnesses in later life, though it is not a normal part of aging. The astute practitioner will screen for depression in this population and appropriately treat to improve chronic illness management and quality of life in older adults.

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age-appropriate screening tools, and evidence-based treatment recommendations will enable the nurse practitioner (NP) to accurately diagnose depression, initiate early treatment, and avoid a missed opportunity in primary care.

■ Background
Depression is a neurobiological disorder that does not have one cause but is believed to result from a combination of psychological, biochemical, and environmental elements as well as genetic predisposition. Neurotransmitters are also thought to play an important role in the etiology of depression. Specifically, a dysregulation in these neurotransmitters can manifest as changes in cognition, affect, behavior, and function.

The severity of depression may range from severe or major depression, to mild or minor depression in which symptoms are less obvious and vary considerably. Both types of depression are seen in late life and may persist for extended periods of time. However, minor depression is more common in this population and frequently occurs as a comorbidity with chronic health problems but responds well to treatment. Dysthymia, a type of mild and chronic depression, is diagnosed when an individual has experienced depressive symptoms most of the time for 2 years or more. The diagnosis is often missed because criteria are less specific for mild depression. If undiagnosed, older adults are at high risk for developing major depression and suicidal ideation.

■ Assessment
Depression assessment in the older adult can be challenging for providers. Communication may be hampered due to hearing loss or cognitive impairment. Additionally, the presence of chronic health problems with physical or somatic symptoms similar to depression and medication adverse reactions overlapping depressive symptoms may confound the diagnosis. Many older adults view symptoms such as reduced energy and interest in life, irritability, hopelessness, weakness, poor sleep, and excessive worry about health problems as a normal part of aging and are hesitant to bring these to their provider’s attention. Furthermore, time constraints in a primary care setting can hinder the thorough evaluation needed for diagnosis.

Assessment for depression requires a thorough and comprehensive history to rule out diseases that can mimic depression, such as hypothyroidism, anemia, heart failure, and neurologic conditions, such as delirium. Documenting current medication use is essential to identify potential adverse reactions of medications that may be mistaken for depression. A complete physical exam should be performed on initial evaluation, including an assessment of functional and mental status, pertinent lab values, such as a complete blood cell count, thyroid panel, kidney and liver function tests, serum calcium, and urinalysis.

The NP should be alert for predisposing risk factors for depression, such as previous history of depression, major physical and chronically disabling illness, polypharmacy, low social support, female gender, caregiving responsibilities, and excessive alcohol use. Additionally, factors such as a recent loss of a loved one, social isolation, transition from home to an alternative living situation, and stress related to adverse life events can precipitate the onset of depression. Depression should also be considered when there is partial or nonresponse to appropriate medical treatment or a lack of participation or incentive on the part of the patient to participate in self-care, or when the symptoms presented are not consistent with or typical of what would be expected.

Several screening tools can be used to identify depression and monitor for response and remission to treatment but are not solely diagnostic. Two very easy-to-complete and well-validated and reliable screening tools are the Geriatric Depression Scale-Short Form (GDS-SF) and the Patient Health Questionnaire-9 (PHQ-9). The GDS-SF is free and available online in a number of different languages. This easy-to-administer self-report tool is specific for use in older adults.

The PHQ-9, also available online, was developed for use specifically in a primary care setting and is derived from the PRIME-MD. It is also used in long-term-care facilities. Like the GDS-SF, it is easy to complete.

Data obtained from a complete history, physical and mental status exam, functional ability, lab indices, and depression screen will guide diagnosis and treatment decisions. Additionally, screening for suicidal ideation is important, as suicide rates in older adults are high, with White males age 80 or greater having the highest suicide rate. If thoughts of suicide are expressed, the NP should discuss a suicide safety plan with the older adult (see A safety plan for patients with depression). The NP must assess for feelings of hopelessness and/or suicidal ideation at every visit and document this carefully. Ultimately, the choice of treatment will depend on the type and chronicity of the depressive symptoms, contraindications to medications, treatment access, and patient preferences.

■ Pharmacologic treatment
NPs treating depression in older adults can find themselves with a variety of medication options and wondering how to choose between them. Drug interactions, adverse reactions, comorbid medical illness, and cost are just some of the important aspects to consider. Further items to consider include: start low and go slow; when to refer; how long to treat; when and what to expect in regard to response and
remission; withdrawal syndrome; and when to use nonpharmacologic treatments.

First-line treatment of depression in older adults includes the use of selective serotonin reuptake inhibitors (SSRIs). Paroxetine and fluoxetine have significant drug interactions associated with their use. They are both cytochrome P450 (CYP450) 2D6 inhibitors; therefore, they will increase the levels of medications that are CYP450 2D6 substrates, such as metoprolol and haloperidol.\(^\text{17}\) Paroxetine use is avoided in older adults because it has considerable anticholinergic adverse reactions. Patients with preexisting bradycardia should be monitored closely with use of fluoxetine and citalopram. Citalopram should not be used in patients with known QTc prolongation and doses in older adults should not exceed 20 mg per day.\(^\text{18,19}\) Sertraline should be considered in patients with a recent myocardial infarction or unstable angina.\(^\text{20}\) SSRIs also have some risk of gastrointestinal (GI) bleeding associated with their use because they can decrease platelet aggregation. In patients taking any nonsteroidal anti-inflammatory medication, such as ibuprofen, or an antiplatelet or anticoagulant medication, a proton pump inhibitor or histamine-2 receptor antagonist should be considered.\(^\text{21-23}\) An antidepressant with an alternative mechanism should be considered in patients with a history of GI bleeding. The risk of hyponatremia with SSRIs is higher in older adults.\(^\text{24,25}\) Other risk factors include female gender, concomitant use of diuretics, higher doses, and low baseline serum sodium.\(^\text{24,25}\) Sodium monitoring should be performed within the first 1 to 2 weeks of initiation, since this is the time for highest risk.\(^\text{24,25}\) SSRIs are all cost effective and are available in generic formulations.

If a patient has failed two adequate trials of an SSRI, NPs should consider using a selective serotonin norepinephrine reuptake inhibitor (SNRI) next. Venlafaxine, duloxetine, and desvenlafaxine are all SNRIs that may be considered. Venlafaxine is generally tolerated similar to the SSRIs. NPs should monitor BP when using venlafaxine and should not use the drug in patients with uncontrolled hypertension.\(^\text{26}\) Desvenlafaxine is the active metabolite of venlafaxine, and it may not have significant advantages over its parent formulation. Duloxetine is a potent CYP450 2D6 inhibitor; therefore, drug interactions must be considered. It should not be used in patients with significant alcohol use due to its potential to cause liver failure or impairment.\(^\text{27,28}\)

### Other medications

Other antidepressants that can be considered for use in older adults as second- or third-line treatment include bupropion and mirtazapine. These agents are significantly different in regard to their adverse reaction profile. Bupropion, an amino-3-p-ketone antidepressant, may cause insomnia and decrease appetite leading to weight loss, while mirtazapine may cause sedation and stimulate appetite leading to weight gain. Bupropion is a CYP450 2D6 inhibitor, and drug interactions should be taken into account.

Patients with significant anxiety may see worsening of these symptoms when taking bupropion, while patients taking mirtazapine may report decreasing anxiety. The incidence of sexual dysfunction is less with bupropion than with other antidepressants.\(^\text{29}\) It is thought that bupropion may lower the seizure threshold, but data show the incidence of seizures with bupropion compared with placebo is 0.6% versus 0.3%, respectively.\(^\text{30,31}\) The risk of seizures is increased with increasing doses. NPs should discuss the risk to benefit ratio with patients when prescribing bupropion. Bupropion is contraindicated in patients with a known seizure disorder.

Tricyclic antidepressants (TCAs) are generally not recommended for use in older adults according to Beer’s criteria, as they have significant anticholinergic adverse reactions, CYP 450 drug interactions, and cause sedation.\(^\text{32}\) When evaluating for drug interactions, NPs should not only consider the pharmacokinetic interactions but pharmacodynamic interactions, such as additive sedation, anticholinergic effects, or alpha 1 blockade. TCAs also have a risk of cardiac adverse reactions and are lethal in overdose. Nortriptyline, a secondary amine, may be considered if the practitioner has a patient that is treatment refractory to other agents. Nortriptyline serum levels can be monitored for efficacy. These agents are often used off-label for patients with other

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### A safety plan for patients with depression

1. Warning signs that depression or mood is worsening (irritability or worsening insomnia).
2. Ways I can self-soothe or distract myself (watch a movie or write in journal).
3. Activities that I can engage in when increasingly depressed or hopeless (exercise or meet friends).
4. Ways to keep myself safe (avoid alcohol or mood-altering substances).
5. People who I can call and ask for support when feeling worse (list names of friends or family members and contact information).
6. Professionals or agencies I can contact if more depressed or feeling suicidal (list contacts and numbers).

Adapted with permission from Safety plan, Stuart G. Principles and Practice of Psychiatric Nursing: 2013:329-331.
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medical conditions, such as neuropathic pain. Even at low doses, the anticholinergic adverse reactions may cause cognitive slowing in patients.

Monoamine oxidase inhibitors (MAOIs) are typically used last-line antidepressants and have a multitude of issues to consider with use. Patients requiring treatment with MAOIs should be referred to a psychiatrist. NPs may also consider referring patients to a psychiatrist or psychiatric NP for clarity of diagnosis, history of nonresponse, presence of comorbid substance abuse, suicidality, and need for psychotherapy.33

Recommendations on length of treatment are not specifically data driven in regards to depression in older adults. Many specialists feel that older adults should be treated for life even with the first episode of depression. In younger adults, lifetime treatment is not considered until after the second or third episode. At a minimum, patients should be treated for 9 to 12 months after achieving remission.24 Other factors to consider before discontinuing the antidepressant include psychosocial stressors or impairment, severity of the depressive episode, family history of depression, and persistent residual depressive symptoms, such as insomnia.35

An adequate trial of an antidepressant is also important for clinicians to ensure before making changes. Many clinicians feel that older adults may require longer response times to antidepressants than younger patients, although there is little data to support this. For younger patients, it is thought that at least 4 to 6 weeks of treatment is long enough to see response and even remission. Some data show most older adults who are partial responders at 4 weeks become full responders at 8 weeks, and few patients who are nonresponders at 4 weeks achieve response at 8 weeks.36 Full response is considered a 50% decrease in baseline symptoms, and remission is considered a score of less than 8 to 12 on most depression rating scales. It is important for NPs to treat full remission so that patients are not put at risk for relapse. Residual symptoms are often a cause for relapse and are many times overlooked after initial patient response. Older adults typically have a host of somatic complaints when depressed. When NPs begin assessing a patient for response, they may expect to find decreased somatic symptoms, increased appetite, and energy within the first few weeks of treatment. Mood, suicidal ideation, and anhedonia may be among the last symptoms to resolve.

Withdrawal syndrome (or discontinuation syndrome) can be important to consider when discontinuing treatment from an antidepressant. Antidepressants with a short half-life, such as paroxetine and venlafaxine, are very well known for causing withdrawal syndrome. Fluoxetine, because of its long half-life, is less likely to cause this. The onset of withdrawal syndrome is usually within a few days, depending on the half-life of the discontinued medication.37 Symptoms usually resolve within a few days to weeks and will resolve almost immediately when the antidepressant is restarted.37 Withdrawal syndrome can present in different ways depending on the antidepressant.37 It is important for NPs to identify withdrawal syndrome. Patients discontinuing an SSRI or SNRI may experience flulike symptoms, such as dizziness, nausea, lethargy, and headache; with paroxetine specifically, patients may have anticholinergic rebound and sensory abnormalities.37 Patients discontinuing a TCA may experience anticholinergic rebound in addition to the symptoms listed for SSRI withdrawal syndrome above. It is best to slowly taper patients off antidepressants unless there is a significant adverse reaction that requires immediate discontinuation.

Nonpharmacologic treatment
Primary care NPs can collaborate with therapists, psychologists, and other mental health clinicians to provide nonpharmacologic or psychosocial interventions to assist the older adult with managing depressive symptoms. Interventions should be individualized and specific to best address the issues or underlying causes of the depression. Both the patient and the providers will benefit from an interdisciplinary approach to care that supports the patient.

There are several evidence-based psychosocial therapies that can be effective in treating depression in older adults. Research has demonstrated that cognitive behavioral therapy, problem-solving therapy, interpersonal therapy, and reminiscence and life review have been shown to be effective in decreasing depression in older adults without cognitive impairment.38-41

While each of these therapies requires some specialized training on the part of the provider, simple problem-solving techniques can be very useful for the NP as a strategy to assist the patient in recognizing problems and exploring options. One example of problem solving may involve helping an older adult to cope with social isolation. The primary care NP can explore what the patient has done in the past and enjoyed and possible opportunities to increase social interactions. The NP’s knowledge of community resources provides an invaluable source of potential options that may include a senior center, support groups, or volunteer opportunities. This simple approach can be very effective in the primary care settings to help a patient gain perspective on a problem and realize possible solutions.
### A patient guide to understanding depression

Everyone has an occasional bad or feeling “blue” day but it is not normal to feel sad for longer periods of time. Depression is a very common medical illness and like diabetes and heart disease depression responds well to treatment. Depression can occur at any age but is particularly difficult for older adults. Older adults who have experienced significant life changes and losses or have chronic illnesses are at greater risk for depression. Previously depression was thought to be caused by only external events or a weakness in one’s personality. However, depression is now believed to be caused by genetic, biological, and psychological factors.

#### Symptoms of depression

Depressive symptoms can be mild or more severe. A sad or irritable mood is often an important indication that depression is present. Other symptoms include changes in sleep, difficulty concentrating, appetite changes, decreased interest in activities, and feelings of hopelessness. Sometimes physical symptoms such as pain, headache, or fatigue can occur when an individual is depressed. Each person feels a little different. Many older adults think that these symptoms are just a normal part of getting older. Depression is not a normal part of aging, so it is important to report changes in behavior or mood to a healthcare professional.

#### Treatment for depression

There are many different approaches to treating depression but most adults find medication to be helpful when managing depressive symptoms. Your healthcare provider will carefully screen you for symptoms and then decide what particular treatment options are best. If you are started on a medication, it should not be discontinued without talking with your healthcare provider. A combination of medication and some form of psychotherapy have been shown to work the best. Interestingly, increasing regular daily exercise also has shown to help older adults with depression. Having someone to share fears or concerns with also helps alleviate feelings of isolation and despair. Your treatment will be individualized with the goal of improving your coping abilities and quality of life.


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### Improving quality of life

Depression is not a normal part of aging. It can complicate numerous chronic health problems and frequently accompanies functional impairment and disability. Pharmacologic and nonpharmacologic therapies are both effective in the treatment of depression. A combination of therapies has shown to be most effective. The astute NP, who recognizes that depression often occurs in late life associated with chronic illness, will routinely assess for depression in this population and will appropriately treat when diagnosed in order to improve functioning and quality of life of older adults.

### REFERENCES

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