

Identifying and treating depression across the life span



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Symptoms, course, and treatment vary based on patients' age, stage of life

Most clinical trials of major depressive disorder (MDD) have focused on diagnosis and treatment of adults, but many younger and older patients also suffer from this condition. The prevalence of MDD is estimated to be 2% in children and 6% in adolescents.¹ Up to 25% of adults age >60 experience MDD, dysthymic disorder, or “minor” depression.²

Although diagnosis and treatment of depression is similar regardless of a patient's age, younger and older patients may not exhibit typical depressive symptoms (*Table 1*).^{1,2} For example, older adults may be more likely to report a lack of emotions than depressed mood. Vigilance for these types of distinct clinical manifestations can improve early recognition and treatment. In addition, evidence suggests there are differences in MDD treatment for younger and older patients.

This article reviews common challenges in recognizing and treating MDD in children, adolescents, and older adults.

Varying clinical features

Children/adolescents. The clinical presentation of MDD in children and adolescents is similar to that of adults. Children usually display anxiety, irritability, temper tantrums, and somatic complaints before verbally expressing depressive feelings. Psychotic depression in children manifests more often as auditory hallucinations than delusions.¹

Table 1

Major depressive disorder: Age-related differences

	Children/adolescents	Adults	Older adults
Prevalence	2% in children; 6% in adolescents	20%	25%
Male-to-female ratio	1:1 in children; 1:2 in adolescents	1:2	1:2
DSM-IV-TR criteria	Similar	Similar	Similar
Clinical features	Irritability, temper tantrums, somatic complaints, hypersomnia, weight gain, auditory hallucinations, psychomotor agitation, separation anxiety, social phobia, panic disorder, drug abuse, poor self-esteem	Typical DSM-IV-TR features. Psychomotor retardation, middle and terminal insomnia	Irritability, motor agitation, restlessness, somatic complaints, diarrhea and constipation, decreased libido, cognitive impairment, delusions, anxiety, panic, worsening of medical comorbidities

Source: References 1,2

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Children usually display anxiety, irritability, and somatic complaints before verbalizing depressive feelings

Younger vs middle-age adults. Researchers who evaluated baseline clinical and sociodemographic information of 1,498 patients enrolled in the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study found that the presentation of depressive symptoms in young adult patients (age 18 to 35) differed from those of middle-age (age 36 to 50) patients.³ Younger patients were more likely to be irritable, complain of weight gain and hypersomnia, and have a negative view of life and the future. They also were more likely to report previous suicide attempts and endorse symptoms consistent with generalized anxiety disorder, social phobia, panic disorder, and drug abuse. Middle-age patients had more depressive episodes, decreased libido, and middle insomnia, and more frequently reported gastrointestinal symptoms such as diarrhea or constipation.³

Older adults. In our experience, typical MDD mood symptoms often are absent in older patients. Frequently, we see somatic complaints, motor restlessness, or psychomotor retardation; these symptoms may be attributable to a concurrent medical illness. This in turn may worsen the physical illness, leading to social isolation and considerable medical morbidity.⁴

Pain plays an important role in depression, particularly in older adults. Chronic

pain affects up to 65% of older adults who live in the community and up to 80% of those who are institutionalized.⁵ The most common causes of pain in these patients are osteoarthritis, osteoporosis, fibromyalgia, degenerative disk disease, lumbar spinal stenosis, and scoliosis. In addition, neuropathic pain, such as post-herpetic neuralgia and peripheral neuropathy, and injuries resulting from falls often cause long-lasting pain.⁶

The presence of pain tends to negatively affect recognizing and treating depression. Regardless of their age, when a patient presents with pain or depression, investigate and consider treating both conditions.⁷

Memory decline is likely to be depressed older adults' chief complaint, and when objectively tested these patients often show cognitive impairment.⁸ Whether depressive symptoms in this age group are a reaction to early cognitive deficits or are an early symptom of neurodegeneration remains controversial.⁹ Some case-control studies have found a link between a history of depression and Alzheimer's disease (AD).^{10,11} In general, older patients whose first episode of depression occurs in late life have a higher relative risk of developing some form of dementia; research suggests that 50% of late-life MDD patients will develop dementia within 5 years.¹²

Researchers have considered the possibility that mild cognitive impairment



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Memory decline is likely to be a depressed older adult's chief complaint



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Table 2

Features of vascular depression

Onset after age 50
Family history of mood disorders is less common
Apathy
Marked loss of interest in activities
Lack of insight
Executive dysfunction (problems with planning, organizing, sequencing, abstracting), impaired memory or speed of processing of information
History of hypertension, diabetes, or cardiovascular disease
May have a neurologic event such as stroke or transient ischemic attack
White or gray matter hyperintensities
Source: Reference 14

(MCI) and dementia are a continuum of depression. In 1 study, 29 patients with MCI and 31 with MCI and MDD were assessed annually for an average of 4.3 years.¹³ Thirty-six patients with MCI (60%) progressed to AD. Presence of depression at the time of MCI diagnosis did not predict conversion to AD but persistence of depression for 2 to 3 years and the presence of melancholic features were associated with higher risk for AD.

Alexopoulos et al¹⁴ proposed the “vascular hypothesis theory” that cerebrovascular disease can predispose patients, particularly older adults, to depressive symptoms (Table 2).¹⁴ Whether vascular depression is a subtype of MDD remains controversial.

Course and prognosis

MDD has been characterized as a self-limited disease, with an average duration of 6 to 9 months. However, newer prospective studies suggest that a substantial number of patients recover more slowly or do not ever fully recover.¹⁵ Several factors, such as genetic/biologic vulnerability and psychosocial factors, influence the courses, prognosis, and risk of relapse/recurrence of MDD in all age groups.

Children and adolescents. The typical duration of a major depressive episode for

clinically referred children and adolescents is 8 to 13 months.^{1,16} Approximately 90% of these patients' major depressive episodes remit by 2 years, but up to 10% persist.^{1,16} Within 5 years of MDD onset, up to 70% of children and adolescents will experience a recurrence,¹⁷ a rate comparable to adults.

Anxiety disorders, panic disorders, phobias, substance abuse, conduct and oppositional disorders, and attention-deficit/hyperactivity disorder occur 2 to 6 times more frequently in children and adolescents with MDD.^{18,19} Children with MDD who have significant psychiatric and psychosocial comorbidity experience poorer outcomes.¹⁸

Older adults. Despite optimal treatment conditions, ≥50% of older patients fail to respond adequately to first-line antidepressant pharmacotherapy.²⁰ Treatment-resistant MDD in older patients increases:

- nonadherence to treatment for comorbid medical disorders
- disability and cognitive impairment
- burden on caregivers
- risk for early mortality, including suicide.²⁰

Differences in treatment

Although MDD often is recurrent, episodic, and in some patients chronic, in general earlier treatment and quicker response lead to better outcomes. A large, naturalistic German study of 795 inpatients with major depression found that early improvement (20% reduction in Hamilton Depression Rating Scale-21 score within the first 2 weeks) with antidepressant therapy may predict later response and remission.²¹

Regardless of a patient's age, MDD treatment should begin with education. All patients should be involved in their treatment. Encourage patients to become familiar with their triggers and stressors, improve their coping skills, and adopt a healthy lifestyle, which includes a nutritious diet, frequent exercise, and adequate sleep. As maintenance treatment we recommend that patients participate in frequent socialization and activities (Table 3). Refer patients to self-help books, online

help guides, and handouts from sources such as National Institute of Mental Health.^{22,23} Encourage patients to have patience and perseverance, and guide them through each step of recovery.

In addition to lifestyle modification, other treatment options for depression include pharmacotherapy, interpersonal psychotherapy, cognitive-behavioral therapy (CBT), and electroconvulsive therapy (ECT). All these modalities are effective for acute and maintenance treatment and should be considered when determining the best approach for each patient.

The effectiveness of antidepressants in general is comparable among and within classes.² Base your initial selection on the patient's previous response to antidepressants and the medication's side effects profile and cost.

The benefits of exercise for all patients cannot be underestimated.²⁴ Prescribe 20 to 30 minutes of daily exercise as part of recommended lifestyle changes. Writing "daily exercise" on a prescription pad can effectively remind patients that exercise needs to be taken as seriously as medication compliance.

Children and adolescents. For mild depression, supportive therapy seems to be as effective as CBT and medications.²⁵ A randomized controlled trial of 439 depressed adolescents found that CBT plus fluoxetine conferred quicker benefit, but in the long run may not be any more efficacious than pharmacotherapy alone.²⁵ Researchers also found that CBT plus fluoxetine was no more effective than pharmacotherapy alone for adolescents with moderate to severe depression.²⁵

Older adults. Compared with younger patients, geriatric patients typically require lower antidepressant dosages to achieve a specific blood level, but the blood levels at which antidepressants are most effective appear to be similar.² Older patients also may be more likely to relapse and less likely to achieve full response to antidepressants than younger patients.² In older adults, amitriptyline, imipramine, and doxepin are not preferred because these

Table 3

Avoiding reoccurrence of depression—a 'prescription' for patients

Take medication as prescribed until your doctor instructs you to stop
Eat 3 nutritious meals every day
Sleep 6 to 8 hours each night
Walk/exercise for 20 minutes every day
Relax and do breathing exercises as taught 3 times a day
Talk with a friend or family member each day
Develop a hobby
Remain active
See your doctor once a month

agents may cause orthostatic hypotension and urinary retention.² A depressed older adult who experiences weight loss might benefit from an antidepressant that improves appetite, such as mirtazapine.²⁶ Some research suggests that maintenance antidepressant therapy in older patients experiencing a first-time episode of MDD should continue for up to 2 years.²⁷

A meta-analysis of 12 studies of CBT in depressed adults age ≥ 60 with chronic pain found that CBT was effective at improving self-reported pain but had no significant effect on depressive symptoms, physical function, or medication use.⁶ ECT often is prescribed for depressed older adults because its safety and efficacy for these patients has been well documented.²⁸ Other neuromodulation therapies include vagus nerve, repetitive transcranial magnetic stimulation, and deep brain stimulation, but none of these treatments have been extensively evaluated in older patients.

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For depressed children, supportive therapy seems to be as effective as CBT and medications



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Compared with younger patients, older adults may be more likely to relapse and less likely to achieve full response to antidepressants

Related Resource

• American Psychiatric Association. Treatment of patients with major depressive disorder. 3rd ed. www.psychiatryonline.com/pracGuide/pracGuideChapToc_7.aspx.

Drug Brand Names

Amitriptyline • Elavil
Doxepin • Aponal, Silenor
Fluoxetine • Prozac

Imipramine • Tofranil
Mirtazapine • Remeron

Disclosure

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Bottom Line

Although diagnosis and treatment of major depressive disorder is similar among all patients, its symptoms and course may be atypical in children, adolescents, and older adults. Awareness of these varying clinical manifestations can facilitate early recognition and treatment.