

respectively; the corresponding rates of severe MDD were 3% and 2.3%. The prevalence of dysthymia (PDD) was reported to be 1.8% (lifetime) and 1.3% (past year). Across adolescence, the prevalence of MDD increased significantly, with markedly greater increases among female than among male youth. Nearly 30% of youth with MDD reported some form of suicidality in the past year, and more than 10% reported a suicide attempt. Only 34% of adolescents with MDD were reported to receive disorder-specific treatment, and only 35% received treatment from the mental health sector.

Rates of depression in younger children are lower than in adolescents. In a study of prepubertal depression using *DSM* diagnostic criteria for case ascertainment in a regionally representative sample,⁴ the 3-month rate of any depressive disorder was estimated to be 0.5% to 1.9%. Across several studies in preschoolers, the estimated prevalence of depression using developmentally modified *DSM* criteria also was reported to be less than 2.0%.⁵

From 2005 to 2014, the past year prevalence of MDD in a nationally representative sample⁶ increased from 8.7% to 11.3% in adolescents, and from 8.8% to 9.6% in young adults. The extent to which 21st century sociocultural changes have contributed to the apparent increase in prevalence, or whether the increase is due to heightened awareness, improved identification, or other factors, is not known.

Depression manifests along a spectrum, ranging from subsyndromal to severe or (rarely) psychotic presentations.¹ Overall, the phenomenology of depression in youth is similar to that in adults, but there may be some developmental differences in presentation that complicate diagnosis. For example, in preschool children, absence of joyful play observed by caregivers may be a prominent sign,⁵ whereas irritability, temper tantrums, low frustration tolerance, and somatic symptoms may predominate in school-aged children, and adolescents may more commonly present with sad mood, neurovegetative symptoms, and suicidality.⁷

MDD is episodic by *DSM* definition, presenting as a distinct change from previous function.¹ The median duration of MDD episodes has been estimated at 1 to 2 months and 8 months in community and clinical samples, respectively.⁸ Approximately 10% of cases of MDD become chronic⁹; moreover, chronicity substantially increases the likelihood of underlying anxiety, substance use, and personality disorders and decreases the likelihood that treatment will be followed by full symptom resolution.¹ The duration of PDD has been estimated to approximate 3 to 4 years in both community and clinical samples.⁸

MDD is highly recurrent, with recurrence rates in adolescents estimated to be 20% to 60% in 1 to 2 years and

70% after 5 years.⁸ In general, greater severity, chronicity or multiple recurrent episodes, comorbidity, presence of residual subsyndromal symptoms, negative cognitive style, family dysfunction, and exposure to ongoing stressful/traumatic events are associated with poor outcome.⁸ The risk for bipolar disorder in prepubertal-onset depression has been estimated at around 10% to 20%, and is higher for patients who have a history of antidepressant-induced or spontaneous hypomania, psychotic features, hypersomnia, or a family history of bipolar disorder.¹⁰

Genetic factors convey substantial vulnerability for the development of depression (40%-60% heritability, higher in adolescents than in children),^{11,12} although precise biological mechanisms remain elusive.¹³ The serotonin transporter gene;¹⁴ variations in cerebral structure and function;¹⁵ and neuroendocrine,¹⁶ neuroinflammatory,¹⁷ neurochemical,¹⁸ autonomic,¹⁹ chronobiologic,²⁰ and gut microbiome²¹ systems as well as interactions among these,²² have been implicated. Potentially depressogenic psychological factors are wide ranging and include insecure attachment,²³ negative cognitive/attributional style,²⁴ difficult temperament/negative affectivity,²⁵ diminished reward effort,²⁶ dysfunctional interpersonal processes,²⁷ impaired self-regulation,²⁸ underdeveloped self-understanding,²⁹ underdeveloped mentalization,³⁰ and learned helplessness,³¹ as well as complex developmental/psychological/biobehavioral interactions.³² An extensive inventory of social—environmental factors contributing to depression risk³³ ranges from exposure to stressful or traumatic circumstances in the family (particularly emotional abuse³⁴ and unattuned/unsupportive parenting styles [eg, passive/withdrawn or discordant³⁵]), to societal issues such as poverty,³⁶ income inequality,³⁷ racial/ethnic³⁸ and other forms of discrimination,³⁹ and acculturation stress.⁴⁰ Social—environmental factors may exert their effect in part through alterations to physiologic homeostasis.^{34,41}

In longitudinal studies,⁴²⁻⁴⁴ the onset of MDD in youth has been characterized by a complex pattern of exposure to adverse childhood circumstances and concurrent psychiatric comorbidity (anxiety, behavior, and attention disorders). The powerful impact of childhood adversities (eg, interpersonal loss, parental maladjustment, child maltreatment, economic adversity) on first-onset depression was reiterated in a national study⁴⁵ in which simulations estimated that childhood adversities were associated with 57.1% of childhood-onset (up to age 13 years) mood disorders, compared to 20.5% to 30.5% of later-onset mood disorders. The continuity of MDD in youth has been characterized as both homotypic (depression to depression) and heterotypic (depression to anxiety,