

# Clinical research

## Characteristics, correlates, and outcomes of childhood and adolescent depressive disorders

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**D**evelopmental psychopathology has identified the defining clinical and contextual features of depression in youngsters. In particular, empirical studies have characterized the longitudinal course of depressive illness and common patterns of co-occurring psychiatric conditions. The functional consequences of early-onset illness have also been documented. A growing body of research is identifying the neurobiological and psychological correlates. In addition, studies are beginning to identify specific genetic and experiential risk factors. In general, the core patterns of depressive disorders across the lifespan are emerging. This paper details the phenomenology, correlates, clinical course, and consequences of pediatric depression, highlighting the similarities and differences in the characteristics of depression among children, adolescents, and adults. A few caveats are warranted before

*Depressive illness beginning early in life can have serious developmental and functional consequences. Therefore, understanding the disorder during this developmental stage is critical for determining its etiology and course, as well as for developing effective intervention strategies. This paper summarizes current knowledge regarding the etiology, phenomenology, correlates, natural course, and consequences of unipolar depression in children and adolescents. Using adult depression as a framework, the unique aspects of childhood and adolescence are considered in order to better understand depression within a developmental context. The data suggest that the clinical presentation, correlates, and natural course of depression are remarkably similar across the lifespan. There are, however, important developmental differences. Specifically, the familial and psychological context in which depression develops in youngsters is associated with variability in the frequency and nature of depressive symptoms and comorbid conditions among children and adolescents. Maturation differences have also been identified in the neurobiological correlates of depression. These developmental differences may be associated with the observed variability in clinical response to treatment and longitudinal course. Characterization of the developmental differences will be helpful in developing more specific and effective interventions for youngsters, thereby allowing them to reach their full potential as adults.*

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proceeding to the following sections. The term “depression” refers to unipolar mood disorders only. Up to now, most of the research on pediatric depression was conducted in major depressive disorder, and therefore, the reported findings are primarily for this condition.

## Historical context of depression in children and adolescents

Case reports of youngsters exhibiting symptoms resembling depressive disorders in adults were described as early as the 17th century. Nevertheless, early theories of depression discounted the validity of the disorder in youth, suggesting that the necessary psychological mechanisms were not yet present for the experience of depression, or that depression was “masked” in the form of other disorders. In particular, it was considered that children did not have a well-developed superego. In 1975, the National Institute of Mental Health convened a meeting to discuss the incidence and diagnosis of depression in children. When the existence of depression in children became acceptable and the basic diagnostic criteria were established,<sup>1</sup> research on childhood depression burgeoned, resulting in the growth of theoretical models as well as empirical databases, and depression is no longer considered “an adult disease.” Despite this burgeoning research, some obstacles remained with regard to the pursuit of knowledge on adolescent depression. The early “storm and stress” theories of development suggested that many of the problems associated with depression, such as sadness, irritable mood, self-doubt, and social withdrawal, were normative expressions of adolescent angst.<sup>2</sup> It is now established, however, that many youngsters do not go through such emotional distress, and that adolescent depression is a serious disorder, often heralding chronic or recurrent problems into adulthood.

## A developmental framework in understanding childhood and adolescent depression

In the past three decades, depression research in children and adolescents has progressed from applying simple extensions of clinical descriptions and theories developed in adults to generating an increasingly sophisticated understanding of these disorders informed by the emerging field of developmental psychopathology. Research adopting this framework has taken into account the normative

developmental processes influencing differences in the etiology, phenomenology, correlates, and outcomes of depression in children, adolescents, and adults.<sup>3-7</sup> It is important to note, however, that this new field of research often does not differentiate among particular stages of development through childhood and adolescence. Although some continuity is likely across childhood and adolescence in the experience and expression of depression, the underlying risk mechanisms and the consequences of depression, some differences are also plausible.

When applying a developmental perspective to psychopathology, one important issue to consider is the conceptualization of different life stages. For example, the transition from childhood to adolescence involves changes in multiple domains, including physical, sexual, cognitive, and social development, with a considerable range of individual differences in the age at which each of these changes occur. At present, there is no consensus on the clear boundaries in defining child and adolescent populations. Since gathering information on these multiple domains is complex, for pragmatic reasons, the majority of the studies have used chronological age to define these boundaries; children  $\leq 12$  years and adolescents between 13 and 18 years. In some cases, however, studies are reviewed in which these ages overlap (eg, some studies included 13-year-olds in the child samples, whereas others included 12-year-olds among adolescent samples, and still others reported findings according to grade level or physical pubertal status).