Attention-Deficit/Hyperactivity Disorder (ADHD) is the most common neurobehavioral disorder affecting school-age children. Studies suggest that approximately 8–12% of children (9.2 in males and 3.0 in girls) meet diagnostic criteria for the clinical disorder of ADHD (Faraone, Sergeant, Gillberg, & Biederman, 2003). Approximately 40–70% of those diagnosed with ADHD will have persistent symptoms into adolescence and adulthood with substantial risk of job instability, mood and anxiety disorder, motor vehicle accidents and substance abuse. ADHD is characterized by various symptoms of inattention, and/or impulsivity and is conceptualized as a spectrum, with a range of severity from mild variation of normal behavior to a chronic and severe condition. ADHD affects the individual, the family, and society and can have negative impact on multiple areas of functioning (Wolraich, Hannah, Baumgaertel & Feurer, 1998, American Academy of Pediatrics, 2000). Children with the disorder often suffer from impaired interpersonal relationships with family and peers, academic underachievement and poor self-esteem (Goldman, Genel, & Bezman, & Slanetz, 1998). In addition, children with ADHD commonly exhibit other comorbid developmental and psychiatric disorders that may complicate the intervention plan (Table 6.1; Pliszka, 1998; Spencer, Biederman & Wilens, 1999).
Clinicians who diagnose and treat children with ADHD should develop a comprehensive treatment plan that recognizes the complexity and chronic nature of the disorder. First, a diagnosis of ADHD requires that the child meet criteria from the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* (DSM–IV) in terms of core symptoms, onset, duration, and functional impairment in more than one setting (American Academy of Pediatrics, 2001). During the initial assessment, clinicians should first obtain information regarding the nature of the child’s symptoms (mostly inattention, behavioral difficulties, etc.) and then determine the severity of the core ADHD symptoms, existence of comorbidities, and the extent of the impairment seen across the different environments.

Because the diagnosis of ADHD and the possible need for chronic medical treatment may cause concerns and even anxiety for the family and the child, it is important to provide counseling prior to initiation of therapy. In addition, clinicians should be aware of the family expectations from the treatment and their treatment preferences, thereby optimizing compliance and clinical outcome.

Next, it is important to set individualized treatment goals. The American Academy of Pediatrics (AAP) guidelines suggest several outcome measures based on the most disabling core ADHD symptoms (e.g., decrease disruptive behaviors, improve academic performance, improve relationship with family, teachers, and peers and improve self-esteem). It is advisable to choose measurable goals that can assess progress from a baseline state (American Academy of Pediatrics, 2001).

Treatment of ADHD consists of two general categories, medication management and behavioral treatment strategies. The following sections describe these treatment strategies in detail, as well as the benefits of a multimodal strategy. The multimodal approach combines the careful medication management of ADHD with proven psychosocial interventions such as parent education, educational intervention, and behavioral therapy in a comprehensive approach. Throughout this chapter, frequent reference is made to the Multimodal Treatment Study of children with ADHD (MTA), the largest randomized clinical trial for the treatment of ADHD ever conducted (MTA Cooperative Group, 1999a). Therefore, it merits particular attention before discussing treatment approaches in detail.

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**Table 6.1. ADHD Comorbid Disorders**

<table>
<thead>
<tr>
<th>Developmental Dimension</th>
<th>Poor academic performance</th>
<th>Learning Disability</th>
<th>Mental Retardation</th>
<th>Autism Spectrum Disorders</th>
<th>Tic Disorders (e.g., Tourette Syndrome)</th>
<th>Behavioral Disorders</th>
<th>Oppositional Defiant Disorder</th>
<th>Conduct disorder</th>
<th>Anxiety</th>
<th>Depression / Dysthymia</th>
<th>Obsessive Compulsive Disorder</th>
</tr>
</thead>
</table>

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The table lists common comorbid disorders associated with ADHD.