

## Meeting the Challenge: Adults with ADHD

by Anne Lambert, MS

Many children with ADHD will become adults with ADHD, with data showing that 72% of children have persistence of at least one-third of their original symptoms into adulthood.<sup>1</sup> Adult ADHD has been consistently associated with a functional impairment and a significant economic burden. One study estimates that adults diagnosed with ADHD incur significantly higher outpatient and inpatient costs, prescription drug costs, and total medical costs compared to adults without ADHD. Employees diagnosed with ADHD missed significantly more days due to “unofficial” absences,<sup>2</sup> and estimated costs of lost earnings due to adult ADHD range from \$67 to \$77 billion per year.<sup>3,4</sup> According to Dr. Thomas Bent, Medical Director, Laguna Beach Community Clinic, Laguna Beach, CA, “One of the biggest frustrations faced by adults with ADHD is an inability to put a name and a diagnosis to the symptoms and physicians often underestimate the impact ADHD has on the quality of life of adults.”

In a recent interview, Joel Young, MD, Medical Director for the Rochester Center for Behavioral Medicine in Michigan, discussed the clinical and social transition from childhood to adult ADHD and the importance of educating physicians on adult ADHD. He emphasized the need for clinicians to understand that as the patient makes the progression to adulthood, the stakes are much higher. The hyperactive symptoms of childhood may manifest as difficulty with impulse control, reckless behavior, increased spending, and substance abuse. The young girl who was labeled a “dreamer” in high school may become an employee who procrastinates, has difficulty staying on task, budgeting time, and may struggle with low self-esteem and depression. “Patients—both children and adults—pay a huge cost for untreated ADHD, as do their families.”

“Taking a good developmental history is essential, but the standard age-of-onset criterion (symptoms before age 7 years) should be relaxed in light of the difficulty patients may have in recalling their early years,” says Frances R. Levin, MD, Kennedy-Leavy Professor of Clinical Psychiatry at Columbia University, New York, NY. Current symptom and diagnostic rating scales can help clinicians in the diagnosis of ADHD in adults.<sup>5</sup> Some useful scales are the Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist,<sup>6</sup> the Conners’ Adult ADHD Rating Scales (CAARS),<sup>7</sup> Barkley’s Current Symptoms Scale-Self-Report Form,<sup>8</sup> and the Brown Attention-Deficit Disorder Rating Scale for Adults.<sup>9</sup>

In a 2003 survey of 400 primary care physicians, 48% said they did not feel confident in diagnosing ADHD in adults. And only 34% reported being “very knowledgeable” or “extremely knowledgeable” about adult ADHD compared with 92% who said the same for depression and 83% for generalized anxiety disorder. The same survey found that 64% of survey respondents indicated they received “not at all thorough” or “not very thorough” instruction in diagnosing and treating adult ADHD, compared with 13% who said the same for their training in depression.<sup>10</sup> The need for additional information on recognizing and diagnosing ADHD in adults was echoed in a 2008 CME Outfitters survey where psychiatrists and primary care physicians expressed a need for education on the recognition and diagnosis of adult ADHD, management of comorbidities, and access to the latest evidence on treatment strategies and management of ADHD in adults.

*neuroscienceCME is provided as an educational service to the professional neuroscience community by CME Outfitters, LLC.*

Accurately differentiating ADHD symptomatology from symptoms of various other psychiatric disorders or comorbidities can be challenging for physicians. In his book, *ADHD Grown Up: A Guide to Adolescent and Adult ADHD*,<sup>11</sup> Dr. Young examined the symptoms that distinguish ADHD from bipolar mania, and ADHD from depression. As with all comorbid conditions, it is important to treat both disorders simultaneously. Psychosocial interventions and pharmacotherapy targeted to each disorder can effectively manage symptoms for these patients. In a 2008 online survey of over 1,000 adults diagnosed with ADHD, 62% of respondents were also diagnosed with depression, anxiety, and/or anxiety disorder. Yet, this same survey also found that 47% of respondents said they have not seen their healthcare professional regarding their condition in the last 2 years, 33% said their symptoms were not under control, and nearly 60% reported being unhappy with their ability to handle stress.<sup>12</sup>

These findings highlight the importance of monitoring the quality of life (QoL) for adults with ADHD and for those with ADHD and comorbid conditions. Improving the core symptoms of ADHD is helpful, and can lead to improved functioning in the real world such as being self-sufficient and being able to cope with the demands of daily life. Several controlled medication studies have measured functional improvements including psychosocial elements and general QoL in adults with ADHD.<sup>13-16</sup> Additional studies are needed to accurately measure the effect of medication on functioning in the workplace, interpersonal relationships, and quality of life. QoL rating scales have also been developed for adults with ADHD that can help clinicians assess the progress and improved functioning of each patient.<sup>17,18</sup>

In a recent Harris Interactive Survey, respondents who took medication said that they are focused primarily on goals of symptom control and improving performance at work (74%), at home (69%), and in relationships (62%).<sup>19</sup> For optimal effect, clinicians need to assess the progress of their patients over time and monitor symptom response, which can be an effective way to be aware of adherence issues. In a study by Capone and colleagues, 50% of patients stopped taking medication within the first 3 months of treatment and 80% stopped by the end of the 18-month observation period.<sup>20</sup> Nonadherence to ADHD medication is often related to treatment frequency and route of administration, and may be exacerbated by concerns over long-term safety.<sup>21,22</sup> As with any disorder, if the patient has not met the target outcomes, the diagnosis and management plan should be re-examined and perhaps modified.<sup>23</sup> Given that adults with ADHD may continue to use medications for extended periods of time, it is important to select an agent and dosing regimen that fosters adherence and leads to better patient outcomes. Although medication is the core treatment for adults with ADHD, some patients are only partial responders. Multimodal approaches including cognitive behavioral therapy and simple lifestyle modification tools may be needed to address the functional and social skills deficits that may remain.<sup>24,25</sup>

Stay tuned to neuroscienceCME in 2009 for new activities on ADHD throughout the life span at <http://www.neuroscienceCME.com/>.

neuroscienceCME is provided as an educational service to the professional neuroscience community by CME Outfitters, LLC.

#### References

- 1 Biederman J, Mick E, Faraone SV. Age-dependent decline of symptoms of attention deficit hyperactivity disorder: impact of remission definition and symptom type. *Am J Psychiatry* 2000;157:816-818.
- 2 Secnik K, Swensen A, Lage MJ. Comorbidities and costs of adult patients diagnosed with attention-deficit hyperactivity disorder. *Pharmacoeconomics* 2005;23:93-102.
- 3 Biederman J, Faraone SV. Economic impact of adult ADHD. Presented at the American Psychiatric Association, May 21-26, 2005. Poster #NR456.
- 4 Turgay A, Ansari R, Schwartz M. Comorbidity differences in ADHD throughout the life cycle. Presented at the American Psychiatric Association, May 21-26, 2005. Scientific and Clinical Report Session No. 4.
- 5 Adler L, Cohen J. Diagnosis and evaluation of adults with attention-deficit/hyperactivity disorder. *Psychiatr Clin North Am* 2004;27:187-201.
- 6 Kessler RC, Adler L, Ames M, et al. The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population. *Psychol Med* 2005;35:245-256.
- 7 Conners CK. Conners' Rating Scales-Revised. Available at: <http://www.mhs.com/mhs/>. Accessed February 28, 2008.
- 8 Barkley RA, Murphy KR. Attention-Deficit Hyperactivity Disorder: A Clinical Workbook, 3rd Edition. New York, NY: Guilford Publications; 2005.
- 9 Brown TE. Brown Attention-Deficit Disorder Scales for Adolescents and Adults. Available at: <http://harcourtassessment.com>. 2001.
- 10 Adult ADHD Often Undiagnosed by Primary Care Physicians. Medical News Today, June 26, 2003. Available at: <http://www.medicalnewstoday.com/articles/3838.php>.
- 11 Young JL. ADHD Grownup: Evaluation, diagnosis and treatment of adolescents and adults. London: W.W. Norton, Ltd; 2007.
- 12 Adult ADHD Burden of Impairment Survey. Available at: <http://www.facebook.com/ADHDallies>.
- 13 Davis JL. New drugs help child ADHD, adult ADHD. WebMD. May 21, 2003. Available at: <http://my.webmd.com/content/Article/65/72717.htm>.
- 14 Friedman R. Adults benefit from drug treatment for ADHD. Medscape Medical News. May 21, 2003. Available at: <http://www.medscape.com/viewarticle/456007>
- 15 Spencer T. Preliminary results of a six-month trial of methylphenidate in adults with ADHD, 2003. (Cassette Recording No. 03APA-S54B). Valencia, CA: Mobiltone Company, Inc.
- 16 Michelson D, Adler L, Spencer T, et al. Atomoxetine in adults with ADHD: two randomized, placebo-controlled studies. *Biol Psychiatry* 2003;53:112-120.
- 17 Landgraf JM. Monitoring quality of life in adults with ADHD: reliability and validity of a new measure. *J Atten Disord* 2007;11:351-362.
- 18 Brod M, Johnston J, Able S, Swindle R. Validation of the adult attention-deficit/hyperactivity disorder quality-of-life Scale (AAQoL): a disease-specific quality-of-life measure. *Qual Life Res* 2006;15:117-129.
- 19 National Survey Reveals Impact of ADHD in Adults. Medical News Today, September 22, 2008. Available at: <http://www.medicalnewstoday.com/articles/122352.php>.
- 20 Capone NM, McDonnell T, Buse J, Kochhar A. Persistence with common pharmacologic treatments for ADHD. 17th Children and Adults with Attention Deficit/Hyperactivity Disorder (CHADD) Annual Conference. Dallas, TX; 2005.
- 21 Olson BG, Rosenbaum PF, Dosa NP, Roizen NJ. Improving guideline adherence for the diagnosis of ADHD in an ambulatory pediatric setting. *Ambul Pediatr* 2005;5:138-142.
- 22 Swanson J. Compliance with stimulants for attention-deficit/hyperactivity disorder: issues and approaches for improvement. *CNS Drugs* 2003;17:117-131.
- 23 American Academy of Pediatrics: Clinical Practice Guideline: Diagnosis and Evaluation of the Child With Attention-Deficit/Hyperactivity Disorder. *Pediatrics* 2000;105:1158-1170.
- 24 Saffren SA, Otto MW, Sprich S, Winett CL, Wilens TE, Biederman J. Cognitive-behavioral therapy for ADHD in medication-treated adults with continued symptoms. *Behav Res Ther* 2005;43:831-842.
- 25 Chronis AM, Jones HA, Raggi VL. Evidence-based psychosocial treatments for children and adolescents with attention-deficit/hyperactivity disorder. *Clin Psychol Rev* 2006;26:486-502.