Attention-Deficit Disorder at the Crossroads of Cosmetic and Therapeutic Psychiatry

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Most clinicians have seen children with clearly independent, functionally impairing disorders of attention. Such children are remarkable in their inability to attend and concentrate. They are disorganized and stimulus sensitive in the examination setting, and seem so different from other children that they have been characterized as having some form of general brain disorder. Attention-deficit hyperactivity disorder (ADHD) is a diagnostic term that has been controversial since its initial use to describe patients suffering from diminished attention, increased motor activity, impulsivity, and poor performance on activity-directed standardized tests.

Supporters of ADHD as an independent, widely prevalent disease entity argue that afflicted individuals suffer from pathologic impairments in attention, impulsivity, and hyperactivity that lead to long-term adverse effects on their emotional, social, academic, and vocational well-being. The opposing viewpoint is that patients now labeled as having ADHD simply fall on one end of the normal continuum of normal activity that lead to long-term adverse effects on their emotional, social, academic, and vocational well-being. The opposing viewpoint is that patients now labeled as having ADHD simply fall on one end of the normal continuum of normal activity that lead to long-term adverse effects on their emotional, social, academic, and vocational well-being.

In the early 1980s, Cantwell concluded that clinical and research studies often confused terms, inadequately described patient populations, and in most cases, failed to use any specific diagnostic criteria at all. Similarly in 1982, Barkley reviewed a cross section of papers on hyperactivity (210 studies over 20 years), revealing that only 36% of the studies actually described symptoms of hyperactivity, whereas more than 64% relied simply on the authors’ opinions rather than any diagnostic criteria to categorize patients.

In response to this miserable state of diagnostic validity, the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, initially published in 1994) required the diagnostic criteria for ADHD to be empirically tested and validated in children. Although these efforts strengthened the diagnostic criteria of childhood ADHD and helped to begin identifying subtypes of the disorder, controversy over ADHD in adults continues into the present. Research suggests that adults with ADHD suffer mostly from inattention and deficits in executive function, often leading to low socioeconomic status, frequent job changes, high rates of spousal separation, and poor automobile driving records, among other deficiencies. The available data now posits that 30% to 70% of children suffering from ADHD will have ongoing symptoms as adults. These estimates, however, are entirely a function of the diagnostic criteria used to label adults as disordered. No large-scale validation studies of ADHD criteria in adults have been conducted to date (with the DSM-IV field trials including only school-aged children), and the 2 dominant diagnostic systems (Wender Utah and DSM-IV) identify completely different sets of patients. As a result, adult ADHD today is diagnostically where childhood ADHD was in the 1980s. Without empirically validated criteria, clinician opinion alone usually forms the basis for diagnostic and treatment decisions.

In spite of ongoing controversy, clinicians currently diagnose and treat ADHD in the United States at an unprecedented rate. In the past 4 years, the number of prescriptions given by physicians to treat adult ADHD dou-

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treat ADHD and have different (and perhaps less to agonists, and perhaps modafinil, have been used to α overall results have been contradictory.24 recent clinical studies in patients using carefully prescribed tionally indicted because of abuse and addiction. Though the lack of treatment response in some patients with ADHD also suggests etiologically distinct subtypes of the disorder and argues against the automatic prescription of stimulants to the entire afflicted population.18

At the heart of the concern about overdiagnosis and overtreatment of ADHD, however, is the potential for per- nently debilitating side effects of stimulants. Psychostimulants commonly cause tics, delayed growth, appetite suppression, weight loss, insomnia, headaches, edginess, and increased pulse and blood pressure, as well as other debilitating neurologic sequelae. Cases of acute and chronic amphetamine psychosis, mania, and depression repeatedly have been reported. Studies of rodents have shown that prolonged or extended exposure to stimulants causes hallucinatory-like behavior (termed amphetamine psychosis or neurotoxicity), stereotyped and rotational movements, and hypersensitivity to the psychomotor activating effects of amphetamines, a process known as behavioral sensitization.19-22 Nonhuman primates experience similar behaviors with chronic amphetamine exposure, including persistent hallucinatory-like actions, static posturing, and fine motor stereotypes.23 Additionally, stimulants have been traditionally indicted because of abuse and addiction. Though recent clinical studies in patients using carefully prescribed stimulants have suggested safe and effective use of stimulants, overall results have been contradictory.24

Nonstimulant treatments, including atomoxetine (a norad-renergic specific reuptake inhibitor), bupropion, tricyclic antidepressants, monoamine oxidase inhibitors, α-2 agonists, and perhaps modafinil, have been used to treat ADHD and have different (and perhaps less toxic) side effects and for the most part far less liability to addiction.25 Importantly, nonstimulants may avoid the synaptic remodeling caused by stimulants. Although nonstimulant treatments are traditionally thought to be less efficacious than psychostimulants, categorization of attention-disordered patients into accurate subtypes (through validated diagnostic criteria) would likely highlight specific groups who would most and least benefit from each modality.

There have been increasing numbers of patients referred to our clinic who have received stimulants for a diagnosis of ADHD but who do not satisfy even the loosest set of criteria for the disorder, and often have other untreated psychiatric disorders such as major depression, personality disorder, and addiction. Some have complaints vaguely resembling ADHD, such as falling asleep during afternoon meetings at work, and have often self-referred and self-diagnosed adult ADHD based on lay literature. These patients often wish to continue stimulants despite the fact that the drugs have complicated their course and carry problematic side effects.

Even with the broad-based definition of ADHD currently in use, as few as one third of self-referred adults who believe they have ADHD actually meet DSM-IV criteria.26 By pre- scribing stimulants to individuals who fit this broad-based description, physicians are practicing cosmetic psychopharmacology—offering treatments to patients as a form of enhancement rather than as correction of a disorder. In effect, such prescriptions are essentially attempts to make an individual who is not sick feel better.

ADHD has become an umbrella term for both those with a specific disorder of attention that probably represents a disease state, as well as a large group of patients who have difficulty paying attention for many reasons, including temperament, circumstance, and event interest. Although there are many who argue that this distinction is academic, it is similar to the distinction between those with growth hormone deficiency dwarfism and those with short stature. Adult ADHD is a rapidly developing fad diagnosis for which no validated diagnostic criteria have been developed. The need for research is obvious here, but the need for scrupulous evaluation and consideration of risk and benefit prior to using stimulant medications is essential for clinicians while we wait for further research to be conducted. Stimulants are not benign, and much of the literature regarding treatment of ADHD minimizes the risks of these drugs. Though it is clear that we must treat ADHD in both children and adults and that there are many who need treatment and have not yet received it, it also is clear that many patients are receiving stimulants without an expert evaluation, and with inadequate consideration of risks and benefits.

We have been irresponsible in our use of stimulants (and other cosmetic psychopharmacological treatments such as benzodiazepines) in the past, giving rise to epidemic fad use of bromides, barbiturates, diazepam, alprazolam, phenter- mine, fenfluramine, and many others. Expert evaluation for all patients, careful diagnostic formulation with considera- tion of alternative and complicating conditions, and thoughtful consideration of the risks and benefits of treat- ment must become the standard of care for patients with mental heath conditions. Patients with ADHD should not have to give up treatment if this becomes the standard we meet and, despite the current flaws in research, we are able to treat this condition effectively if we meet this standard and act prudently.
This is far from the only difficult decision we as clinicians face. Dr Paul McHugh once said, “A doctor is a person who uses dangerous treatments with prudence in the face of inadequate information.”

References