



Book Review

Clinicians' and Educators' Desk Reference on the Licensed Complementary and Alternative Healthcare Professions

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Many of us assume that acceptance of integrative medicine hinges on an eventual recognition of its evidence-based claims.

History suggests that the movement's

success more likely will depend upon a more everyday phenomenon: familiarity. Rather than laboratory-based research, it is the public's increased familiarity with acupuncture, chiropractic, therapeutic massage, nutritional supplementation, and meditation, for example, to which we must credit having progressed from "alternative" to "complementary" to now "integrative" medicine status. In order for the coming generation of integrative health care delivery models to succeed, administrators and CAM modality practitioners shall have to

evolve a familiarity based on convergence: a multidisciplinary sense of one another's strengths and skills.

The Academic Consortium for Complementary and Alternative Health Care (ACCAHC) has provided us with a text that maps out for us the nature of the care rendered by these modalities, as well as the education and accreditation of its practitioners. Elizabeth Goldblatt, a member of the Planning Committee of the IOM Summit on Integrative Medicine and chair of the Academic Consortium for CAM, puts it well: "Our main goal is to foster inter-professional education so that all health care practitioners—conventional and complementary and alternative medicine—will have access to information about these licensed fields in order to cultivate clinical, educational and research collaborations."

— *Book review by Jerry Kantor, Vice Chair, AAIM Executive Advisory Board*

Letter to the Editor



PHARMACOLOGIC TREATMENT OF **Attention Deficit Hyperactivity Disorder**

The diagnosis of attention deficit hyperactivity disorder is standardized into types including inattentive, hyperactive, and combined, per the *Diagnostical and Statistical Manual of Mental Disorders*, applicable to all ages. Individuals with ADHD have increased risk for substance abuse (Biederman, Wilens, written communication, March 2005); traffic violations¹; and comorbidities consisting of oppositional defiant disorder, enuresis, major depression, multiple anxiety disorders, conduct disorder, and bipolar disorder (about equal to the general population)².

Contrary to statements concerning brain development in these individuals:

- "Genetic and or early environmental influences... in ADHD are fixed, nonprogressive, and unrelated to stimulant treatment"³
- Imaging studies from group data confirm that abnormalities in frontosubcortical networks (fails to activate) are associated with ADHD.⁴
- Comparative genetic studies indicate the following: panic disorder = 50%; schizophrenia = 70–80%; ADHD = 75%⁵

The mechanisms of action of stimulants involve reuptake inhibition of dopamine and norepinephrine transporter proteins (they are in excess in ADHD, leading to excessive reuptake of these catecholamines, resulting in metabolism and thus deficiencies of these compounds)⁶. Psychopharmacological treatment of ADHD includes:

1. Stimulants (methylphenidate, primarily dopamine; mixed amphetamines—both dopamine and norepinephrine). Studies via PET scans⁷ and psychological testing (CGIS-T)⁸ are indicative of their efficacy.
2. Atomoxetine (selective norepinephrine reuptake inhibitor). Controlled placebo studies with $p < .001$ per Michelson D., et al.⁹
3. Antidepressants (bupropion or TCAs).
4. Anti-narcoleptics (modafinil).
5. Alpha-2 adrenergic receptor stimulants (guanfacine).

Commonality of 1) through 5) is dopaminergic or noradrenergic mechanism of action. Of course, there are numerous adjunctive and augmentative treatments, including nutrition, corrective learning, and other behavioral therapeutic approaches.

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— *Jerald H. Ratner, MD, PA, FFAIM*