

ADAPTING PSYCHOTHERAPY TO MEET THE NEEDS OF ADULTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

J. RUSSELL RAMSAY AND ANTHONY L. ROSTAIN

University of Pennsylvania

Requests for the assessment and treatment of attention-deficit/hyperactivity disorder (ADHD) among adult patients are on the rise. The findings from longitudinal research indicate that clinically significant symptoms persist into adulthood for many children diagnosed with ADHD. Many other patients' symptoms are not identified until they are in active treatment for other complaints in adulthood. Thus, psychotherapists are increasingly likely to encounter adult patients with ADHD-related issues. However, the same core symptoms of inattention, impulsivity, and hyperactivity that create functional problems in patients' lives also interfere with the effectiveness of psychotherapy. The aim of this article is to summarize the accumulated clinical and empirical wisdom about how to effectively adapt psychotherapy to meet the needs of adult patients with ADHD.

Attention-deficit/hyperactivity disorder (ADHD) is a common neurobehavioral disorder of childhood that has wide-ranging effects on behavior, learning and cognition, and emotional functioning (Barkley, 1998; Brown, 2000; Wender,

2000). It is estimated that ADHD affects about 3–5% of school-age children in the United States (American Psychiatric Association [APA], 2000). Barkley (1998) summarized prevalence studies of ADHD that used established diagnostic criteria for children and adolescents. The prevalence rates ranged from 2% to 9.5% ($M = 4.9\%$) of children and adolescents when using *DSM-III* criteria (APA, 1980) and 1.4% to 13.3% ($M = 5.9\%$) when using adults' ratings of *DSM-III-R* criteria (APA, 1987). Reviews of international samples show similar prevalence rates of ADHD in children in other countries, indicating that ADHD is not simply an American disorder (Barkley, 1998; Faraone, Sergeant, Gillberg, & Biederman, 2003), though diversity issues remain understudied (Gingerich, Turnock, Litfin, & Rosén, 1998).

The prevalence of ADHD in adults falls between 4 and 5%, on the basis of surveys of nonclinical samples of college students and of adults applying for their driver's licenses (Barkley, 1998; DuPaul et al., 2001; Heiligenstein, Conyers, Berns, & Smith, 1998; Murphy & Barkley, 1996b). Recent prospective longitudinal research indicates that considerable numbers of children diagnosed with ADHD (50–70%) continue to experience clinically significant symptoms as adults (Barkley, 1998; Biederman et al., 1996; Klein & Mannuzza, 1991; Mannuzza, Klein, Bessler, Malloy, & LaPadula, 1998; Weiss & Hechtman, 1993).

By the time these children with ADHD reach adulthood and seek treatment, however, it is rare that ADHD is their sole reason for seeking help. It is estimated that 70–75% of adults presenting for treatment carry at least one additional psychiatric diagnosis (Shekim, Asarnow, Hess, Zaucha, & Wheeler, 1990; Wilens, Biederman, & Spencer, 2002). The prevalence rates for anxiety disorders (24–43%) and depression (major depression: 16–31%; dysthymia: 19–37%) among clinic-referred adults with ADHD are comparable to those seen in children with ADHD and occur more frequently than would be predicted by

J. Russell Ramsay and Anthony L. Rostain, ADHD Treatment and Research Program, University of Pennsylvania.

We thank Lisa Mimmo for her helpful comments on an earlier version of this article.

Correspondence regarding this article should be addressed to J. Russell Ramsay, PhD, ADHD Treatment and Research Program, University of Pennsylvania, 3535 Market St., #2027, Philadelphia, PA 19104-3309. E-mail: ramsay@mail.med.upenn.edu

chance (Barkley, 1998; Tzelepis, Schubiner, & Warbasse, 1995; Wilens et al., 2002). The prevalence of substance use disorders among patients with ADHD is almost double that seen in the general population (Rostain, 2003), with 32–53% reporting alcohol use problems and 8–32% reporting other substance use problems (Barkley, 1998; Biederman, Wilens, Mick, Spencer, & Faraone, 1999; Shekim et al., 1990; Tzelepis et al., 1995).

There are gender ratio differences in the prevalence of the disorder in clinic versus community samples of children with ADHD. In clinic-referred childhood samples, male patients typically outnumber female patients about 8–10:1, depending on the study (Ross & Ross, 1982; Wilens et al., 2002). This ratio is lower in community samples of children, with male individuals outnumbering female individuals about 3:1 (Arnold, 1996; Gaub & Carlson, 1997), and there are some data to suggest that these differences decrease as the age of the sample increases, with male adults outnumbering female adults by only 2:1 (Cohen et al., 1993; Murphy & Barkley, 1996b; Offord et al., 1987; Wilens et al., 2002). Such findings suggest that female children with ADHD are more likely to be underidentified (and thus undertreated) than are male children with ADHD, presumably because of the fact that female children with ADHD exhibit fewer disruptive externalizing behaviors and are less likely to be diagnosed with conduct disorder (Arnold, 1996; Biederman et al., 1994, 2002; Gaub & Carlson, 1997; Roney, Miller, & Nadeau, 1995; Rucklidge & Kaplan, 1997; Wilens et al., 2002). Female and male adults are generally considered to be similar in terms of their patterns of difficulties in academic and psychosocial functioning and in their risk for comorbid depression and anxiety (Biederman et al., 1994), though it has been suggested that women with ADHD have higher rates of anxiety and depression (Roney et al., 1995; Resnick, 2000). In addition to having difficulties related to academic/vocational functioning, women with ADHD often experience difficulties fulfilling traditional role expectations, such as mother, spouse–partner, or homemaker (Roney et al., 1995; Solden, 1995).

Adults with ADHD are more likely than control participants to experience functional problems in academic/vocational settings and relationships and when handling various affairs of daily living (Barkley, 2002a; Barkley, Murphy, &

Kwasnik, 1996; Murphy & Barkley, 1996a; Weiss & Hechtman, 1993; Weiss, Murray, & Weiss, 2002). Findings that the symptoms of ADHD endure into adulthood have led to a reconceptualization of ADHD as a developmental syndrome of impaired executive functioning that significantly affects an individual's reciprocal interactions with the environment throughout the life span (Brown, 2000; Ramsay & Rostain, 2003). Impairments in the executive functions subserve the specific difficulties with planning, self-control, and impulsivity that are the hallmark problems of ADHD (Barkley, 1997).

The aim of this article is to summarize the accumulated clinical and evidence-based wisdom about how to effectively adapt therapy to the needs of adult patients with ADHD to increase the likelihood of positive therapeutic outcomes. To do so, we briefly review the phenomenology of ADHD insofar as it affects the process of psychotherapy. We then recommend some ways to adapt the delivery of psychotherapy with respect to the problems for which adults with ADHD commonly seek treatment. We hope that these recommendations will provide practicing psychotherapists with scaffolding on which to develop effective treatment plans for their adult patients with ADHD.

Role of Psychotherapy in Treating Adult ADHD

Adults in increasing numbers are seeking help for problems related to ADHD, either seeking diagnostic evaluations with the expressed purpose of assessing ADHD symptoms or after determining in the course of active treatment that their initial presenting complaints (e.g., depression, anxiety, relationship problems) are actually complicated by underlying issues of ADHD (Weiss, Hechtman, & Weiss, 1999; Weiss & Murray, 2003; Weiss et al., 2002). Although there are effective therapies for these comorbid problems, identifying the role of ADHD in a patient's life can be like finding a missing puzzle piece that helps clarify a muddled picture. A careful assessment and accurate diagnosis is the first therapeutic intervention for adults with ADHD (see Barkley, 1998; Nadeau, 1995; Wender, 1995; and Weiss et al., 1999). When an individual's symptoms are accurately diagnosed, it can be an emotional and liberating experience to realize that one's longstanding problems and

seemingly self-defeating behavior patterns that had been attributed to "laziness" or to a character flaw instead have a sound neurobiological explanation. At the same time, however, the diagnosis might trigger strong feelings of anger and/or sadness at the thought of how one's life could have been different had ADHD been identified earlier.

Pharmacotherapy, and more specifically the use of psychostimulants, stands out as the first line of intervention to be considered. The effectiveness of these medications in the treatment of childhood symptoms has been documented by an overabundance of outcome studies, making stimulants the most widely studied medication prescribed to children (American Academy of Child and Adolescent Psychiatry [AACAP], 1997; Greenhill, 2001). Psychostimulants are also highly effective in the treatment of ADHD symptoms in adult patients (Spencer et al., 1996; Weiss & Murray, 2003; Wilens, Spencer, & Biederman, 2000). In fact, many adult patients with relatively mild and uncomplicated cases of ADHD may respond well to pharmacotherapy alone.

More often in clinical practice, however, mental health professionals encounter patients who are not responsive to medications or whose clinical presentations are obfuscated by the presence of comorbid diagnoses (e.g., mood disorder, learning disorder, substance abuse) and/or complex developmental experiences. Moreover, pharmacotherapy alone is insufficient for upward of 50% of adult patients with ADHD (Wilens et al., 2000). The positive medication effects reported in the literature often reflect improvements on measures of the core symptoms (e.g., symptom checklists). Although these improvements provided by medications are impressive and important, they do not necessarily translate into satisfactory functional improvements in the daily lives of patients, such as improvements in self-control and organization (Weiss et al., 1999). Thus, many patients seek some form of treatment instead of or in addition to medications.

Multimodal treatment, personalizing a combination of several treatment approaches and support services to meet a patient's diverse needs, is widely endorsed for the treatment of ADHD for patients of all ages (AACAP, 1997; MTA Cooperative Group, 1999; Resnick, 2000; Robin, 1998; Weiss et al., 2002). Psychotherapy is a core component of multimodal treatment for most patients. For children, the primary objective of ther-

apy is training adult caregivers (e.g., parents, teachers) in principles of behavior management (Barkley, 2002b). Children with ADHD also benefit from a therapeutic emphasis on developing effective socialization skills, as these children are at a higher risk for interpersonal difficulties (Gaub & Carlson, 1997; Henker & Whalen, 1999). Adolescents benefit from family sessions focused on collective problem-solving and maintaining constructive communication among family members, with the teen often participating in supplementary individual sessions dedicated to addressing various developmental stressors (Robin, 1998). Although the diagnosis of ADHD in children and adults relies heavily on behavioral assessments (i.e., behavior checklists), thorough evaluations also include a psychoeducational component to assess for the presence of learning disabilities, which require additional specialized academic tutoring and support. Adults with ADHD often present with two major therapy goals: (a) developing coping strategies with which to manage their symptoms of ADHD and (b) dealing with the pervasive emotional and functional effects that living with ADHD has had on their lives (including the presence of comorbid disorders; Brown, 2000; Hallowell, 1995; McDermott, 2000; Ramsay & Rostain, 2003).

Yet, the very problems faced by these adults in their lives, which stem from the characteristic executive function problems of ADHD, pose challenges to their getting the most out of psychotherapy. These challenges include problems such as being unable to concentrate on a theme during a session, having difficulty remembering and generalizing insights developed during sessions to one's life, and poor follow through on therapeutic homework, to name a few. At their worst, these difficulties could lead to premature termination and/or a negative therapy experience that would replicate and perpetuate the sense of frustration and failure that the patient likely experienced throughout his or her life as a consequence of living with ADHD.

With the increasing recognition that ADHD affects individuals throughout the life span and with adults seeking treatment for ADHD in greater numbers (or having their ADHD identified during a course of therapy), it is important that psychotherapists who treat these patients recognize the challenges they are liable to face in the course of treatment. Therapists likely will have to make adaptations to their standard clinical ap-

proaches in order to improve clinical outcomes for these patients. Although there is a need to augment existing anecdotal clinical information with more clinical research to guide treatment selection, there are some preliminary outcome data of the effectiveness of psychosocial treatments for adult ADHD that take into account what we know about the neuropsychological and psychosocial effects of ADHD in adulthood.

How Does ADHD Affect Treatment?

Although the notion of adult ADHD seemed to burst onto the scene out of nowhere in the 1990s, researchers and clinicians versed in the phenomenology of ADHD had long observed its enduring effects as their child patients grew up and became adults (Wender, 1975; Wender, Reimherr, & Wood, 1981; Wood, Reimherr, Wender, & Johnson, 1976). The observation that adult patients suffering from “adult brain dysfunction” appeared less impaired than child patients with “minimal brain dysfunction” was attributed to their increased ego maturation, giving adults greater measures of internalized control and self-awareness than are seen in children (Bellak, 1977; Mann & Greenspan, 1976).

It was not until relatively recently that longitudinal research confirmed the enduring nature of ADHD symptoms in young adult and adult samples. Considering the chronic nature of the core symptoms and the many concomitant psychiatric diagnoses and functional problems often experienced by these adults, it makes sense that many adults with ADHD would seek psychotherapy to address their myriad difficulties. Once engaged in traditional psychotherapy, however, the same difficulties that cause problems in their day-to-day lives would arise in the consulting room. Patients may frequently be tardy for or miss altogether their scheduled appointments. Patients may forget to take their medications and/or forget to obtain prescriptions for refills from their prescribing health professionals in a timely manner. These and similar problems that pose significant challenges to the therapists who treat adults with ADHD in psychotherapy do not fit within traditional conceptualizations used to understand emotional disorders. For example, Ratey, Greenberg, Bemporad, and Lindem (1992) identified a sample of 60 psychiatric patients deemed “treatment failures” as having symptoms of ADHD that had gone misdiagnosed. Consequently, their

difficulties were conceptualized as stemming from noncompliance, low self-esteem, and defenses that became the focus of what were ultimately ineffective therapies. Without taking into account ADHD’s neurologic foundation, unstructured therapies that place a premium on monitoring the associations presented by patients run the risk of becoming too unfocused to be effective. Moreover, therapies focused more specifically on behavior change and skill development can be derailed by poor follow through on therapeutic homework and overlooking the emotional effects for patients living with ADHD.

Historically, many of the aforementioned behaviors would have been chalked up to the patient’s unconscious resistance and treated as the source of the symptoms. However, previous psychoanalysts (the prevailing model of psychotherapy at the time) familiar with ADHD acknowledged its biological underpinnings and cautioned against jumping too quickly to that conclusion. At the same time, they cautioned against overattributing therapy-interfering behaviors to ADHD, as this response would risk supporting patients’ presumed rationalizations against seeking further insight, thereby reinforcing their unconscious negative self-images (see Mann & Greenspan, 1976).

Modern psychoanalysts and psychodynamic therapists have assimilated the neuropsychology of ADHD into their case formulations (Zabarenko, 2002). Carney (2002) noted that the behaviors of one of her patients in psychoanalysis, namely, engaging in obsessive and magical thinking, were simultaneously defenses against and compensations for various features of his ADHD. From an emotional standpoint, these cognitive styles served to intellectualize therapy sessions, thereby defending the patient against strong negative affect associated with his chronically erratic functioning. At the same time, from a neuropsychological standpoint, his cognitive style served to help him slow down his information processing and his actions in order to maximize his ability to size up a situation and to apply his decision-making skills.

Still other defenses noted by psychodynamic therapists include a tendency of patients with ADHD to “escape into action” in order to avoid dealing with “bewildering and confusing” emotions that are regularly activated when facing their problems (Bemporad & Zambenedetti, 1996). Patients may be ambivalent about under-

taking treatments that, although focused on treating a disorder that has wreaked havoc in their lives, have the potential unwanted effects of removing desirable facets of ADHD considered to represent constituent parts of their identities.

The stress associated with facing these difficulties in therapy can be overwhelming and may exacerbate the core symptoms. Stress reactions are intensified by the affective instability and poor emotional regulation that are implicated as being lesser renowned components of ADHD (Barkley, 1997; Wender, 1995). Patients' defenses may lead to a tendency to self-medicate or to "act out" by seeking different types of medications, thus diverting focus from changing their problematic behavior patterns. These defenses may also lead to therapy-interfering behaviors that make exploring their behavioral and emotional patterns more difficult than usual or impossible in cases when the aforementioned stressors contribute to patients dropping out of therapy altogether.

Patients with ADHD often already enter therapy with a chronic sense of being a failure and of being unable to meet the demands of daily life, often described in terms of a ubiquitous low self-esteem. These attitudes come from a history of having difficulties fulfilling life's demands that are thought to be within their capacities, frequently described as "not fulfilling my potential" or having to work much harder than others for similar outcomes. It is interesting to note that a study of a group treatment for adults with ADHD noted that in addition to hypothesized improvements in attention and organization, patients completing treatment reported *decreases* in measures of self-esteem (Wiggins, Singh, Getz, & Hutchins, 1999). The authors' interpretation of these counterintuitive data was that the decreases in self-esteem reflected a "coming to terms" with the severity of their deficits and a mourning over lost opportunities in the face of improvements from therapy. It was hypothesized that this dip in self-esteem would be temporary, though follow-up measures were not obtained in this study.

Because of their sensitivity to failure and their difficulties associated with problem-solving, there is often a sense of "magical thinking" among adults with ADHD, that is, looking for simple, quick solutions to problems or trusting that these problems will somehow be rectified on their own or will simply go away. In cognitive

therapy terms, this magical thinking could be considered an extension of a "self-mistrust" or "inadequacy" schema, core beliefs that the patient cannot adequately rely on his or her consistency of follow through or coping abilities. Instead of developing and refining a sense of trust in his or her relative dependability and problem-solving skills, the individual responds to stressors by engaging in inordinate levels of avoidance and procrastination, hoping that these problems will somehow work out.

This magical thinking may contribute to many patients' unrealistic expectations about the curative effects of medications, the nature of change in psychotherapy, and the effects they expect to see in their daily lives. Patients may overestimate the "expert" clinician's role in treatment and underestimate their role in making changes in their lives. The treatment alliance will benefit from a discussion of the nature of the change process in psychotherapy, the role of the patient in this process, and—particularly when addressing the symptoms of ADHD—normalizing setbacks as grist for the mill in therapy.

A related cognitive pattern is that of externalizing responsibility for one's circumstances. We do not mean the frequently levied charge that ADHD is a convenient excuse for having achievement difficulties, reflecting a societal trend of shirking personal responsibility by assigning blame to others for problems. Rather, just as a patient may place too much faith in medications because of self-doubt, some patients may respond to a diagnosis of ADHD with excessive externalization of responsibility, sometimes referred to as adopting a "victim role." Patients with this mindset might place a premium on securing their "rights" in terms of accommodations from others without making commensurate efforts in changing their own behaviors. Although becoming one's own advocate is a skill that is helpful to many patients, an approach skewed to externalization runs the risk of alienating others (including therapists) and leaving the patient without the very help he or she so vigorously pursues—the essence of a self-defeating behavior. When these thoughts and behaviors are conceptualized and framed as attempts at coping with chronic ADHD, they become issues for the therapeutic agenda.

It is equally important for therapists to heed these reminders that their patients' resistance reflects self-protective processes. More specifi-

cally, therapists must be mindful of their own reactions to ADHD patients and how these reactions affect treatment. Although this is a useful suggestion for clinicians in general, the chronic and pervasive nature of the symptoms of ADHD can be particularly frustrating in psychotherapy. It is important for therapists to be aware of the difficulties faced by their adult patients with ADHD, particularly the ones affecting the psychotherapy process, so that they can be conceptualized and addressed therapeutically. In the next section, we discuss specific ways to adapt psychotherapy to meet the needs of adult patients with ADHD.

Adapting Therapy

As was previously mentioned, Ratey et al. (1992) studied a clinical sample of 60 patients considered “treatment failures” but who were later found to meet diagnostic criteria for previously unrecognized ADHD. After receiving the diagnosis of ADHD, the patients were prescribed medications (i.e., desipramine or methylphenidate) to treat their core symptoms, which subsequently improved significantly. Furthermore, the psychotherapeutic approach for these patients focused on educating them about ADHD, reinforcing that their difficulties were the result of neurogenetic factors (rather than character flaws, resistance, or low self-esteem), and on developing new coping strategies.

The empirical foundation for psychosocial treatments for adults with ADHD is scant but growing. Existing clinical research has provided preliminary evidence of the effectiveness of skill-based group treatments (Hesslinger et al., 2002; Stevenson, Whitmont, Bornholt, Livesey, & Stevenson, 2002; Wiggins et al., 1999) and of individual cognitive therapy (Rostain & Ramsay, 2005; Safren, Sprich, Chulvick, & Otto, 2004; Wilens et al., 1999) for adult patients, each targeting the core symptoms and associated problems of ADHD.

Drawing from the extant research on psychosocial treatments for adult ADHD, from emerging longitudinal studies of the effects of ADHD, and from the accumulation of clinical observations of mental health professionals versed in adult ADHD, a collective clinical wisdom has grown regarding the need for multimodal treatment and, more specifically, the various components of this treatment (AACAP, 1997; Barkley,

1998; Brown, 2000; Hallowell & Ratey, 1994; Hesslinger et al., 2002; Nadeau, 1995; Resnick, 2000; Rostain & Ramsay, 2005; Safren et al., 2004; Stevenson et al., 2002; Weiss et al., 1999; Wiggins et al., 1999; Wilens et al., 1999). Commonly cited components of the multimodal treatment approach are medication management, psychotherapy, academic support services, vocational counseling, coaching, support groups, education, and so forth.

Clinicians providing psychotherapy to adults with ADHD soon recognized that unstructured, free-association therapies would be predominantly ineffective with these patients. That is, these patients’ executive functioning difficulties, which result in lack of focus, inefficient memory, and difficulty following through on tasks, were not a good match for this therapy format. Although insight-oriented therapies were recommended for helping these patients address deep-seated issues, managing the effects of the core symptoms of ADHD was deemed more suited for focused intervention approaches, which strive to impart coping skills that extend beyond the consulting room and the traditional therapy hour (Hallowell & Ratey, 1994; Murphy & LeVert, 1995). What follows are some important modifications to psychotherapy-as-usual in order to make it more beneficial for adult patients seeking treatment for ADHD.

Active Involvement of the Therapist

Hallowell and Ratey (1994) suggested that therapists adopt a more interactive, directive role in therapy, actively refocusing patients to the therapeutic agenda rather than getting too far off track in the hopes of unearthing some important emotional material. Considering the tendency of ADHD patients to get off track in their daily lives, an unstructured therapy approach runs the risk of replicating these frustrations by following interesting therapeutic leads and exploring some interesting observations but in the end finding that the main objectives of therapy have not been achieved. The existing studies of psychosocial treatments for adult ADHD each used either a group format actively structured by the therapists (Hesslinger et al., 2002; Stevenson et al., 2002; Wiggins et al., 1999) or a cognitive therapy approach, in which therapists are generally more active and directive with patients than in other

therapy models (Rostain & Ramsay, 2005; Safren et al., 2004; Wilens et al., 1999).

Although the therapeutic stance of the therapist treating an adult with ADHD has been likened to that of a “coach” (Hallowell, 1995), it is important not to lose sight of the interpersonal effects of ADHD. Thus, it has been recommended that in addition to increased activity in session, therapists adopt a humanistic stance to understanding their patients’ struggles with living with ADHD and to make use of the restorative role of the therapeutic alliance.

Restorative Power of the Therapeutic Relationship

The difficulties associated with ADHD also are apparent in interpersonal situations, such as with teachers and other students at school, supervisors, and colleagues at work as well as around friends and family. The explicit (e.g., statements made to the individual) and implicit (e.g., nonverbal information, such as looks of anger) feedback from these relationships provides individuals with information regarding their behaviors. Individuals with ADHD face two salient challenges in relationships. First, their executive functioning deficits mean that they will likely miss some important and subtle social cues about the effects of their behaviors on others. Second, by the time the social cues are overt enough for them to register with individuals with ADHD, they are likely of a negative, critical nature about behaviors that are already difficult for the patient to change.

Striking a balance between normalizing these behaviors in terms of common difficulties associated with ADHD and adopting a problem-solving approach to develop ways to identify, understand, and change these behaviors provides a face-saving approach for dealing with these issues. Patients may be surprised by the absence of criticism from their therapists when discussing these issues, though they may assume their therapists think negatively of them. Thus, it is important for therapists to elicit patients’ thoughts about the discussion of these behaviors and to actively inquire about “mind-reading” (e.g., “Do you have any thoughts about what I might be thinking right now?”). By dealing with these potentially therapy-interfering behaviors in a constructive fashion, patients with ADHD are more likely to be able to engage in an exploration of them rather than falling into interpersonal reen-

actments such as being overly contrite and apologetic (e.g., “bad child”) or leaving therapy altogether.

The role of the therapeutic alliance in the treatment of adult ADHD remains understudied, though Hesslinger et al. (2002) reported that patients rated the group format (i.e., interaction with other adult with ADHD) and the therapists as the first and third most helpful treatment factors, respectively. Stevenson et al. (2002) recruited “coaches” who were assigned to give individualized assistance to each participant in their group treatment. The specific therapeutic approaches for adult ADHD patients guiding the cognitive therapy studies explicitly focused on the importance of many of the therapeutic alliance factors mentioned above (McDermott, 2000; Ramsay & Rostain, 2003), though no specific data regarding these alliance factors were collected.

Setting Reasonable Ground Rules for Therapy

Another interpersonal factor is the relationship into which the patient with ADHD enters with a therapist, who presumably has specific attendance and performance expectations for him or her. Clinicians will have to make decisions about how to handle the business of doing therapy in terms of setting some reasonable ground rules regarding attendance and billing for late arrivals or missed appointments. We recommend that therapists take into account their patients’ unique circumstances and be willing to adjust these ground rules when appropriate, such as prorating a bill for a patient who arrived late but who resisted his typical strategies of totally “blowing off” the appointment when he recognized he was running late. Regardless of the final ground rules, a clinical priority is the tactful and constructive review of these rules and a review of the particular behaviors in question as they arise, exploring and processing the patient’s reaction to them.

Psychoeducation

The therapist is an important source of information about ADHD for the patient. The clinician need not develop a specialty in treating ADHD in order to recommend informative books (e.g., Hallowell & Ratey, 1994; Murphy & LeVert, 1995; Wender, 2000) and reputable online resources (e.g., www.chadd.org) that help patients learn more about the effects of ADHD. In fact, this

self-study by the patient can be an ongoing therapeutic task that is periodically reviewed in session. This sort of task represents a nice merging of psychoeducation and therapeutic processing of the patient's thoughts and feelings about what was learned (or exploring any difficulties following through on the task) in the service of managing the patient's symptoms. Every published clinical study of psychotherapy for adult ADHD included a psychoeducation component, and it is generally considered a core feature of treatment.

Problem-Solving Focus

Of course, because the patient's difficulties working within the structure of therapy likely mimic difficulties in other life domains, therapy is a handy laboratory for developing solutions that promise to generalize to other life domains, one of the goals of all forms of psychotherapy. Difficulties in therapy are anticipated during the construction of a specific problem list for therapy. That is, adults with ADHD disorder often present for treatment with commonly heard complaints of inattention, impulsivity, and disorganization. However, these complaints do not necessarily translate into useful therapy objectives. Patients are encouraged to provide examples of specific problems that illustrate these complaints. A specific problem might be as commonplace as not returning rented videos to a video store on time and having to pay an overdue fine, but it likely represents a sore point for the patient and can be a gateway to discussing and conceptualizing the cognitive and emotional meanings of the problems for the patient. Consequently, difficulties following through on therapeutic homework and/or remembering therapy appointments also could be anticipated. Thus, should these difficulties occur, the therapist and patient could say, "We knew this might happen, now how do you plan to handle it?"

Armed with such a problem list, psychotherapy for ADHD involves a component of active and collaborative problem-solving. In fact, similar to psychoeducation, the available clinical research literature on psychotherapy for adult ADHD is unanimous in its concentration on specifically defined problems, either in the form of prescribed skill modules (Hesslinger et al., 2002; Safren et al., 2004; Stevenson et al., 2002; Wiggins et al., 1999) or patient-generated problem definitions (Rostain & Ramsay, 2005; Wilens et al., 1999).

This focus does not entail the therapist simply telling the patient what to do but rather taking the time to explore in detail the components of the recurring problems the patient faces. For example, for patients who report that they chronically run late for scheduled meetings, an off-the-cuff suggestion by the therapist to leave earlier would be unhelpful and the patient would likely say something along the lines of, "I know I should just start getting ready earlier. I would tell someone else to do it, but I cannot seem to do it myself." Lateness becomes a relevant therapeutic agenda item and, further, it could be predicted that the patient will at some point be late for and/or miss a therapy appointment. Meticulously exploring the process by which a patient runs late (e.g., behavioral analysis) provides valuable information from which to develop some options for change. These options will be different for a patient who loses track of time and does not have sufficient external reminders from those for a patient who is aware of the time but who has procrastinated on other tasks and thus feels compelled to try to do "one more thing" before leaving for an appointment and ends up running late.

The many functional difficulties described by adults with ADHD are the observable manifestations of neurologic problems and are the most recent examples of longstanding functional problems. Apart from deserving attention in their own right, they provide entry points for discussing patients' developmental histories that are often replete with numerous frustrations that contribute to what patients describe as a pervasive negative self-image. Thus, an important aspect of treatment is developing a case conceptualization of the confluence of developmental issues, core beliefs, compensatory strategies, and frequent grief reactions to being diagnosed with ADHD.

Case Conceptualization

The case conceptualization provides the guiding framework for therapy, specifically in the cognitive therapy models for ADHD treatment that have been studied (McDermott, 2000; Ramsay & Rostain, 2003; Rostain & Ramsay, 2005; Safren et al., 2004; Wilens et al., 1999). It provides an understanding of the patient in terms of a working hypothesis about the connection among developmental experiences, the system of core beliefs, and their relevance for the patient's current problems. The underlying neurobiology

and neuropsychology of ADHD are important threads affecting the case conceptualization insofar that they have affected the patient's developmental experiences of and interactions with the environment. In fact, the symptoms of ADHD have such a profound and pervasive effect on development that it has been described as an "Axis I.5" disorder (Ramsay & Rostain, 2003). The conceptualization provides an understanding of a patient's experience and a blueprint for interventions at a number of different levels.

Core beliefs. The connection between the patient's daily frustrations and how, over the course of a life, the experiences of living with ADHD congeal into belief systems about one's self, one's future, and the world (the cognitive triad; A. T. Beck, 1967) represent an important intervention point in psychotherapy for these patients. By discussing examples of the patient's problems and exploring similar developmental experiences and their idiosyncratic meanings for the individual, the patient and clinician collaboratively develop an overall conceptualization of the patient's belief system. In cognitive therapy terms, these accumulated experiences take the form of cognitive structures called *schemas*, the specific content of which are the *core beliefs*, our deepest, most fundamental beliefs about who we are and how the world works (J. S. Beck, 1995). These beliefs are implicit and unquestioned, reflecting one's tacit construction of "how the world is," which, not surprisingly, exerts significant influence on affect and behavior.

Compensatory strategies. As schemas are predominantly implicit and not easily modifiable, more immediate inroads can be made through the identification and modification of *compensatory strategies*. *Compensatory strategies* are those behaviors that may seem at first glance to be adaptive but, in fact, that maintain a maladaptive schema by acting in concert with the schema to create self-defeating patterns or a seemingly self-fulfilling prophecy.

A common compensatory strategy seen in adults with ADHD is *avoidance*. For many adults with ADHD, even the most mundane tasks have become associated with feelings of incompetence and failure. The situation can be complicated when the person has insufficient coping and organizational strategies in the first place. The individual likely experiences sinking emotions and negative predictions when faced with a challenging task. When the resulting physical feelings and

distressing cognitions arise, they can be instantly relieved by escaping the situation rather than facing it. Thus, avoidance is negatively reinforced by the immediate relief it provides from emotional discomfort. In most cases, however, this strategy only defers the task, resulting in escalating distress and the accumulation of negative consequences of avoidance. For instance, a patient with chronic disorganization with paperwork regularly responded to the arrival of her monthly bills by setting them aside until she could give them her full attention, thinking, "I'll deal with this a little later when I'm more focused." She would then forget about the bills until they happened to resurface, often after payment was due—seemingly reinforcing her sense of inadequacy and shame (e.g., "I cannot handle normal responsibilities").

Reviewing the cognitive, emotional, and behavioral patterns of avoidance yields important clinical data regarding the person's functioning and provides inroads to the activated belief system. This belief system is not the etiology of ADHD but is certainly an important factor in the expression and maintenance of related behaviors. Intervening at the level of the compensatory strategy is very efficient as there is an opportunity to develop behavioral alternatives, to explore ambivalence about this prospect, and, consequently, to elicit the relevant core beliefs related to living with ADHD that maintain and are maintained by the compensatory strategies. Said differently, it is a way to interrupt the cycle.

Processing grief. Another theme to be aware of during this therapeutic exploration is the grief reaction that most patients experience during the course of treatment. The diagnosis of ADHD and the emergent understanding of its effects across the life span are quite sobering for many individuals. Many patients struggle with the acceptance and acceptability of the diagnosis, perhaps thinking of it as an unacceptable "excuse" or as a stigma. As was mentioned earlier, one treatment study found that patients completing a group treatment reported *lowered* self-esteem, perhaps because of finally facing their problems and contemplating their "lost opportunities" (Wiggins et al., 1999). In fact, once a patient comes to terms with the implications of the diagnosis, it can trigger a reflection and reprocessing of one's life that leaves one asking "what if" questions regarding the different course one could have taken had one been aware of the effects of and received

adequate treatment for ADHD earlier in life. Supporting and validating the patient's exploration of these issues helps to determine the course of treatment in terms of what the patient hopes to change.

In facing the problems the patient wishes to change, however, it is important for the therapist to realize the patient has likely faced inordinate difficulties and setbacks that make him or her sensitive to "failure." The therapist must be sensitive to this fact and acknowledge it in order to instill hope and foster a sense of resilience in terms of engaging in the process of change through psychotherapy. Thus, the case conceptualization of ADHD weaves together an understanding of its biological underpinnings, of the individual's unique assortment of core beliefs and compensatory strategies stemming from his or her developmental experiences, and, consequently, of the specific skills and coping strategies required for the patient to achieve specific treatment goals. This conceptualization also allows a therapist to respond confidently and hopefully to the patient's question, "How is this treatment going to be different from what I've already tried?" This query can be answered both in terms of changing beliefs and in terms of changing behavior patterns, both of which will help the patient to better live with ADHD.

Strategies for Living With ADHD

Therapy has the potential of becoming an important place for the adult patient with ADHD. It provides the patient with a secure forum for understanding the effects of ADHD and orchestrating an overall coping plan for living with it, not unlike how people construct plans to handle specific dietary restrictions or chronic health issues. We mentioned earlier the importance of encouraging the patient to engage in a program of self-education about ADHD. As the research on psychosocial treatments for adults with ADHD is preliminary, none of the published studies focused specifically on helping patients identify additional therapeutic resources they might need (e.g., tutoring, vocational counseling). However, implicit in these studies and the adult ADHD literature is the need for multimodal treatment and coping support for many of these patients.

It becomes apparent for many patients that psychotherapy and self-help alone are not suffi-

cient to fulfill their functional needs. Although many patients are prescribed medications to treat ADHD and later seek psychotherapy, a sizable number of patients in psychotherapy decide to seek concurrent pharmacotherapy. The decision to pursue a medication evaluation and subsequent issues regarding medication compliance are important to address in therapy.

Depending on the specific difficulties encountered by the individual, adjunctive treatments such as academic support, vocational rehabilitation, disability services, organizational coaching, and support group participation may be helpful. The therapist and patient can collaboratively explore the potential benefits of these and other additional services and, when indicated, ambivalence the patient might have about following through on them. Again, exploring these issues is likely to reveal beliefs related to taking medications, seeking academic tutoring, requesting academic accommodations, and so forth that are ego dystonic for the individual. The goal should not be to coerce the patient into unquestioningly accepting these recommendations but rather to explore his or her ambivalence, ensuring that whatever decision the patient makes will be informed rather than emotional and/or reactive.

Finally, therapy can be a place where the patient works out issues related to various coping strategies and tools that help negotiate the challenges of living in an information age with symptoms that interfere with information processing. In addition to helping patients develop their personal coping strategies for managing the symptoms of ADHD, therapists can help them to foster a sense of resilience and competency in dealing with the demands of life. In essence, therapy returns to the issue with which we started: anticipating and normalizing setbacks as predictable problems to be solved rather than viewing them as evidence of some sort of personal or moral failure. Thus, adults with ADHD who complete adequate treatment can appear to have gone through a transformation. That is, patients start as disempowered "victims" of ADHD, then become "proactive" patients with ADHD, and, ultimately, leave treatment as individuals "living" with ADHD, having integrated self-awareness and coping skills into their individual lifestyles.

Summary

The enduring nature of the symptoms of ADHD for adults has only recently come to light in the clinical literature. Although the field is not yet able to offer definitive psychotherapy guidelines, there is a growing consensus regarding effective treatment strategies. The aim of this article has been to summarize the prevailing clinical wisdom, informed by clinical observation and preliminary research, regarding adapting psychotherapy to meet the needs of adult patients with ADHD. Although more work and research are needed to optimize psychosocial treatment options for adults with ADHD, it is becoming clear that ADHD can be counted as another “biological” disorder for which psychotherapy can be an effective treatment option.

References

- American Academy of Child and Adolescent Psychiatry. (1997). Practice parameters for the assessment and treatment of children, adolescents, and adults with attention-deficit/hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(10, Suppl.), 85S–121S.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- ARNOLD, L. (1996). Sex differences in ADHD: Conference summary. *Journal of Abnormal Child Psychology*, 24, 555–569.
- BARKLEY, R. A. (1997). *ADHD and the nature of self-control*. New York: Guilford Press.
- BARKLEY, R. A. (Ed.). (1998). *Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment* (2nd ed.). New York: Guilford Press.
- BARKLEY, R. A. (2002a). Major life activity and health outcomes associated with attention-deficit/hyperactivity disorder. *Journal of Clinical Psychiatry*, 63(Suppl. 12), 10–15.
- BARKLEY, R. A. (2002b). Psychosocial treatments for attention-deficit/hyperactivity disorder in children. *Journal of Clinical Psychiatry*, 63(Suppl. 12), 36–43.
- BARKLEY, R. A., MURPHY, K., & KWASNIK, D. (1996). Psychological adjustment and adaptive impairments in young adults with ADHD. *Journal of Attention Disorders*, 1(1), 41–54.
- BECK, A. T. (1967). *Depression: Causes and treatments*. Philadelphia: University of Pennsylvania Press.
- BECK, J. S. (1995). *Cognitive therapy: Basics and beyond*. New York: Guilford Press.
- BELLAK, L. (1977). Psychiatric states in adults with minimal brain dysfunction. *Psychiatric Annals*, 7, 575–589.
- BEMPORAD, J., & ZAMBENEDETTI, M. (1996). Psychotherapy of adults with attention-deficit disorder. *Journal of Psychotherapy Practice and Research*, 5, 228–237.
- BIEDERMAN, J., FARAONE, S. V., MILBERGER, S., CURTIS, S., CHEN, L. MARRS, A., et al. (1996). Predictors of persistence and remission of ADHD: Results from a four-year prospective follow-up study of ADHD children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 343–351.
- BIEDERMAN, J., FARAONE, S. V., SPENCER, T., WILENS, T., MICK, E., & LAPEY, K. A. (1994). Gender differences in a sample of adults with attention deficit hyperactivity disorder. *Psychiatry Research*, 53, 13–29.
- BIEDERMAN, J., MICK, E., FARAONE, S. V., BRAATEN, E., DOYLE, A., SPENCER, T., ET AL. (2002). Influence of gender on attention deficit hyperactivity disorder in children referred to a psychiatric clinic. *American Journal of Psychiatry*, 159, 36–42.
- BIEDERMAN, J., WILENS, T., MICK, E., SPENCER, T., & FARAONE, S. V. (1999). Pharmacotherapy of attention-deficit/hyperactivity disorder reduces risk for substance use disorder. *Pediatrics*, 104, e20–e25.
- BROWN, T. E. (Ed.). (2000). *Attention deficit disorders and comorbidities in children, adolescents, and adults*. Washington, DC: American Psychiatric Press.
- CARNEY, J. K. (2002). Self- and interactive regulation: Treating a patient with AD/HD. *Psychoanalytic Inquiry*, 22, 355–371.
- COHEN, P., COHEN, J., KASEN, S., VALEZ, C. N., HARTMARK, C., JOHNSON, J., ET AL. (1993). An epidemiological study of disorders in late childhood and adolescence: I. Age- and gender-specific prevalence. *Journal of Child Psychology and Psychiatry*, 34, 851–867.
- DUPAUL, G. J., SCHAUGHENCY, E. A., WEYANDT, L. L., TRIPP, G., KIESNER, J., OTA, K., ET AL. (2001). Self-report of ADHD symptoms in university students: Cross-gender and cross-national prevalence. *Journal of Learning Disabilities*, 34, 370–379.
- FARAONE, S. V., SERGEANT, J., GILLBERG, C., & BIEDERMAN, J. (2003). The worldwide prevalence of ADHD: Is it an American condition? *World Psychiatry*, 2(2), 104–113.
- GAUB, M., & CARLSON, C. L. (1997). Gender differences in ADHD: A meta-analysis and critical review. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36, 1036–1045.
- GINGERICH, K. J., TURNOCK, P., LITFIN, J. K., & ROSEN, L. A. (1998). Diversity and attention deficit hyperactivity disorder. *Journal of Clinical Psychology*, 54, 415–426.
- GREENHILL, L. L. (2001). Clinical effects of stimulant medication in ADHD. In M. V. Solanto, A. F. T. Arnsten, & F. X. Castellanos (Eds.), *Stimulant drugs and ADHD: Basic and clinical neuroscience* (pp. 31–71). New York: Oxford University Press.
- HALLOWELL, E. M. (1995). Psychotherapy of adult attention deficit disorder. In K. G. Nadeau (Ed.), *A comprehensive guide to attention deficit disorder in adults: Research, diagnosis, and treatment* (pp. 146–167). New York: Brunner/Mazel.
- HALLOWELL, E. M., & RATEY, J. J. (1994). *Driven to distraction*. New York: Touchstone.

- HEILIGENSTEIN, E., CONYERS, L. M., BERNS, A. R., & SMITH, M. A. (1998). Preliminary normative data on *DSM-IV* attention deficit hyperactivity disorder in college students. *Journal of American College Health, 46*, 185-188.
- HENKER, B., & WHALEN, C. K. (1999). The child with attention-deficit/hyperactivity disorder in school and peer settings. In H. C. Quay & A. E. Hogan (Eds.), *Handbook of disruptive behavior disorders* (pp. 157-178). New York: Kluwer.
- HESSLINGER, B., VAN ELST, L. T., NYBERG, E., DYKIEREK, P., RICHTER, H., BERNER, M., ET AL. (2002). Psychotherapy of attention deficit hyperactivity disorder in adults: A pilot study using a structured skills training program. *European Archives of Psychiatry and Clinical Neuroscience, 252*, 177-184.
- KLEIN, R., & MANNUZZA, S. (1991). Long-term outcome of hyperactive children: A review. *Journal of the American Academy of Child and Adolescent Psychiatry, 30*, 383-387.
- MANN, H. B., & GREENSPAN, S. I. (1976). The identification and treatment of adult brain dysfunction. *American Journal of Psychiatry, 133*, 1013-1017.
- MANNUZZA, S., KLEIN, R. G., BESSLER, A., MALLOY, P., & LAPADULA, M. (1998). Adult psychiatric status of hyperactive boys grown up. *American Journal of Psychiatry, 155*, 493-498.
- MCDERMOTT, S. P. (2000). Cognitive therapy for adults with attention-deficit/hyperactivity disorder. In T. E. Brown (Ed.), *Attention deficit disorders and comorbidities in children, adolescents, and adults* (pp. 569-606). Washington, DC: American Psychiatric Press.
- MTA Cooperative Group. (1999). A 14-month randomized clinical trial of treatment strategies for attention-deficit/hyperactivity disorder. Multimodal Treatment Study of Children with ADHD. *Archives of General Psychiatry, 56*, 1073-1086.
- MURPHY, K. R., & BARKLEY, R. A. (1996a). Attention deficit hyperactivity disorder adults: Comorbidities and adaptive impairments. *Comprehensive Psychiatry, 37*, 393-401.
- MURPHY, K. R., & BARKLEY, R. A. (1996b). Prevalence of *DSM-IV* symptoms of ADHD in adult licensed drivers: Implications for clinical diagnosis. *Journal of Attention Disorders, 1*, 147-161.
- MURPHY, K. R., & LEVERT, S. (1995). *Out of the fog: Treatment options and coping strategies for adult attention deficit disorder*. New York: Hyperion.
- NADEAU, K. G. (Ed.). (1995). *A comprehensive guide to attention deficit disorder in adults: Research, diagnosis, and treatment*. New York: Brunner/Mazel.
- OFFORD, D. R., BOYLE, M. H., SZATMARI, P., RAEGRANT, N., LINKS, P. S., CADMAN, D. T., ET AL. (1987). Ontario child health study: II. Six-month prevalence of disorder and rates of service utilization. *Archives of General Psychiatry, 44*, 832-836.
- RAMSAY, J. R., & ROSTAIN, A. L. (2003). A cognitive therapy approach for adult attention-deficit/hyperactivity disorder. *Journal of Cognitive Psychotherapy: An International Quarterly, 17*, 319-334.
- RATEY, J. J., GREENBERG, M. S., BEMPORAD, J. R., & LINDEM, K. J. (1992). Unrecognized attention-deficit hyperactivity disorder in adults presenting for outpatient psychotherapy. *Journal of Child and Adolescent Psychopharmacology, 2*(4), 267-275.
- RATEY, J. J., MILLER, A. C., & NADEAU, K. G. (1995). Special diagnostic and treatment considerations in women with attention deficit disorder. In K. G. Nadeau (Ed.), *A comprehensive guide to attention deficit disorder in adults: Research, diagnosis, and treatment* (pp. 260-283). New York: Brunner/Mazel.
- RESNICK, R. J. (2000). *ADHD: The hidden disorder*. Washington, DC: American Psychological Association.
- ROBIN, A. (1998). *ADHD in adolescents*. New York: Guilford Press.
- ROSS, D. M., & ROSS, S. A. (1982). *Hyperactivity: Research, theory, and action*. New York: Wiley.
- ROSTAIN, A. L. (2003). Growing up with ADHD. *Practical Neurology, 2*(4), 28-35.
- ROSTAIN, A. L., & RAMSAY, J. R. (2005). *Results of a pilot study of a combined treatment for adult attention-deficit/hyperactivity disorder*. Manuscript in preparation.
- RUCKLIDGE, J. J., & KAPLAN, B. J. (1997). Psychological functioning of women identified in adulthood with attention-deficit/hyperactivity disorder. *Journal of Attention Disorders, 2*, 167-176.
- SAFREN, S. A., SPRICH, S., CHULVICK, S., & OTTO, M. W. (2004). Psychosocial treatments for adults with attention-deficit/hyperactivity disorder. *Psychiatric Clinics of North America, 27*, 349-360.
- SHEKIM, W., ASARNOW, R. F., HESS, E., ZAUCHA, K., & WHEELER, N. (1990). An evaluation of attention deficit disorder-residual type. *Comprehensive Psychiatry, 31*, 416-425.
- SOLDEN, S. (1995). *Women with attention deficit disorder*. Grass Valley, CA: Underwood Books.
- SPENCER, T. J., BIEDERMAN, J., WILENS, T., HARDING, M., O'DONNELL, D., & GRIFFIN, S. (1996). Pharmacotherapy of attention deficit hyperactivity disorder across the lifecycle: A literature review. *Journal of the American Academy of Child and Adolescent Psychiatry, 35*, 409-432.
- STEVENSON, C. S., WHITMONT, S., BORNHOLT, L., LIVESEY, D., & STEVENSON, R. J. (2002). A cognitive remediation programme for adults with attention deficit hyperactivity disorder. *Australian and New Zealand Journal of Psychiatry, 36*, 610-616.
- TZELEPIS, A., SCHUBINER, H., WARBASSE, L. H., III. (1995). Differential diagnosis and psychiatric comorbidity patterns in adult attention deficit disorder. In K. G. Nadeau (Ed.), *A comprehensive guide to attention deficit disorders in adults: Research, diagnosis, and treatment* (pp. 35-57). New York: Brunner/Mazel.
- WEISS, G., & HECHTMAN, L. T. (1993). *Hyperactive children grown up* (2nd ed.). New York: Guilford Press.
- WEISS, M., HECHTMAN, L. T., & WEISS, G. (1999). *ADHD in adulthood: A guide to current theory, diagnosis, and treatment*. Baltimore: Johns Hopkins University Press.
- WEISS, M., & MURRAY, C. (2003). Assessment and management of attention-deficit hyperactivity disorder in adults. *Canadian Medical Association Journal, 168*, 715-722.
- WEISS, M., MURRAY, C., & WEISS, G. (2002). Adults with attention-deficit/hyperactivity disorder: Current concepts. *Journal of Psychiatric Practice, 8*(2), 99-111.

- WENDER, P. H. (1975). The minimal brain dysfunction syndrome. *Annual Review of Medicine*, 26, 45–62.
- WENDER, P. H. (1995). *Attention-deficit hyperactivity disorder in adults*. New York: Oxford University Press.
- WENDER, P. H. (2000). *ADHD: Attention-deficit hyperactivity disorder in children, adolescents, and adults*. New York: Oxford University Press.
- WENDER, P. H., REIMHERR, F. W., & WOOD, D. R. (1981). Attention deficit disorder ('minimal brain dysfunction') in adults: A replication study of diagnosis and drug treatment. *Archives of General Psychiatry*, 38, 449–456.
- WIGGINS, D., SINGH, K., GETZ, H. G., & HUTCHINS, D. E. (1999). Effects of brief group intervention for adults with attention deficit/hyperactivity disorder. *Journal of Mental Health Counseling*, 21(1), 82–92.
- WILENS, T. E., BIEDERMAN, J., & SPENCER, T. J. (2002). Attention deficit/hyperactivity disorder across the life-span. *Annual Review of Medicine*, 53, 113–131.
- WILENS, T. E., MCDERMOTT, S. P., BIEDERMAN, J., ABRANTES, A., HAHESEY, A., & SPENCER, T. (1999). Cognitive therapy in the treatment of adults with ADHD: A systematic chart review of 26 cases. *Journal of Cognitive Psychotherapy: An International Quarterly*, 13(3), 215–226.
- WILENS, T. E., SPENCER, T. J., & BIEDERMAN, J. (2000). Pharmacotherapy of attention-deficit/hyperactivity disorder. In T. E. Brown (Ed.), *Attention deficit disorders and comorbidities in children, adolescents, and adults* (pp. 509–535). Washington, DC: American Psychiatric Press.
- WOOD, D. R., REIMHERR, F. W., WENDER, P. H., & JOHNSON, G. E. (1976). Diagnosis and treatment of minimal brain dysfunction in adults. *Archives of General Psychiatry*, 33, 1453–1460.
- ZABARENKO, L. M. (2002). AD/HD, psychoanalysis, and neuroscience: A survey of recent findings and their applications. *Psychoanalytic Inquiry*, 22, 413–432.