Symptoms of ADHD in Adults
The core ADHD symptoms in adults appear to be developmentally related to those in children and include the classic triad, namely, inattention/distractibility, impulsivity, and hyperactivity. There is growing consensus, however, that the central feature of ADHD is disinhibition. Adults with ADHD have difficulty stopping themselves from immediately responding, and they have deficits in their capacity for monitoring their own behavior. This impulsivity often takes the form of socially inappropriate behavior, such as blurting out thoughts that are rude or insulting. Hyperactivity, while a common feature among children, is likely to be less overt in adults. The “on the go” drivenness seen in many ADHD children is replaced in adults with restlessness, difficulty relaxing and feeling of being chronically “on edge.” Deficits in sustained attention and concentration are likely to remain and may become more apparent in late adolescence and early adulthood as responsibilities increase. Appointments, social commitments and deadlines are frequently forgotten. Finally, the problem often expressed by adults with ADHD is frustration over the inability to be organized.

Frequent symptoms of adult ADHD:
- Easily distracted - 85.3 percent
- Difficulty sustaining attention - 83.7 percent
- Impatient - 78.6 percent
- Mental restlessness - 74.7 percent
- Shifting from one task to another - 74.3 percent
- Difficulty completing tasks - 70.8 percent
- Forgets to do things - 64.4 percent
- Physical restlessness - 61.3 percent

In addition to the core symptoms, adults with ADHD often exhibit the associated features of boredom, social inappropriateness, chronic conflicts in social relationships, negative internal feelings, raging outbursts, frequent search for high stimulation and sleep disturbance.

Diagnosis
The diagnosis of ADHD in adults requires a longstanding history of ADHD symptoms, dating back to at least age 7.

In the absence of treatment, such symptoms should have been consistently present without remission.

The core symptoms of ADHD, hyperactivity (restlessness) poor concentration/attention and impulsivity should be present in adulthood.

Evaluation, should include the patient’s history and the patient’s self-report of symptoms and mental status testing. A thorough history should include an emphasis on past school performance and conduct, previous and current psychiatric therapies, and reports of specific symptoms of inattention, distractibility and disorganization. Some adults with ADHD tend to minimize or be unaware of their past or present symptoms.
Consequently, it is beneficial to obtain corroborative data from family and friends. Careful inquiry about family genetic conditions also may be informative given the genetic links of mood disorders and ADHD.

Patients with a range of psychiatric conditions may emphasize difficulty with concentration, attention or short-term memory when they describe their problems. Therefore, the following diagnoses and their distinctive features should be considered:

- **Major Depression** – enduring dysphoric mood or anhedonia, and sleep and appetite disturbance
- **Bipolar Disorder** – enduring dysphoric or euphoric mood, insomnia and delusions
- **Generalized Anxiety** – exaggerated apprehension and worry and somatic symptoms of anxiety
- **Substance Abuse** – pathologic pattern of substance use with social consequences and physiologic and psychologic tolerance and withdrawal
- **Personality Disorders** – arrest history (antisocial), repeated self-injurious or suicidal behavior (borderline) and lack of recognition that behavior is self-defeating

**Comorbid Conditions**

- 17-37 percent have current depressive disorder.
- 31.6 percent have current anxiety disorder.
- Concurrent rates of substance abuse have suggested that 33.3 percent of ADHD adults have histories of alcohol abuse/dependence and 39.5 percent have abused illegal substances.
- ADHD adults exhibit elevated rates of antisocial behavior. For example, 24.2 percent of ADHD adults have had their driver’s licenses suspended and 33.7 percent have been arrested at some point.

**Clinical Significance of ADHD in Adults**

- Greater prevalence of educational problems (89.3 chronic school underachievement). ADHD adults have higher rates of repeated grades, tutoring, placement in special classes and reading disability. In college populations, ADHD adults exhibit high academic underachievement, more learning disabilities and lower grades.
- Lower socioeconomic status, more work difficulties, and more frequent job changes (e.g., 52.9 percent fired from employment and 76.7 percent have chronic employment problems).
- Higher frequency of marital problems with higher rates of separations and divorce.
- More speeding violations, suspended licenses, crashes and crashes causing bodily harm.
- On neuropsychological studies, ADHD adults show impairment in vigilance, motoric inhibition, executive functions (such as organization, planning and complex problem solving), and verbal learning and memory. They have demonstrated difficulty processing auditory material and difficulty learning when it requires the ability to attend over time (e.g., listening to lectures and sustaining attention to take notes).

**Epidemiology**

- 30 percent to 50 percent of those who had ADHD as children continue to have symptoms of the disorder as adults.
- Depending on the criteria used, ADHD persists into adulthood in 11 percent of childhood ADHD cases. This represents about 1 percent to 3 percent of adults. There are three studies, however, that suggest that the prevalence of ADHD in adults may be only slightly less than that observed for children. Murphy and Barkley (1996) reported in a self-report rating of adults applying for driver’s licenses that 4.7 percent met the criteria for childhood onset ADHD. Heiligenstein et al. (1998) reported that in a college sample 4 percent met the criteria for ADHD. In family studies it has been reported that 7.5 percent of fathers and 3 percent of mothers of non-ADHD children have childhood-onset ADHD (Faraone & Biederman, 1999).
- ADHD patients are more likely to be men (2/3 of ADHD adults).

**Prognosis**

- Research indicates that virtually all patients who experience ADHD as children will improve over a predictable course of time. We can expect that approximately two adults in 1,000 will manifest
diagnosable ADHD at the age of 30 and that about five in 10,000 will do so at 40.

Pharmacotherapy
- In contrast to consistent robust responses to stimulants in children and adolescents, more equivocal responses to stimulants have been exhibited in treatment of adults with ADHD (ranging from 25 percent to 78 percent positive response). Variability in the response rate appears to be related to several factors, including the diagnostic criteria used to determine ADHD, low stimulant doses, high rates of comorbidity and differing methods of assessing overall response. Higher response rates were reported for more robust doses of MPH, up to 1.0 mg/kg per day (i.e., response rates being in the 74 percent range).
- Edmund S Higgins, MD, reported that of the studies testing stimulant medications for adults with ADHD, five were double-blind, three were open label, and one involved retrospective chart reviews of college students. The range of positive responders was 25 percent to 100 percent. The results were mixed in the five placebo-controlled studies. Two reported stimulant medication was no better than placebo and three demonstrated a significant response for the stimulant compared with those treated with placebo. Eight of the studies that used antidepressants to treat adults with ADHD were open label, and only three were placebo controlled. One of the controlled studies used deprenyl (Eldepryl), a monoamine oxidase inhibitor (a type of medication difficult to use in primary care because of dietary restrictions), and found the placebo response equal to the active treatment response. The other two controlled studies were with desipramine (an older tricyclic antidepressant) and tomooxetine (a new selective noradrenergic reuptake inhibitor). Both studies reported a good response to the active agent and almost no response to the placebo. For adults with ADHD, the range of positive responders to antidepressants is 0 percent to 75 percent. There are no studies that have directly compared the effectiveness of stimulants and antidepressants. He concluded that the available research suggests that patients will benefit equally from treatment with one of the tested stimulants or antidepressants. Unfortunately, the important question of whether to initiate treatment with a stimulant or an antidepressant has not been adequately answered. Unfortunately, the tricyclic antidepressants, such as desipramine, can cause many side effects. The newer antidepressants, such as bupropion (Wellbutrin) and venlafaxine (Effexor), seem to be effective for adults with ADHD and are usually better tolerated by patients.
- In one study, using a cutoff of 30 percent or better reduction to denote response, 76 percent of the subjects receiving bupropion (Wellbutrin) improved, compared to 37 percent of the subjects receiving the placebo (Wilens et al., 2001).
- The efficacy of clonidine in the treatment of adult ADHD remains unclear.
- Fluoxetine has been reported to be moderately effective in adults with ADHD. Overall, however, Serotonin selective reuptake inhibitors have not been well tested in controlled trials and appear to have inconsistent effectiveness.

Psychosocial Interventions
- Education about ADHD. Adults with ADHD benefit from direct education about the disorder. They can use information about their deficits to develop compensatory strategies. They could be educated about their elevated risk for drug and alcohol dependence and should be encouraged to drink in moderation or practice abstinence. Significant others and employers may also need information regarding the adult with ADHD in order to enhance their ability to direct the individual in more constructive ways of dealing with their relative weaknesses.
- Compensatory Strategies
  - Deal with repetitive tasks
    - Use deadlines for structure
    - Use last-minute pressure to get energized
    - Delegate to another person
    - Do a small amount of the task at a time
    - Work with another person
  - Control impulses
    - Talk to yourself (in-your-head conversations)
Switch gears mentally (think of something else)
Switch gears physically (leave the situation)
Avoid environmental distractions
Go to a quiet place or isolate yourself
Use background “white” noise such as music or television

Control the intensity of unpleasant feelings
Have structured “blow-out” time (e.g., blasting music)
Choose helpful addictions such as exercise
Understand mood changes and ways to change these. Learn to tolerate a bad mood. Knowing that it will pass, learn strategies to make it pass sooner
Plan to deal with the inevitable blahs. Have a list of friends to call. Have a few videos that always engross you and get your mind off things. Have ready access to exercise. Rehearse a few pep talks you can give yourself
Expect depression after success. This is because the high stimulus of the chase or the challenge or the preparation is over. The deed is done, and now you miss the conflict, the high stimulus

Deal with failure
Get away, put it out of your mind and refocus on the problem later
Delegate the task to someone else
Acknowledge and anticipate the inevitable collapse of a certain percentage of projects undertaken
Accept fear of things going too well. Accept edginess when things are too easy

Retain large amounts of information when dealing with large tasks.
Take notes. Keep a notepad in your car, by your bed, and in your pocketbook or jacket
Use flash cards for schoolwork
Watch someone else and then do it, not relying on written instructions
Ask questions and link the idea or task to something that is already known
Go to a quiet place and hyper-focus
Work on chunks of material at a time
Break down large tasks into small ones. Attach deadlines to the small parts

Stay organized
Make notes to yourself (lists, Post-its, calendar, daily planner)
Use laptop computers or Palm-Pilots
Goal setting – structure each day
Prioritize and avoid procrastination. Put first things first
Do lots of projects at any one time. It is ok to do two things at once
Pile things and paper
Delegate
Use color-coding systems
Leave time between engagements to gather your thoughts

Staying satisfied in your job
Have a new routine every day
Do many tasks at one time
Deal with different people all the time
Maintain a sense of accomplishment
Be creative
Take charge of yourself and your time
Perform work that can be accomplished with quick bursts of Energy
Meet quotas and pressure
Make your environment as peppy as you want it to be without letting it boil over

Maintain relationships with family and friends
Maintain eye contact when talking
Ask questions so that they know you are listening and interested
Talk out your feelings with someone else
Step back mentally and physically, perhaps to another room
Learn to joke with yourself and others about your various symptoms, from forgetfulness, to getting
lost all the time, or being tactless or impulsive
- Schedule activities with friends and adhere to these schedules. Keep connected
- Pay compliments. Notice other people

- **Psychotherapy.**
  - Cognitive therapy has focused on guiding the individual to assess life circumstances, plan ahead more accurately, develop effective problem-solving techniques and recognize negative self-perceptions that detour thought into dysfunctional pathways.
  - Family therapy can assist by helping in marital relationships, particularly in regard to the spouse’s perception of the partner with ADHD. Also, family therapy aims at forming strategies to handle disruptive behaviors.

- With the high comorbidity of mood disorders in adults with ADHD, many clinicians recommend intense treatment of the mood disturbance before psychostimulant treatment.

**Selected References**


**ADHD in Adult: Definition and Diagnosis**

The following reports are based on a symposium held in New York City at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

Psychiatrists increasingly face the challenge of diagnosing attention deficit hyperactivity disorder in adult patients. Despite the recent introduction of new clinical rating scales for adult ADHD, a number of controversies continue to complicate the diagnosis of this disorder. The *DSM-IV* criteria for ADHD, for example, were developed for children and adolescents and cannot always be applied to adults. In addition, the relationship between self-rated symptoms of ADHD and reports of symptom severity provided by parents, siblings or other informants remains uncertain, as does the relationship between childhood and adult symptoms of ADHD.

At the annual meeting of the American Association of Child and Adolescent Psychiatry, investigators discussed the development of several clinical rating scales for adult ADHD and described the ways in which these scales can be used to accurately evaluate symptoms.
The Conners Adult ADHD Rating Scale

Although several behavioral rating scales of ADHD are available for pediatric use, few analogous scales have been developed for use in adults. C. Keith Conners, Ph.D., Professor Emeritus of Psychiatry and Behavioral Sciences at Duke University Medical Center, described the development and validation of a recently developed clinical rating scale, the Conners Adult ADHD Rating Scale.

Dr. Conners and colleagues began their efforts by identifying nine symptom domains thought to encompass the range of ADHD manifestations in adults. Three domains — in attention/concentration, hyperactivity/restlessness and impulsivity/self-control — were based on the core symptoms of ADHD as it typically appears in children. Other symptom domains that the researchers believed to be of potential interest in adult patients included executive function e.g., self-regulation, prioritization of work, awareness of time; memory; difficulties with self-image; interpersonal problems; learning problems, especially during adulthood; and mood disturbances e.g., irritability, frustration, or overreaction to stressful events.

The researchers created a pool of rating scale items for each of these nine domains. In developing the items, the researchers drew on several sources, including the diagnostic criteria for ADHD specified in the DSM-IV; clinical experience with self-referred adults and with the parents of children with ADHD; publications and instruments from other researchers, such as the Wender Utah Rating Scale; and popular books on the subject of ADHD in adulthood. The final list comprised 93 questions, roughly 10 items per symptom domain studied.

The investigators administered the questions to 167 adults with ADHD and 839 normal subjects. A factor analysis of the responses revealed four distinct factors, which were labeled Inattention/Cognitive Problems, Hyperactivity/Restlessness, Impulsivity/Emotional Lability, and Problems with Self-Concept. According to Dr. Conners, the Inattention/Cognitive factor is analogous to the inattention that characterizes ADHD in children, although in adults it encompasses a variety of cognitive problems, including difficulties with executive functions and with starting and completing tasks. The Hyperactivity/Restlessness factor encompasses not only motor hyperactivity but also feelings of inner restlessness, distractibility, risk taking, and a tendency to become bored easily. The Impulsivity/Emotional Lability factor resembles childhood impulsivity but also includes impulsive verbal outbursts, "hot temper," stress intolerance, irritability and labile mood.

Dr. Conners noted that these four factors were identified in both male and female patients. Among subjects ages 18 to 29, men exhibited significantly higher levels of ADHD symptoms than did women; symptom levels declined with increasing age in both sexes, although the rate of decrease was greater in men than in women. Mean symptom scores of men and women converged around age 29 and were more or less equivalent at older ages.

To assess the validity of the Conners Adult ADHD Rating Scale, the researchers determined how well the test predicted whether an individual would satisfy the diagnostic criteria for a DSM-IV diagnosis of ADHD. By these criteria, the Conners Adult ADHD Rating Scale produced a false-positive rate of about 13 percent and a false-negative rate of 18 percent; the overall correct classification rate was 85 percent. "To put those numbers in perspective, there are very few laboratory tests that will give you an overall classification rate better than 80 percent or 90 percent," Dr. Conners noted. However, he cautioned that the misdiagnosis rate of nearly 15 percent suggests that adults who are suspected of having ADHD cannot be adequately evaluated using the CAARS alone.

Impairment of Executive Function: ADHD in a Nutshell?
Thomas E. Brown, Ph.D., Assistant Clinical Professor of Psychiatry at Yale University School of Medicine, in New Haven, Connecticut, described the development of an alternative approach to the diagnosis of ADHD in adults—the Brown Attention Deficit Disorder Scale—and discussed the use of this test, in combination with other standardized measures, to evaluate suspected cases of ADHD. One version of this test has been developed for use with adults and another for adolescents. Both emphasize the role of executive function impairment in ADHD. There are no items measuring hyperactivity on this scale. These symptoms can be assessed using the DSM-IV or the Conners Adult ADHD Rating Scale.

Dr. Brown noted that adults who are being evaluated for ADHD present with a variety of complaints—including concentration problems, disorganization or distraction, difficulty initiating tasks, working consistently and attending to details — and many of the deficits involve impairment of executive functioning. Using interviews with a number of people who had been evaluated and received a diagnosis based on existing criteria, he and his colleagues attempted to identify a core group of symptoms that affect most adults with ADHD and that these individuals describe as particularly troublesome.

One striking aspect of ADHD in adult patients, Dr. Brown continued, is that there is often a pronounced situational variability in the severity of symptoms. "Every patient that I've ever seen with attention deficit disorder has a few domains of activity in which they are able to concentrate perfectly well and where they experience very little impairment on those cognitive functions which are highly problematic for them in many other areas," he said. This suggests that these individuals usually do not have impairments in individual cognitive functions but rather in how these functions are managed and organized at a higher level. "ADHD is essentially a name for developmental impairment of executive function," he explained.

According to Dr. Brown, there are five important symptom clusters that are consistently reported by adults with ADHD. These are: (1) problems getting organized, prioritizing and activating tasks; (2) difficulty sustaining focus and attention, especially with reading; (3) trouble sustaining alertness, effort, processing speed and motivation; (4) issues related to affect such as preventing anger from getting out of control (a problem not included in the DSM-IV definition of the disorder); and (5) deficits in working memory (the ability to hold something in mind while doing something else) and memory retrieval. "These clusters are picking up on what constitutes a decent description of executive function," Dr. Brown said.

**Downplaying Hyperactivity**

Dr. Brown conceded that this conceptualization of adult ADHD has been the subject of some controversy because it places relatively little emphasis on hyperactivity. However, he said, these symptom clusters represent the types of problems that adults with ADHD are most troubled by when they seek help for their disorder. Further, this emphasis on executive functioning may explain why many people do not appear to develop ADHD symptoms until the middle of elementary school or later. Because the use of executive function and the demands made upon it increase with maturation, deficits might not become apparent until later in life.

When evaluating an adult for ADHD, standardized tests can be an important source of information. Dr. Brown described the results of a study that examined a group of 176 adults, ages 16 to 69, who were seeking treatment for ADHD. All of these individuals met DSM-IV criteria for ADHD, 55 percent with inattentive type and the remainder with combined type. The patients completed the full Wechsler Adult Intelligence Scale-Revised, as well as the logical memory subtest of the Wechsler Memory Scale (in which the clinician reads two short text passages and the patient is asked to recite them in as close to the original wording as possible) and the Verbal Comprehension Index (in which patients undergo IQ testing, and three subscales that are most sensitive to concentration are removed and examined separately as a concentration index).
The results support the view that impairment of executive function is an important component of ADHD. Eighty-seven subjects (49 percent) exhibited a discrepancy of at least one standard deviation between their WAIS-R verbal IQ score and their score on the concentration measure. Among normal subjects, this magnitude of discrepancy was noted in only 21 percent. Similarly, a discrepancy of at least one standard deviation between the verbal IQ and prose memory test scores was noted for 66 percent of ADHD subjects and only 15 percent of controls. Thus, although not a definitive measure of ADHD for all patients, a discrepancy between verbal IQ and measures of concentration or memory is one factor that should be considered when evaluating an adult who may have ADHD.

Do Adult Symptoms Match Memories of Childhood Symptoms?

One important unresolved issue in adult ADHD is whether the disorder is always a continuation of a childhood disorder or whether ADHD can develop in adulthood without childhood precedent. Brian Greenfield, M.D., Assistant Professor of Psychiatry at McGill University in Montreal, discussed the results of recent work examining the relationship between adult self-reported symptoms of ADHD and retrospectively recalled childhood symptoms in the same individuals.

There is good reason to suspect that there may be a relatively poor relationship between ADHD symptoms as they actually occur during childhood and later recollection of those symptoms in adulthood. Dr. Greenfield cited a longitudinal study by Daniel Offer, M.D., and colleagues at Northwestern University Medical School, Chicago, in which a cohort of mentally healthy individuals was evaluated during adolescence with respect to a number of psychosocial issues and re-interviewed several years later in adulthood. The investigators found a large discrepancy between events experienced during adolescence and the subsequent recollection of those events, a result that calls into question the usefulness of retrospective questionnaires to evaluate psychiatric disorders having their origins in childhood and adolescence, Dr. Greenfield said. However, he noted that there may be opposing trends in this population. On the one hand—and in line with Dr. Offer's observations—the executive dysfunction seen in adult ADHD patients may put them at increased risk of forgetting their childhood symptoms. On the other hand, these symptoms may have been so severe that patients might be expected to have little difficulty recalling them accurately.

Thus, in a new study, Dr. Greenfield and his colleagues compared current self-reported symptoms of ADHD with retrospective self-reports of ADHD symptom severity in childhood. A total of 140 subjects ages 18 to 60 were tested using several measures of ADHD symptoms, each consisting of 18 to 25 questions, as well as the 93-item Conners scale. The subjects received two test batteries, one for symptoms in adulthood and one for childhood symptoms.

The investigators compared adult and childhood ratings of ADHD, both for the same test and for different measures. In addition, symptoms were evaluated two different ways—as either a categorical variable (i.e., each patient was classified as either having or not having ADHD on the basis of rating scale scores) or as a continuous variable.

In general, correlations using categorical diagnoses were rather weak between adult ratings of ADHD and retrospective ratings of childhood ADHD, especially for the comparisons between different rating scales. For example, the correlation between scores on the Conners rating scale in adulthood and Wender rating scale for childhood symptoms was only 0.15. Although the correlations were substantially higher when the same rating scale was used for childhood and adult symptoms, and better still when ADHD was treated as a continuous variable, Dr. Greenfield suggested that overall the findings raise doubts regarding the validity of retrospective recall of childhood symptoms and of the importance of childhood symptoms in diagnosing ADHD in adults.

Concordance Between Self-Ratings and Other Ratings
Lily Hechtman, M.D., Professor of Psychiatry at McGill, discussed the importance of obtaining a complete diagnostic evaluation of adults suspected of having ADHD, including reports of symptoms from family members or other informants. Adults with ADHD frequently have poor insight into their symptoms, she noted, and may have a variety of co-morbidities. These can present a considerable diagnostic challenge because it can be difficult to tell whether symptoms are caused by ADHD or by co-morbid substance abuse, depression or anxiety. "Because of these difficulties," Dr. Hechtman said, "we have engaged in a very extensive diagnostic workup for these patients," including the use of several standardized tests (e.g., the Wender and Conners scales). These are filled out by both the patient and an informant, and with regard to childhood as well as current symptoms.

Other components of the diagnostic evaluation include an adult ADHD rating scale developed by Russell Barkley, M.D., of the University of Massachusetts Medical School; the Conners Continuous Performance Test; the Stop Signal Task, which gauges the ability to inhibit behavior, and various measures of co-morbidity, including the Symptom Checklist-90, the Beck Depression Inventory and the Hamilton Rating Scale for Anxiety. The assessment also includes IQ testing; measures of freedom from distractibility, such as the Digit Span Test; a semi-structured interview for other co-morbidities; and a marital adjustment scale for patients who are married or in a long-term relationship.

In a recent study, Dr. Hechtman and colleagues compared the severity of self-reported ADHD symptoms—for both adulthood and childhood—with reports provided by parents, siblings or other informants. Most of the 131 patients were self-referred. Three clinicians reviewed all available patient information and arrived at a consensus diagnosis for each subject. ADHD was diagnosed in all but 27 cases.

The retrospectively recalled severity of childhood ADHD symptoms by the patients was significantly greater than the symptom severity reported by the informants for both the Wender and Barkley rating scales, Dr. Hechtman and colleagues found. The correlations between "self" and "other" symptom ratings were about 0.7. For the Wender scale, the patient and informant ratings of childhood symptoms correlated only weakly with the consensus diagnosis, though the correlations did reach statistical significance. For the Barkley scale, only the correlation between self-ratings and consensus diagnosis was statistically significant. The correlation between the informant ratings and the consensus diagnosis was not.

For current symptom severity, self-reported ratings were greater than those reported by informants, regardless of the scale used. Once again, the correlation between self-ratings and the consensus diagnosis was higher than the correlation between the informant rating and the consensus diagnosis for all of the measures examined. Correlation coefficients were generally in the 0.3 to 0.5 range for these comparisons.

Thus, for both ratings of current symptom severity and retrospective recall of symptoms during childhood, the self-ratings were more highly correlated with the consensus diagnosis of ADHD than were ratings by informants such as parents or siblings. Dr. Hechtman noted that this may reflect the fact that these were primarily self-referred patients who were seeking help for ADHD and who may have been more aware of their symptoms than are many patients with ADHD.

Dr. Hechtman noted that a thorough clinical evaluation is essential in making the diagnosis of ADHD in adults. Standardized tests are helpful but cannot substitute for clinical judgement. Finally, at least in self-referred adults, self-reports of symptom severity provide information that is equal or superior to that provided by parents, siblings or other family members.

— Mark Bowes, Ph.D.

Suggested Reading
1. Searight HR, Burke JM, Rottnek F. "Adult ADHD: evaluation and treatment in family medicine." Am Fam Physician. 2000;62:2077-