Why Ritalin Rules

Mary Eberstadt

This selection first appeared in the April/May 1999 issue of *Policy Review*. Mary Eberstadt is consulting editor to *Policy Review*.

There are stories that are mere signs of the *Times*, and then there are stories so emblematic of a particular time and place that they demand to be designated cultural landmarks. Such a story was the *New York Times*'s front-page report on January 18 appearing under the tame, even soporific headline, "For School Nurses, More Than Tending the Sick."

"Ritalin, Ritalin, seizure drugs, Ritalin," in the words of its sing-song opening. "So goes the rhythm of noontime" for a typical school nurse in East Boston "as she trots her tray of brown plastic vials and paper water cups from class to class, dispensing pills into outstretched young palms." For this nurse, as for her counterparts in middle- and upper-middle-class schools across the country, the day's routine is now driven by what the *Times* dubs "a ticklish question," to wit: "With the number of children across the country taking Ritalin estimated at well over three million, more than double the 1990 figure, who should be giving out the pills?"

"With nurses often serving more than one school at a time," the story goes on to explain, "the whole middle of the day can be taken up in a school-to-school scurry to dole out drugs." Massachusetts, for its part, has taken to having the nurse deputize "anyone from a principal to a secretary" to share the burden. In Florida, where the ratio of school nurses to students is particularly low, "many schools have clerical workers hand out the pills." So many pills, and so few professionals to go around. What else are the authorities to do?

Behold the uniquely American psychotropic universe, pediatrics zone—a place where "psychiatric medications in general have become more common in schools" and where, in particular, "Ritalin dominates." There are by now millions of stories in orbit here, and the particular one chosen by the *Times*—of how the drug has induced a professional labor shortage—is no doubt an estimable entry. But for the reader struck by some of the facts the *Times* mentions only in passing—for example, that Ritalin use more than doubled in the first half of the decade alone, that

production has increased 700 percent since 1990, or that the number of schoolchildren taking the drug may now, by some estimates, be approaching the 4 million mark—mere anecdote will only explain so much.

Fortunately, at least for the curious reader, there is a great deal of other material now on offer, for the explosion in Ritalin consumption has been very nearly matched by a publishing boom dedicated to that same phenomenon. Its harbingers include, for example, Barbara Ingersoll's now-classic 1988 *Your Hyperactive Child*, among the first works to popularize a drug regimen for what we now call attention deficit disorder (ADD, called ADHD when it includes hyperactivity). Five years later, with ADD diagnoses and Ritalin prescriptions already rising steeply in the better-off neighborhoods and schools, Peter D. Kramer helped fuel the boom with his best-selling *Listening to Prozac*—a book that put the phrase "cosmetic pharmacology" into the vernacular and thereby inadvertently broke new conceptual ground for the advocates of Ritalin. In 1994, most important, psychiatrists Edward M. Hallowell and John J. Ratey published their own best-selling *Driven to Distraction: Recognizing and Coping with Attention Deficit Disorder from Childhood to Adulthood*, a book that was perhaps the single most powerful force in the subsequent proliferation of ADD diagnoses; as its opening sentence accurately prophesied, "Once you catch on to what this syndrome is all about, you'll see it everywhere."

Not everyone received these soundings from the psychotropic beyond with the same enthusiasm. One noteworthy dissent came in 1995 with Thomas Armstrong's *The Myth of the ADD Child*, which attacked both the scientific claims made on behalf of ADD and what Armstrong decried as the "pathologizing" of normal children. Dissent also took the form of wary public pronouncements by the National Education Association (NEA), one of several groups to harbor the fear that ADD would be used to stigmatize minority children. Meanwhile, scare stories on the abuse and side effects of Ritalin popped out here and there in the mass media, and a national controversy was born. From the middle to the late 1990s, other interested parties from all over—the Drug Enforcement Administration (DEA), the Food and Drug Administration (FDA), the medical journals, the National Institutes of Health (NIH), and especially the extremely active advocacy group CHADD (Children and Adults with Attention Deficit Disorder)—further stoked the debate through countless reports, conferences, pamphlets, and exchanges on the Internet.

To this outpouring of information and opinion two new books, both on the critical side of the ledger, have just been added: Richard DeGrandpre's iconoclastic *Ritalin Nation: Rapid-Fire Culture and the Transformation of Human Consciousness* (Simon & Schuster, 1999), and physician Lawrence H. Diller's superbly analytical *Running on Ritalin: A Physician Reflects on Children, Society and Performance in a Pill* (Bantam Books, 1998). Their appearance marks an unusually opportune moment in which to sift through some ten years' worth of information on Ritalin and ADD and to ask what, if anything, we have learned from the national experiment that has made both terms into household words.

Let's put the question bluntly: How has it come to pass that in *fin-de-siècle* America, where every child from preschool onward can recite the "anti-drug" catechism by heart, millions of middle- and upper-middle-class children are being legally drugged with a substance so similar to cocaine that, as one journalist accurately summarized the science, "it takes a chemist to tell the difference"?

What Is Methylphenidate?

The first thing that has made the Ritalin explosion possible is that methylphenidate, to use the generic term, is perhaps the most widely misunderstood drug in America today. Despite the fact that it is, as Lawrence Diller observes in *Running on Ritalin*, "the most intensively studied drug in pediatrics," most laymen remain under a misimpression both about the nature of the drug itself and about its pharmacological effects on children.

What most people believe about this drug is the same erroneous characterization that appeared elsewhere in the *Times* piece quoted earlier—that it is "a mild stimulant of the central nervous system that, for reasons not fully understood, often helps children who are chronically distractible, impulsive and hyperactive settle down and concentrate." The word "stimulant" here is at least medically accurate. "Mild," a more ambiguous judgment, depends partly on the dosage, and partly on whether the reader can imagine describing as "mild" any dosage of the drugs to which methylphenidate is closely related. These include dextroamphetamine (street name: "dexies"), methamphetamine (street name: "crystal meth"), and, of course, cocaine. But the chief substance of the *Times*'s formulation here—that the reasons why Ritalin does what it does to children remain a medical mystery—is, as

informed writers from all over the debate have long acknowledged, an enduring public myth.

"Methylphenidate," in the words of a 1995 DEA background paper on the drug, "is a central nervous system (CNS) stimulant and shares many of the pharmacological effects of amphetamine, methamphetamine, and cocaine." Further, it "produces behavioral, psychological, subjective, and reinforcing effects similar to those of *d*-amphetamine including increases in rating of euphoria, drug liking and activity, and decreases in sedation." To put the point conversely, as Richard DeGrandpre does in *Ritalin Nation* by quoting a 1995 report in the Archives of General Psychiatry, "Cocaine, which is one of the most reinforcing and addicting of the abused drugs, has pharmacological actions that are very similar to those of methylphenidate, which is now the most commonly prescribed psychotropic medicine for children in the U.S."

Such pharmacological similarities have been explored over the years in numerous studies. DeGrandpre reports that "lab animals given the choice to self-administer comparative doses of cocaine and Ritalin do not favor one over another" and that "a similar study showed monkeys would work in the same fashion for Ritalin as they would for cocaine." The DEA reports another finding—that methylphenidate is actually "chosen *over* cocaine in preference studies" of non-human primates (emphasis added). In *Driven to Distraction*, pro-Ritalin psychiatrists Hallowell and Ratey underline the interchangeable nature of methylphenidate and cocaine when they observe that "people with ADD feel focused when they take cocaine, *just as they do when they take Ritalin* [emphasis added]." Moreover, methylphenidate (like other stimulants) appears to increase tolerance for related drugs. Recent evidence indicates, for example, that when people accustomed to prescribed Ritalin turn to cocaine, they seek higher doses of it than do others. To summarize, again from the DEA report, "it is clear that methylphenidate substitutes for cocaine and *d*-amphetamine in a number of behavioral paradigms."

All of which is to say that Ritalin "works" on children in the same way that related stimulants work on adults—sharpening the short-term attention span when the drug kicks in and producing equally predictable valleys ("coming down," in the old street parlance; "rebounding," in Ritalinese) when the effect wears off. Just as predictably, children are subject to the same adverse effects as adults imbibing such drugs, with the two most common—appetite suppression and insomnia—being of particular concern. That is why, for example, handbooks on

ADD will counsel parents to see their doctor if they feel their child is losing too much weight, and why some children who take methylphenidate are also prescribed sedatives to help them sleep. It is also why one of the more Orwellian phrases in the psychotropic universe, "drug holidays"—meaning scheduled times, typically on weekends or school vacations, when the dosage of methylphenidate is lowered or the drug temporarily withdrawn in order to keep its adverse effects in check—is now so common in the literature that it no longer even appears in quotations.

Just as, contrary to folklore, the adult and child physiologies respond in the same way to such drugs, so too do the physiologies of *all* people, regardless of whether they are diagnosed with ADD or hyperactivity. As Diller puts it, in a point echoed by many other sources, methylphenidate "potentially improves the performance of anyone–child or not, ADD-diagnosed or not." Writing in the *Public Interest* last year, psychologist Ken Livingston provided a similar summary of the research, citing "studies conducted during the mid seventies to early eighties by Judith Rapaport of the National Institute of Mental Health" which "clearly showed that stimulant drugs improve the performance of most people, regardless of whether they have a diagnosis of ADHD, on tasks requiring good attention." ("Indeed," he comments further in an obvious comparison, "this probably explains the high levels of 'self-medicating' around the world" in the form of "stimulants like caffeine and nicotine.")

A third myth about methylphenidate is that it, alone among drugs of its kind, is immune to being abused. To the contrary: Abuse statistics have flourished alongside the boom in Ritalin prescription-writing. Though it is quite true that elementary schoolchildren are unlikely to ingest extra doses of the drug, which is presumably kept away from little hands, a very different pattern has emerged among teenagers and adults who have the manual dexterity to open prescription bottles and the wherewithal to chop up and snort their contents (a method that puts the drug into the bloodstream far faster than oral ingestion). For this group, statistics on the proliferating abuse of methylphenidate in schoolyards and on the street are dramatic.

According to the DEA, for example, as early as 1994 Ritalin was the fastest-growing amphetamine being used "non-medically" by high school seniors in Texas. In 1991, reports DeGrandpre in *Ritalin Nation*, "children between the ages of 10 and 14 years old were involved in only about 25 emergency room visits connected with Ritalin abuse. In 1995, just four

years later, that number had climbed to more than 400 visits, which for this group was about the same number of visits as for cocaine." Not surprisingly, given these and other measures of methylphenidate's recreational appeal, criminal entrepreneurs have responded with interest to the drug's increased circulation. From 1990 to 1995, the DEA reports, there were about 2,000 thefts of methylphenidate, most of them night break-ins at pharmacies—meaning that the drug "ranks in the top 10 most frequently reported pharmaceutical drugs diverted from licensed handlers."

Because so many teenagers and college students have access to it, methylphenidate is particularly likely to be abused on school grounds. "The prescription drug Ritalin," reported *Newsweek* in 1995, "is now a popular high on campus—with some serious side effects." DeGrandpre notes that at his own college in Vermont, Ritalin was cited as the third-favorite drug to snort in a campus survey. He also runs, without comment, scores of individual abuse stories from newspapers across the country over several pages of his book. In *Running on Ritalin*, Diller cites several undercover narcotics agents who confirm that "Ritalin is cheaper and easier to purchase at playgrounds than on the street." He further reports one particularly hazardous fact about Ritalin abuse, namely that teenagers, especially, do not consider the drug to be anywhere near as dangerous as heroin or cocaine. To the contrary: "they think that since their younger brother takes it under a doctor's prescription, it must be safe."

In short, methylphenidate looks like an amphetamine, acts like an amphetamine, and is abused like an amphetamine. Perhaps not surprisingly, those who value its medicinal effects tend to explain the drug differently. To some, Ritalin is to children what Prozac and other psychotropic "mood brightening" drugs are to adults—a short-term fix for enhancing personality and performance. But the analogy is misleading. Prozac and its sisters are not stimulants with stimulant side effects; there is, ipso facto, no black market for drugs like these. Even more peculiar is the analogy favored by the advocates in CHADD: that "Just as a pair of glasses help the nearsighted person focus," as Hallowell and Ratey explain, "so can medication help the person with ADD see the world more clearly." But there is no black market for eyeglasses, either—nor loss of appetite, insomnia, "dysphoria" (an unexplained feeling of sadness that sometimes accompanies pediatric Ritalin-taking), nor even the faintest risk of toxic psychosis, to cite one of Ritalin's rare but dramatically chilling possible effects.

What is methylphenidate "really" like? Thomas Armstrong, writing in *The Myth of the ADD Child* four years ago, probably summarized the drug's appeal best. "Many middle- and upper-middle- class parents," he observed then, "see Ritalin and related drugs almost as 'cognitive steroids' that can be used to help their kids focus on their schoolwork better than the next kid." Put this way, the attraction to Ritalin makes considerable sense. In some ways, one can argue, that after-lunch hit of low-dose methylphenidate is much like the big cup from Starbucks that millions of adults swig to get them through the day—but only in some ways. There is no dramatic upswing in hospital emergency room visits and pharmacy break-ins due to caffeine abuse; the brain being jolted awake in one case is that of an adult, and in the other that of a developing child; and, of course, the substance doing the jolting on all those children is not legally available and ubiquitous caffeine, but a substance that the DEA insists on calling a Schedule II drug, meaning that it is subject to the same controls, and for the same reasons of abuse potential, as related stimulants and other powerful drugs like morphine.

What Is CHADD?

This mention of Schedule II drugs brings us to a second reason for the Ritalin explosion in this decade. That is the extraordinary political and medical clout of CHADD, by far the largest of the ADD support groups and a lobbying organization of demonstrated prowess. Founded in 1987, CHADD had, according to Diller, grown by 1993 to include 35,000 families and 600 chapters nationally. Its professional advisory board, he notes, "includes most of the most prominent academicians in the ADD world, a veritable who's who in research."

Like most support groups in self-help America, CHADD functions partly as clearing-house and information center for its burgeoning membership—organizing speaking events, issuing a monthly newsletter (*CHADDerbox*), putting out a glossy magazine (named, naturally enough, *Attention!*), and operating an exceedingly active website stocked with on-line fact sheets and items for sale. Particular scrutiny is given to every legal and political development offering new benefits for those diagnosed with ADD. On these and other fronts of interest, CHADD leads the ADD world. "No matter how many sources of information are out there," as a slogan on its website promises, "CHADD is the one you can trust."

One of CHADD's particular strengths is that it is exquisitely media-sensitive, and has a track record of delivering speedy responses to any reports on Ritalin or ADD that the group deems inaccurate. Diller quotes as representative one fund-raising letter from 1997, where the organization listed its chief goals and objectives as "conduct[ing] a proactive media campaign" and "challeng[ing] negative, inaccurate reports that demean or undermine people with ADD." Citing "savage attacks" in the *Wall Street Journal* and *Forbes*, the letter also went on to exhort readers into "fighting these battles of misinformation, innuendo, ignorance and outright hostility toward CHADD and adults who have a neurobiological disorder." The circle-the-wagons rhetoric here appears to be typical of the group, as is the zeal.

Certainly it was with missionary fervor that CHADD, in 1995, mounted an extraordinary campaign to make Ritalin easier to obtain. Methylphenidate, as mentioned, is a Schedule II drug. That means, among other things, that the DEA must approve an annual production quota for the substance—a fact that irritates those who rely on it, since it raises the specter, if only in theory, of a Ritalin "shortage." It also means that some states require that prescriptions for Ritalin be written in triplicate for the purpose of monitoring its use, and that refills cannot simply be called into the pharmacy as they can for Schedule III drugs (for example, low-dosage opiates like Tylenol with codeine, and various compounds used to treat migraine). Doctors, particularly those who prescribe Ritalin in quantity, are inconvenienced by this requirement. So too are many parents, who dislike having to stop by the doctor's office every time the Ritalin runs out. Moreover, many parents and doctors alike object to methylphenidate's Schedule II classification in principle, on the grounds that it makes children feel stigmatized; the authors of *Driven to Distraction*, for example, claim that one of the most common problems in treating ADD is that "some pharmacists, in their attempt to comply with federal regulations, make consumers [of Ritalin] feel as though they are obtaining illicit drugs."

For all of these reasons, CHADD petitioned the DEA to reclassify Ritalin as a Schedule III drug. This petition was co-signed by the American Academy of Neurology, and it was also supported by other distinguished medical bodies, including the American Academy of Pediatrics, the American Psychological Association, and the American Academy of Child and Adolescent Psychiatry. Diller's account of this episode in *Running on Ritalin* is particularly credible, for he is a doctor

who has himself written many prescriptions for Ritalin in cases where he has judged it to be indicated. Nevertheless, he found himself dissenting strongly from the effort to decontrol it—an effort that, as he writes, was "unprecedented in the history of Schedule II substances" and "could have had a profound impact on the availability of the drug."

What happened next, while CHADD awaited the DEA's verdict, was in Diller's words "a bombshell." For before the DEA had officially responded, a television documentary revealed that Ciba-Geigy (now called Novartis), the pharmaceuticals giant that manufactures Ritalin, had contributed nearly $900,000 to CHADD over five years, and that CHADD had failed to disclose the contributions to all but a few selected members.

The response from the DEA, which appeared in the background report cited earlier, was harsh and uncompromising. Backed by scores of footnotes and well over 100 sources in the medical literature, this report amounted to a public excoriation of CHADD's efforts and a meticulous description, alarming for those who have read it, of the realities of Ritalin use and abuse. "Most of the ADHD literature prepared for public consumption and available to parents," the DEA charged, "does not address the abuse liability or actual abuse of methylphenidate. Instead, methylphenidate is routinely portrayed as a benign, mild stimulant that is not associated with abuse or serious effects. In reality, however, there is an abundance of scientific literature which indicates that methylphenidate shares the same abuse potential as other Schedule II stimulants."

The DEA went on to note its "concerns" over "the depth of the financial relationship between CHADD and Ciba-Geigy." Ciba-Geigy, the DEA observed, "stands to benefit from a change in scheduling of methylphenidate." It further observed that the United Nations International Narcotics Control Board (INCB) had "expressed concern about non-governmental organizations and parental associations in the United States that are actively lobbying for the medical use of methylphenidate for children with ADD." (The rest of the world, it should be noted, has yet to acquire the American taste for Ritalin. Sweden, for example, had methylphenidate withdrawn from the market in 1968 following a spate of abuse cases. Today, 90 percent of Ritalin production is consumed in the United States.) The report concluded with the documented observations that "abuse data indicate a growing problem among school-age children," that "ADHD adults have a high incidence of substance disorders," and that "with three to

five percent of today's youth being administered methylphenidate on a chronic basis, these issues are of great concern."

Yet whatever public embarrassment CHADD and its supporters may have suffered on account of this setback turned out to be short-lived. Though it failed in the attempt to decontrol Ritalin (in the end, the group withdrew its petition), on other legislative fronts CHADD was garnering one victory after another. By the end of the 1990s, thanks largely to CHADD and its allies, an ADD diagnosis could lead to an impressive array of educational, financial, and social service benefits.

In elementary and high school classrooms, a turning point came in 1991 with a letter from the U.S. Department of Education to state school superintendents outlining "three ways in which children labeled ADD could qualify for special education services in public school under existing laws," as Diller puts it. This directive was based on the landmark 1990 Individuals with Disabilities Education Act (IDEA), which "mandates that eligible children receive access to special education and/or related services, and that this education be designed to meet each child's unique educational needs" through an individualized program. As a result, ADD-diagnosed children are now entitled by law to a long list of services, including separate special-education classrooms, learning specialists, special equipment, tailored homework assignments, and more. The IDEA also means that public school districts unable to accommodate such children may be forced to pick up the tab for private education.

In the field of higher education, where the first wave of Ritalin-taking students has recently landed, an ADD diagnosis can be parlayed into other sorts of special treatment. Diller reports that ADD-based requests for extra time on SATs, LSATs, and MCATs have risen sharply in the course of the 1990s. Yet the example of such high-profile tests is only one particularly measurable way of assessing ADD's impact on education; in many classrooms, including college classrooms, similar "accommodations" are made informally at a student's demand. A professor in the Ivy League tells me that students with an ADD diagnosis now come to him "waving doctor's letters and pills" and requesting extra time for routine assignments. To refuse "accommodation" is to risk a hornet's nest of liabilities, as a growing caseload shows. A 1996 article in *Forbes* cites the example of Whittier Law School, which was sued by an ADD-diagnosed student for giving only 20 extra minutes per hour-long exam instead of a full hour. The school, fearing an expensive legal battle, settled the suit. It further undertook a preventive

measure: banning pop quizzes "because ADD students need separate rooms and extra time."

Concessions have also been won by advocates in the area of college athletics. The National College Athletic Association (NCAA) once prohibited Ritalin usage (as do the U.S. and International Olympic Committees today) because of what Diller calls its "possible acute performance-enhancing benefits." In 1993, citing legal jeopardy as a reason for changing course, the NCAA capitulated. Today a letter from the team physician will suffice to allow an athlete to ingest Ritalin, even though that same athlete would be disqualified from participating in the Olympics if he were to test positive for stimulants.

Nor are children and college students the only ones to claim benefits in the name of ADD. With adults now accounting for the fastest-growing subset of ADD diagnoses, services and accommodations are also proliferating in the workplace. The enabling regulations here are 1997 guidelines from the Equal Employment Opportunity Commission (EEOC) which linked traits like chronic lateness, poor judgment, and hostility to coworkers—in other words, the sorts of traits people get fired for—to "psychiatric impairments," meaning traits that are protected under the law. As one management analyst for the *Wall Street Journal* recently observed (and as CHADD regularly reminds its readers), these EEOC guidelines have already generated a list of accommodations for ADD-diagnosed employees, including special office furniture, special equipment such as tape recorders and laptops, and byzantine organizational schemes (color coding, buddy systems, alarm clocks, and other "reminders") designed to keep such employees on track. "Employers," this writer warned, "could find themselves facing civil suits and forced to restore the discharged people to their old positions, or even give them promotions as well as back pay or reasonable accommodation."

An ADD diagnosis can also be helpful in acquiring Supplemental Security Income (SSI) benefits. SSI takes income into account in providing benefits to the ADD-diagnosed; in that, it is an exception to the trend. Most of the benefits now available, as even this brief review indicates, have come to be provided in principle, on account of the diagnosis per se. Seen this way, and taking the class composition of the ADD-diagnosed into account, it is no wonder that more and more people, as Diller and many other doctors report, are now marching into medical offices demanding a letter, a diagnosis, and a prescription. The

pharmacological charms of Ritalin quite apart, ADD can operate, in effect, as affirmative action for affluent white people.

What Is Attention Deficit Disorder?

Another factor that has put Ritalin into millions of medicine cabinets has to do with the protean nature of the disorder for which it is prescribed—a disorder that was officially so designated by the American Psychiatric Association in 1980, and one that, to cite Thomas Armstrong, "has gone through at least 25 different name changes in the past century."

Despite the successful efforts to have ADD construed as a disability like blindness, the question of what ADD is remains passionately disputed. To CHADD, of course, it is a "neurobiological disorder," and not only to CHADD; "the belief that ADD is a neurological disease," as Diller writes, also "prevails today among medical researchers and university teaching faculty" and "is reflected in the leading journals of psychiatry." What the critics observe is something else—that "despite highly successful efforts to define ADD as a well-established disorder of the brain," as DeGrandpre puts it in a formulation echoed by many, "three decades of medical science have yet to produce any substantive evidence to support such a claim."

Nonetheless, the effort to produce such evidence has been prodigious. Research on the neurological side of ADD has come to resemble a Holy Grail-like quest for something, anything, that can be said to set the ADD brain apart—genes, imbalances of brain chemicals like dopamine and serotonin, neurological damage, lead poisoning, thyroid problems, and more. The most famous of these studies, and the chief grounds on which ADD has come to be categorized as a neurobiological disability, was reported in *The New England Journal of Medicine* in 1990 by Alan Zametkin and colleagues at the National Institute of Mental Health (NIMH). These researchers used then-new positron emission tomography (PET) scanning to measure differences in glucose metabolizing between hyperactive adults and a control group. According to the study's results, what emerged was a statistically significant difference in the rates of glucose metabolism—a difference hailed by many observers as the first medical "proof" of a biological basis for ADD.

Diller and DeGrandpre are only the latest to argue, at length, that the Zametkin study established no such thing. For starters—and from the scientific point of view, most important—a series of follow-up studies, as

Diller documents, "failed to confirm" the original result. DeGrandpre, for his part, details the methodological problems with the study itself—that the participants were adults rather than children, meaning that the implications for the majority of the Ritalin-taking population were unclear at best; that there was "no evidence" that the reported difference in metabolism bore any relationship to behavioral activity; that the study was further plagued by "a confounding variable that had nothing to do with ADD," namely that the control group included far fewer male subjects than the ADD group; and that, even if there had been a valid difference in metabolism between the two groups, "this study tells us nothing about the cause of these differences."

Numerous other attempts to locate the missing link between ADD and brain activity are likewise dissected by Diller and DeGrandpre in their books. So too is the causal fallacy prevalent in ADD literature—that if a child responds positively to Ritalin, that response "proves" that he has an underlying biological disorder. This piece of illogic is easily dismissed. As these and other authors emphasize, drugs like Ritalin have the same effect on just about everybody. Give it to almost any child, and the child will become more focused and less aggressive—one might say, easier to manage—whether or not there were "symptoms" of ADD in the first place.

In sum, and as Thomas Armstrong noted four years ago in *The Myth of the ADD Child*, ADD remains an elusive disorder that "cannot be authoritatively identified in the same way as polio, heart disease, or other legitimate illnesses." Instead, doctors depend on a series of tests designed to measure the panoply of ADD symptoms. To cite Armstrong again: "there is no prime mover in this chain of tests; no First Test for ADD that has been declared self-referential and infallible." Some researchers, for example, use "continuous performance tasks" (CPTS) that require the person being tested to pay attention throughout a series of repetitive actions. A popular CPT is the Gordon Diagnostic System, a box that flashes numbers, whose lever is supposed to be pressed every time a particular combination appears. Yet as numerous critics have suggested, although the score that results is supposed to tell us about a given child's ability to attend, its actual significance is rather ambiguous; perhaps, as Armstrong analyzes, "it only tells how a child will perform when attending to a repetitive series of meaningless numbers on a soulless task."

In the absence of any positive medical or scientific test, the diagnosis of ADD in both children and adults depends, today as a decade ago, almost exclusively on behavioral criteria. The diagnostic criteria for

children, according to the latest Diagnostic and Statistics Manual (DSM-IV), include six or more months' worth of some 14 activities such as fidgeting, squirming, distraction by extraneous stimuli, difficulty waiting turns, blurting out answers, losing things, interrupting, ignoring adults, and so on. (To read the list is to understand why boys are diagnosed with ADD three to five times as often as girls.) The diagnostic latitude offered by this list is obvious; as Diller understates the point, "what often strikes those encountering DSM criteria for the first time is how common these symptoms are among children" generally.

The DSM criteria for adults are if anything even more expansive, and include such ambiguous phenomena as a sense of underachievement, difficulty getting organized, chronic procrastination, a search for high stimulation, impatience, impulsivity, and mood swings. Hallowell and Ratey's 100-question test for ADD in *Driven to Distraction*, an elaborately extrapolated version of the DSM checklist, illustrates this profound elasticity. Their questions range from the straightforward ("Are you impulsive?" "Are you easily distracted?" "Do you fidget a lot?") to more elusive ways of eliciting the disorder ("Do you change the radio station in your car frequently?" "Are you always on the go, even when you don't really want to be?" "Do you have a hard time reading a book all the way through?"). Throughout, the distinction between what is pathological and what is not remains unclear—because, in the authors' words, "There is no clear line of demarcation between ADD and normal behavior."

Thus the business of diagnosing ADD remains, as Diller puts it, "very much in the eye of the beholder." In 1998, partly for that reason, the National Institutes of Health convened a conference on ADD with hundreds of participants and a panel of 13 doctors and educators. This conference, as newspapers reported at the time, broke no new ground, and indeed could not reach agreement on several important points—for instance, how long children should take drugs for ADD, or whether and when drug treatment might become risky. Even more interesting, conference members could not agree on what is arguably the rather fundamental question of how to diagnose the disorder in the first place. As one panelist, a pediatrician, put it succinctly, "The diagnosis is a mess."

Who Has ADD?

To test this hypothesis, I gave copies of Hallowell and Ratey's questionnaire to 20 people (let's call them subjects) and asked them to com-

plete it and total up the number of times they checked "yes." "These questions," as Hallowell and Ratey note, "reflect those an experienced diagnostician would ask." Although, as they observe, "this quiz cannot confirm the diagnosis" (as we have seen already, nothing can), it does "offer a rough assessment as to whether professional help should be sought." In short, "the more questions that are answered 'yes,' the more likely it is that ADD may be present."

In a stab at methodological soundness, I had equal numbers of males and females take the test. All would be dubbed middle or upper middle class, all but one are or have been professionals of one sort or another, all are white, and the group was politically diverse—which is to say, the sample accurately reflects the socioeconomic pool from which most of the current Ritalin-taking population is drawn. As to the matter of observer interference, although some subjects may have guessed what the questionnaire was looking for, all of them (myself excepted, of course) took the test "blind," that is, without any accompanying material to prejudice their responses.

We begin with results at the lower end of the scale. Of the 18 subjects who completed the test, two delivered "yes" scores of 8 and 10 (a professor of English and his wife, an at-home mother active in philanthropy). These "yes" results, as it turned out, were at least threefold lower than anyone else's. In "real" social science, according to some expert sources, we would simply call these low scores "outliers" and throw them out for the same reason. We, however, shall include them, if only on the amateur grounds of scrupulousness.

The next lowest "yes" tallies—29 in each case—were achieved by an editorial assistant and a school nurse. That is to say, even these "low scorers" managed to answer yes *almost a third of the time* (remember, "the more questions that are answered 'yes,' the more likely it is that ADD may be present"). After them, we find a single "yes" score of 33 (an assistant editor). Following that, fully six subjects, or a third of the test-finishers, produced scores in the 40s. These include this magazine's editor, two at-home mothers (one a graphic designer, the other a poet), a writer for *Time* and other distinguished publications, *Policy Review's* business manager, and—scoring an estimable 49—the headmaster of a private school in Washington.

Proceeding into the upper echelons, a novelist who is also an at-home mother reported her score as 55, and a renowned demographic expert with ties to Harvard and Washington think tanks scored a 57. A male British

journalist and at-home father achieved a 60, and a female American journalist and at-home mother (me) got a 62. Still another at-home mother, this one with a former career in public relations, garnered a 65.

In the lead, at least of the test-finishers, was a best-selling satirist whom we shall call, for purposes of anonymity, Patrick O'Rourke; he produced an estimable score of 75. "Mr. O'Rourke" further advanced the cause of science by answering the questions on behalf of his 16-month-old daughter; according to his proud report, 65 was the result. Then there were the two subjects who, for whatever reason, were unable to complete the test in the first place. One of these subjects called to say that he'd failed to finish the test because he'd "gotten bored checking off so many yes answers." When I pressed him for some, any, final tally for me to include, he got irritated and refused, saying he was "too lazy" to count them up. Finally he said "50 would be about right," take it or leave it. He is a Wall Street investment banker specializing in the creation of derivative securities. Our last subject, perhaps the most pathological of all, failed to deliver any score despite repeated reminding phone calls from the research team. He is the professor mentioned earlier, the one who reported that ADD is now being used as a blanket for procrastination and shirking on campus.

Now on to interpreting the results. Apart from the exceedingly anomalous two scores of ten and under, all the rest of the subjects reported answering "yes" to at least a quarter of the questions—surely enough to trigger the possibility of an ADD diagnosis, at least in those medical offices Diller dubs "Ritalin mills." (As for the one subject who reported no result whatsoever, he is obviously entitled to untold ADD bonus points for that reason alone.) Fully 15 of the finishers, or 80-plus percent, answered yes to one-third of the questions or more. Eight of the finishers, or 40-plus percent of the sample, answered yes more than half of the time, with a number of scores in the high 40s right behind them. In other words, *roughly half of the sample answered yes roughly half of the time.*

My favorite comment on the exercise came from the school nurse (who scored, one recalls, a *relatively* low 29). She has a background in psychiatry, and therefore realized what kind of diagnosis the questionnaire was designed to elicit. When she called to report her result, she said that taking the test had made her think hard about the whole ADD issue. "My goodness," she concluded, "it looks like the kind of thing almost anybody could have." This brings us to the fourth reason for the explosion of ADD and its prescribed corollary, Ritalin: The nurse is right.

What Is Childhood?

The fourth and most obvious reason millions of Americans, most of them children, are now taking Ritalin can be summarized in a single word that crops up everywhere in the dry-bones literature on ADD and its drug of choice: *compliance.* One day at a time, the drug continues to make children do what their parents and teachers either will not or cannot get them to do without it: Sit down, shut up, keep still, pay attention. That some children are born with or develop behavioral problems so severe that drugs like Ritalin are a godsend is true and sad. It is also irrelevant to the explosion in psychostimulant prescriptions. For most, the drug is serving a more nuanced purpose—that of "help[ing] your child to be more agreeable and less argumentative," as Barbara Ingersoll put it over a decade ago in *Your Hyperactive Child.*

There are, as was mentioned, millions of stories in the Ritalin universe, and the literature of advocates and critics alike all illustrates this point. There is no denying that millions of people benefit from having children take Ritalin—the many, many parents who will attest that the drug has improved their child's school performance, their home lives, often even their own marriages; the teachers who have been relieved by its effects in their classrooms, and have gone on to proselytize other parents of other unruly children (frequently, it is teachers who first suggest that a child be checked for the disorder); and the doctors who, when faced with all these grateful parents and teachers, find, as Diller finds, that "at times the pressure for me to medicate a child is intense."

Some other stories seep through the literature too, but only if one goes looking for them. These are the stories standing behind the clinical accounts of teenagers who lie and say they've taken the day's dose when they haven't, or of the children who cry in doctor's offices and "cheek" the pill (hide it rather than swallow, another linguistic innovation of Ritalinese) at home. These are the stories standing behind such statements as the following, culled from case studies throughout the literature: "It takes over of me [sic]; it takes control." "It numbed me." "Taking it meant I was dumb." "I feel rotten about taking pills; why me?" "It makes me feel like a baby." And, perhaps most evocative of all, "I don't know how to explain. I just don't want to take it any more."

But these quotes, as any reader will recognize, appeal only to sentiment; science, for its part, has long since declared its loyalties. In the end, what has made the Ritalin outbreak not only possible but inevitable is

the ongoing blessing of the American medical establishment–and not only that establishment. In a particularly enthusiastic account of the drug in a recent issue of *The New Yorker*, writer Malcolm Gladwell exults in the idea that "we are now extending to the young cognitive aids of a kind that used to be reserved exclusively for the old." He further suggests that, given expert estimates of the prevalence of ADD (up to 10 percent of the population, depending on the expert), if anything "too few" children are taking the drug. Surely all these experts have a point. Surely this country can do more, much more, to reduce fidgeting, squirming, talking excessively, interrupting, losing things, ignoring adults, and all those other pathologies of what used to be called childhood.

The Scandal of Special Ed

Robert Worth

This selection first appeared in *The Washington Monthly*'s June 1999 issue. Robert Worth is a contributing editor to *The Washington Monthly*.

If you've ever wondered what the words "special education" mean, consider Saundra Lemons. A tall, gangly 19-year-old senior in a Washington, D.C., public high school, she is quiet and attentive. Like the vast majority of children in special ed, she's not blind or deaf or confined to a wheelchair; instead she has had trouble learning to read. If dollars were education, Saundra would be in fine shape. D.C. pours almost a third of its total education budget into the 10 percent of its students who are special ed. In theory—or rather, in wealthy school districts—this money buys kids like Saundra all kinds of assistance: special tutoring sessions, a modified curriculum, specially trained therapists and consultants, even untimed tests.

But Saundra wasn't born in a wealthy suburb. So when she started having trouble in first grade, she was placed—like many kids in D.C.—into a dead-end classroom where she learned nothing. In her case, it was a class for the mentally retarded. It took six years for a teacher to notice