

Increased Use of Psychiatric Drugs in American Schools

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Executive Summary

Attention-Deficit/Hyperactivity Disorder (ADHD) has become the most frequently diagnosed mental health condition among American children. Now, a growing body of research indicates that overdiagnosis of ADHD and overuse of psychiatric drugs, including Ritalin, is a problem in many American schools and communities. What's more, treatment often takes the form of psychiatric drug combinations that have not been tested for their safety, efficacy or effectiveness. Details follow.

Ritalin drug therapy for behavior-disordered children became a commonly accepted practice by 1960. By 1975, there had been a six-fold increase in Ritalin use to treat what we now refer to as ADHD (or attention-deficit/hyperactivity disorder), prompting the *New England Journal of Medicine* to publish an article warning against the potential dangers of continued escalation in Ritalin use. Concerns included development of low self-esteem and drug abuse among children medicated for ADHD, inadequate monitoring of drug treatment by physicians, and reduction in motivation by parents and teachers to take other steps to help children¹. These issues have never been resolved fully, and the use of Ritalin and other psychiatric drugs to treat ADHD and related disorders has continued to increase. By the mid-1990s, ADHD drug treatment had reached epidemic proportions. Concern about the educational system's role in this epidemic is warranted.

The trends described in the 1975 *NEJM* article pale in comparison to those of the last decade. While ADHD drug treatment was generally on the rise throughout the 1970s and 1980s, use of psychiatric drugs to treat behavior problems increased dramatically after the U.S. Department of Education determined in 1991 that children with ADHD could qualify for special education services under the Individuals with Disabilities Education Act (IDEA). In the 1990s alone, there was over 700 percent increase in the use of Ritalin, with the U.S. consuming nearly 90 percent of the world's supply of the drug.² By the year 2000, nurses delivered more medications in American schools for mental health conditions than for any other chronic condition, and more than half of all such medications were prescribed specifically for ADHD.³

Despite the increased use of Ritalin, in 1998 the American Medical Association (AMA) asserted that there was no evidence of widespread overuse of psychostimulant medications such as Ritalin.⁴ This statement was made in response to the growing professional and public debate about ADHD overtreatment. As of 1998, the AMA statement could be construed as accurate—but primarily because no national study of Ritalin use or ADHD had been conducted. Since that

time, trend analyses and research studies have substantiated concerns that children are overmedicated for behavioral problems such as ADHD and that the overuse of psychiatric drugs is occurring in many—not isolated—American schools and communities.⁵

ADHD—which is a valid and complex disorder—has become the most frequently diagnosed mental health condition among American children. Hallmark signs of the disorder include developmentally inappropriate levels of impulse control, restlessness, and/or concentration that are persistent, pervasive, and impairing. So defined, ADHD is estimated to affect 3-5 percent of children. However, a growing body of research indicates that children are medicated for the disorder at much higher rates.

As a clinical psychologist with a practice that focused on the assessment of behavioral and developmental disorders, I watched the ADHD epidemic unfold first-hand. When I began practicing in the 1980s, ADHD was rarely mentioned in a referral and was a diagnosis given only after a host of other disorders and conditions had been ruled out. By 1995, 75 percent of all referrals to my practice, which were typically prompted by parents or teachers, were specifically for ADHD concerns. However, the referred children often exhibited normal developmental struggles and a wide range of behavioral and learning problems other than ADHD. The fact that so many parents and teachers actively sought ADHD diagnoses for their children and students compelled me to investigate how many children were diagnosed and treated for ADHD in the community where I was practicing. Thus, I began studying ADHD diagnosis, treatment, and outcomes in southeastern Virginia (SE VA). The research that my colleagues and I have conducted revealed some alarming findings.

We documented that approximately 17 percent of elementary and middle school students in Southeastern VA had been diagnosed with ADHD and 14 percent were actively mediated for the disorder even during the summer months when some of the children would normally have been on drug holidays.

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one-third of the white boys in elementary and middle school grades had been diagnosed with ADHD. Among the students medicated for ADHD, 28 percent were taking two different types of psychiatric drugs simultaneously and 8 percent were receiving three different types of psychiatric drugs simultaneously. The most common combination involved a psychostimulant such as Ritalin and an anti-depressant such as Prozac. None of these drug combinations has been tested for safety, efficacy, or effectiveness. Over half the children diagnosed with ADHD received the diagnosis during their preschool or kindergarten years. Among elementary students in one district, 63 percent of the students who were young for their grade were taking medication to treat ADHD.

These findings indicate that the rate of ADHD treatment was 3-6 times higher than national estimates of the disorder. They also suggest that children were being medicated for *developmentally appropriate* impulsivity, hyperactivity or inattention. Despite the high rate of ADHD drug treatment that we observed, children diagnosed with ADHD were 3-7 times more

likely than their classmates to experience adverse educational outcomes. Children diagnosed with ADHD, whether medicated or not, were more likely to be expelled or suspended from school, to repeat a grade, to require special education services, and to have a high rate of school absenteeism.

Overdiagnosis of ADHD and overuse of psychiatric drugs is a problem in many American schools and communities. My colleagues and I analyzed Drug Enforcement Administration (DEA) data on Ritalin distribution for the entire U.S. Using per capita distribution rates that take into account the number of children in every U.S. county, we found that ADHD drug treatment varies up to 30-fold across states and up to 100-fold across U.S. communities. We were able to categorize communities as low, moderate, and high Ritalin use communities. Looking at these data along with the handful of community-based studies of ADHD diagnosis and treatment patterns, we were able to determine the rate of ADHD drug therapy may be most appropriate in the 25 percent of low use regions. For example, Utah is a low use state that ranks 44th out of the 50 states in Ritalin use. In Utah approximately 3 percent of elementary students are medicated for ADHD. In contrast, North Carolina is a moderate use state and 7-10 percent of elementary and middle school students in rural regions of the state are treated for ADHD. More strikingly, in the high-use state of Virginia, 14-17 percent of elementary and middle school students are treated for the disorder. These findings suggest that ADHD may be overdiagnosed and overtreated in 36 out of 50 states.

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Reducing special education costs associated with ADHD is vitally important. The U.S. Department of Education estimates that in 1995 alone over \$3.2 billion additional educational dollars were expended on behalf of students with

ADHD annually and the costs continue to rise.⁶ Presently, a disquieting number of young children—even preschool age children—are being treated with untested combinations of psychiatric drugs. Excessive reliance on drugs to treat behavioral and learning problems is not working. Our preliminary analysis of Ritalin distribution data for the entire Commonwealth of Virginia has revealed no association between the rate of Ritalin use and educational outcomes at the school district level. We expect the same would be found for other states. Other trends also suggest that reliance on psychiatric drugs to treat behavior problems is not working. Although the use of these drugs has increased over the past three decades, school drop-out rates have remained essentially stable during the same time period. Moreover, the rate of teenage depression and suicide, which should be reduced by effective treatment of early emerging behavioral problems, has increased rather than decreased since the ADHD and psychiatric drug treatment epidemic took hold.

The educational system has played a role in the emergence of this epidemic and it has a responsibility to address the problem. Unfortunately, recently passed laws that prohibit teachers from recommending the use of psychiatric drugs may be only the first step of many necessary steps. I would argue for the following considerations:

1. Expanded efforts to prevent school personnel from recommending psychiatric medications for students.

2. New legislation to prevent schools from diagnosing ADHD. Schools do not diagnose asthma, diabetes, or other chronic health conditions and they should not diagnose chronic mental health conditions such as ADHD.

3. Increased teacher education and training directed toward improving behavior and classroom management to provide better learning environments for all students, including children with ADHD.

4. Improved methods to increase medical management of children medicated for ADHD and related disorders. Although schools should not recommend medications or diagnose disorders such as ADHD, input from educators is important for effective management of behavioral problems that are evident in school settings.

These recommendations would ensure that teachers are better prepared to assist children in establishing developmentally appropriate behavioral control. They would also decrease the number of children perceived as disordered and thereby disabled and eligible for special education services. Such educational reform is essential.

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Endnotes

¹ Sroufe, L & Stewart, M, "Treating problem children with psychostimulants.," *New England Journal of Medicine*, 289, pp. 407-413, 1975.

² Marshall, E., "Duke study faults overuse of stimulants for children." *Science*, 289(4), August, 2000.

³ McCarthy, AM, Kelly, MW, & Reed, D, "Medication administration practices of school nurses." *Journal of School Health*, 2000, 70(9), pp. 371-376.

⁴ Goldman, L S, Genel, M, Bezman, R J. & Slanetz, P J, "Diagnosis and treatment of attention-deficit/hyperactivity disorder in children and adolescents," Council on Scientific Affairs, American Medical Association. *Journal of the American Medical Association*, 279(14), 1998, pp. 1100-7.

⁵ LeFever, GB, "ADHD overdiagnosis: A justified concern." Paper presented at the American Psychological Association, San Francisco, CA, August 26, 2001.

⁶ Forness, SR , "The impact of attention deficit hyperactivity disorder on school systems," Paper presented at the Consensus Development Conference, National Institutes of Health: Diagnosis and treatment of attention deficit hyperactivity disorder, Bethesda, MD, November, 1998.