

SB

230

Alaska State Legislature

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Senator Bettie Davis

Sectional Analysis Senate Bill 230

Section 1. Requires school boards to adopt policies restricting school personnel from recommending that a student be given psychotropic drugs.

Section 2. Technical amendment to accommodate the addition of AS 47.10.019(b) in sec. 3 of this bill.

Section 2. Prohibits a child from being considered to be a child in need of aid simply based on the refusal of the child's custodian to give psychotropic drugs to the child.

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: _____
Bill Version: SB 230
() Publish Date: _____

Revision Date/Time (Note if correction): 1/16/2002 9:11 am Dept. Affected: Health & Social Services
Title: PSYCHOTROPIC DRUGS FOR TREATMENT OF CHILDREN IN NEED OF AID BRU: Purchased Services
Component: Foster Care Special Need
Sponsor: DAVIS Component Number: 2238
Requestor: SENATE (HES)

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES (0)						
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: _____

Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

Section 1 of this bill does not impact this department. Sections 2 and 3 amend CINA statute AS 47.10.019. This statute places limits on the court's determinations in finding a minor to be a child in need of aid. This amendment adds a subsection which prohibits the court from finding a minor to be a child in need of aid and prohibits the department from taking custody of a child solely on the basis of an allegation or finding that the child's parent or legal custodian refuses to administer or consent to the administration of psychotropic medication.

Should this bill become law, the department does not anticipate any fiscal impact. The bill has impact on practice only.

Prepared by: Debbie Loveid Phone _____
Division: Family & Youth Services Date/Time _____
Approved by: Elmer A. Lindstrom, Deputy Commissioner Date 01/24/2002
Agency: Department of Health & Social Services

For distribution information, call the Governor's Legislative Office

22-LS1162\F
Lauterbach
3/8/02

*Sen Davis
Attn Richard
& memo*

CS FOR SENATE BILL NO. 230()

IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTY-SECOND LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): SENATOR DAVIS

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to recommending or refusing psychotropic drugs as a treatment for
2 children; and relating to notification of parents and custodians about the children in
3 their care."

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA .

5 * Section 1. AS 14.33.120(a) is amended to read:

6 (a) Each governing body shall adopt a written school disciplinary and safety
7 program. The program required under this subsection must include written

8 (1) standards for student behavior and safety that reflect community
9 standards and that include, at a minimum, basic requirements for respect and honesty;
10 standards required under this paragraph must be developed and periodically reviewed
11 with the collaboration of members of each school, parents, teachers, and other persons
12 responsible for the students at a school; a governing body may require that standards
13 developed under this paragraph be consistent for all schools in an attendance area or
14 the district;

1 (2) standards relating to when a teacher is authorized to remove a
2 student from the classroom for

3 (A) failure to follow student behavior and safety standards; or

4 (B) behavior described under AS 14.30.045(1) or (2);

5 (3) procedures for notifying teachers of dangerous students consistent
6 with AS 47.12.310(b);

7 (4) standards relating to when a teacher, teacher's assistant, or other
8 person responsible for students is authorized to use reasonable and appropriate force to
9 maintain classroom safety and discipline as described under AS 11.81.430(a)(2);

10 (5) policies necessary to comply with provisions of state and federal
11 law, including 20 U.S.C. 1400 - 1485 (Individuals with Disabilities Education Act);

12 (6) standards to address needs of students for whom mental health or
13 substance abuse may be a contributing factor to noncompliance with the school
14 disciplinary and safety program;

15 (7) policies for implementing a student conflict resolution strategy,
16 including the nonviolent resolution or mediation of conflicts and procedures for
17 reporting and resolving conflicts;

18 (8) procedures for periodic review and revision of the school
19 disciplinary and safety program;

20 (9) policies that

21 (A) prohibit a teacher from making a psychological or
22 medical diagnosis of a behavioral condition or disorder in a student or
23 from recommending a psychotropic drug for a student; and

24 (B) subject to (A) of this paragraph, provide that, if school
25 personnel perceive that a student may have a behavioral condition or
26 psychological problem or if requested by a student's parent or legal
27 guardian, school personnel may

28 (i) discuss the student's behavior with the student's
29 parent or legal guardian;

30 (ii) if appropriate and with the consent of the
31 student's parent or legal guardian, refer a student for an

1 educational evaluation by an appropriate educational evaluator
2 who is a certified school psychologist, approved school social
3 worker, approved or certified speech pathologist, school nurse, or
4 school counselor;

5 (iii) if appropriate, recommend to the student's
6 parent or legal guardian that the student be evaluated by a licensed
7 physician or other mental health professional, as defined in
8 AS 47.30.915;

9 (iv) refer the parent or legal guardian to an
10 appropriate health professional affiliated with the school district
11 for possible evaluation of the student; and

12 (v) if behavioral conditions or psychological
13 problems appear to persist after taking appropriate steps described
14 in (i) - (iv) of this subparagraph, follow local procedures to provide
15 specialized educational services that are appropriate for the
16 student.

17 * Sec. 2. AS 47.10.019 is amended to read:

18 Sec. 47.10.019. Limitations on determinations. (a) Notwithstanding other
19 provisions of this chapter, the court may not find a minor to be a child in need of aid
20 under this chapter solely on the basis that the child's family is poor, lacks adequate
21 housing, or exhibits a lifestyle that is different from the generally accepted lifestyle
22 standard of the community where the family lives. However, this subsection
23 [SECTION] may not be construed to prevent a court from finding that a child is in
24 need of aid if the child has been subjected to conduct or conditions described in
25 AS 47.10.011 - 47.10.015.

26 * Sec. 3. AS 47.10.019 is amended by adding a new subsection to read:

27 (b) Notwithstanding other provisions of this chapter, a court may not find a
28 minor to be a child in need of aid and the department may not take custody of a child,
29 including emergency custody, solely based on an allegation or finding that the child's
30 parent or other person having the care and custody of the child has refused to
31 administer or consent to the administration of a psychotropic drug to the child.

Subject: S.B. 230

Date: Fri, 22 Mar 2002 08:14:26 -0500

From: "john breeding" <wildcolt@flash.net>

To: <Senator_Lyda_Green@legis.state.ak.us>

Dear Senator Green

I have just read the amended work draft of S.B. 230, relating to recommending or refusing psychotropic drugs. As I know from listening to you at the first hearing, you are very aware of the problem of coercion in the schools on the issue of psychiatric evaluation and drug treatment, and that you are serious about the dangers and immorality of such behavior. I deeply appreciate your consideration of these serious issues as chairperson of the committee hearing this bill.

With that in mind, I urge you to reconsider the revised wording of this bill which weakens and undermines any intention of protecting children and parents from coercion and the dangers of drug treatment. At the very minimum, it needs to be made very clear that any condition of testing and/or drug treatment tied to school inclusion is illegal. Also, please know that all school personnel should be included, not only teachers (counselors, nurses, administrators, etc.). It is not appropriate for any of them to be acting outside the scope of authentic educational practice. Section Bv really puts things backwards ---educational services are the domain of educators, not something to come in after looking for imagined mental illnesses.

Your leadership in challenging the very harmful practices of diagnosing and drugging our school children, and pointing educators back toward the business of education is too important to be sabotaged by wording that loses all real power to curtail coercion and abdication of educational responsibility.

Finally, I have seen Richard Warner's (CCHR) recommended wording of this legislation, and I strongly support it.

I also encourage you to contact your colleague in Utah, Representative Katherine Bryson, who just succeeded in shepherding through an excellent related bill in that state. I have copied her this email so you will have a contact if you so desire.

I am happy to respond to any questions or concerns you might have.

Sincerely,

John Breeding, PhD
Texans For Safe Education

Subject: CS for Senate Bill No. 230
Date: Thu, 21 Mar 2002 13:03:13 EST
From: WindWarner@aol.com
To: Senator_Lyda_Green@legis.state.ak.us

(NOTE: This may be a duplicate. I tried to send it last night but got a message that AOL was not responding.)

March 20, 2002

To: Senator Lyda Green
From: Richard Warner, President
Citizens Commission on Human Rights

Dear Ms. Green:

Richard Benavides sent us a copy of the CS for Senate Bill No. 230. We feel that unless certain changes are made, this current version of the bill will have the opposite effect of what we believe is intended. The drugging of children and stigmatizing them with psychiatric labels will increase, not decrease.

It must be realized that drugging and labeling children follows the behavioral/psychiatric/psychological evaluation. For a label is certain to follow the evaluation and drugging is certain to be the "treatment." Sections (9) (B) (ii " iv) set up the means by which school personnel would be encouraged to send children for psychological, psychiatric, or "educational" evaluations " and parents would be encouraged to have their children evaluated " by individual"s working directly for the school or affiliated with the school. This, in effect, sets up the "pipeline" to get children drugged.

You may recall that an individual who testified at the March 4 hearing stated that in Fairbanks the school district had a relationship with a particular psychologist or psychiatrist who tended to put the kids on Ritalin.

There is no need for school personnel to "refer" or "recommend" that students receive such evaluations unless the school needs to comply with federal laws to receive federal money for children in a particular disability category. One problem that was brought out in the March 4 hearing (and occurs nationally) is that a psychiatrist or psychologist will come to the school and "train" teachers to view normal children as mentally ill. Or to view certain "symptoms" which may be the result of any one of hundreds of real physical " not mental " conditions " as psychiatric symptoms. The teachers are encouraged to see these kids as educationally or psychiatrically "disabled" and send them to be evaluated.

School personnel are not doctors or psychologists. They should not be suggesting to parents that the child has a "disease" or disorder. School personnel should only advise the parents of the behaviors which they have observed and discuss disciplinary or educational approaches to resolve those behaviors. If parents or guardians want more information school personnel can give them a list of resources (as they have done in the Utah bill) and leave it to the parents to choose or not choose to avail themselves of those resources.

In short, if we are truly to rein in the indiscriminate labeling and drugging of children, it must be the parent or guardian " not the school - who initiates any contact which might lead in the direction of a child being psychiatrically drugged.

Here's our amended version of the bill.

* Section 1. AS 14.33.120 (a) is amended to read:

(a) Each governing body shall adopt a written school disciplinary and safety program. The program required under this subsection must include written

(9) policies that

(A) prohibit school personnel from

- (i) making a psychiatric, psychological, or medical diagnosis of a student;
- (ii) recommending or requiring that a child take or continue to take a psychotropic drug as a condition of attending school;
- (iii) recommending that a parent or guardian seek or use a psychiatric, psychological treatment or evaluation for a child, or;
- (iv) recommending a specific, licensed physician or health professional to a parent or guardian

(B) subject to (A) of this paragraph, provide that, school personnel are permitted to discuss the academic, behavioral or discipline problems of a child with a parent or guardian

(C) permit a licensed mental health professional employed by the school, acting for the sole purpose of complying with federal education laws, to

- (i) recommend, but not require, a psychiatric, psychological, or behavioral treatment for a child
- (ii) conduct a mental health evaluation of a child with the consent of the child's parent or guardian

(D) permit the school district to make available to the child's parent or guardian a list of community or school resources provided that the list conspicuously states the following:

"This list is provided as a resource to you. The school neither recommends nor requires that you use this list or any of the services provided in it. It is for you to decide what services, if any, to access and from whom you wish to obtain them."

* Section 3. AS 47.10..019 is amended to read:

(b) Notwithstanding other provisions of this chapter, a court may not find a minor to be a child in need of aid and the department may not take custody of a child, including emergency custody, solely based on an allegation or finding that the child's parent or other person having the care and custody of the child has refused to administer or consent to the administration of a psychotropic drug to the child, or has refused to consent to a psychiatric, psychological, or behavioral treatment or evaluation of a child.

Thank you for your leadership on this legislation. I will try to contact you Thursday morning to discuss this legislation. I will also be sending Senator Davis and Mr. Benavides our analysis and our suggested amendments to the CS.

ALASKA MENTAL HEALTH BOARD

TONY KNOWLES, GOVERNOR
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March 4, 2002

Honorable Bettye Davis
Alaska State Senate
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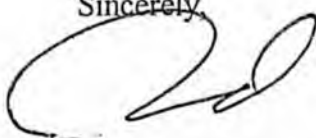
Dear Senator Davis,

The Alaska Mental Health Board supports the intent of Senate Bill 230. The Board would like to point out a concern with the bill as currently written. Section 1 of the bill amends AS 14.33.120(a) to add a clause that requires school boards to adopt written policies "...prohibiting school personnel from recommending the use of psychotropic drugs for a student and requiring that, if school personnel perceive that a student may have a behavioral or psychological problem, a letter be sent to the parent or other person having care and custody of the child recommending that an appropriate medical or behavioral health evaluation be conducted by a licensed physician."

Depending upon the circumstances, recommending that such an evaluation be conducted is appropriate. However, please be aware that suggesting that a licensed physician conduct the evaluation could present problems in many school districts, particularly in rural Alaska, where qualified physicians may not be readily or regularly available. The Board suggests that you may want to consider revising SB 230 to indicate that these evaluations may be conducted by licensed physicians or licensed mental health professionals (as defined in SB 302).

Our apologies for not bringing this concern to your attention earlier in the process. The Board would be happy to work with you on the bill. Thank you for your consideration.

Sincerely,



Richard Rainery
Executive Director



Legislative Research Report 99.023

January 27, 1999

Recent Studies on Attention Deficit Hyperactivity Disorder and the Use of Ritalin

Legislative Research Services
Division of Legal and Research Services
Legislative Affairs Agency
Alaska State Legislature

Prepared by Gina P. Spartz



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SUMMARY

You asked us to provide information on Attention Deficit Hyperactivity Disorder (ADHD) and the success of treatment procedures involving the drug Ritalin. You also wanted to know if there are any statistical data on the use of Ritalin by children in the U.S. and Alaska.

There are very little data available on the precise number of children currently diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). Recent estimates indicate that approximately 2 million school-age U.S. children are currently diagnosed with ADHD. Roughly one million of these children are being treated with Ritalin. According to state officials to whom we spoke, state agencies do not track the use of Ritalin by Alaska's schoolchildren.

ADHD is a behavioral disorder, the core symptoms include hyperactivity, impulsivity, and inattention. There is no known cause or test for ADHD; however, recent studies show a strong genetic link. The drug Ritalin has been used to treat ADHD since the 1960s. Ritalin has been successful in regulating and controlling ADHD patients' responses to external stimuli which allows them to focus on accomplishing tasks. The use of the drug increased in the 1990s, prompting concern in the general public that the drug is overprescribed. Recent studies reported in the *Journal of the American Medical Association (JAMA)*, indicate, however, that the increase is largely due to a broader definition of ADHD and the fact that children are taking the drug for longer periods of time. Two recent national studies have concluded that there is a lack of information on whether Ritalin is helpful in alleviating ADHD symptoms in the long run.

STATISTICAL DATA ON ATTENTION DEFICIT HYPERACTIVITY DISORDER AND RITALIN

We spoke to officials with the State Departments of Education and Health and Social Services regarding statistics on the use of Ritalin in Alaska's schoolchildren. They indicated that to the best of their knowledge the state does not track that kind of information.¹

National data are also difficult to find. The most frequently cited statistics on ADHD and Ritalin use are provided by the National Institute of Health (NIH). The NIH reports that roughly 2 million school-age children (3-5 percent of children in the U.S. population) are currently diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). According to a 1995 study, roughly 1.5 million of these children (5 to 18 years) were using Ritalin.²

¹ We contacted Harry Gamble, Public Information officer with the Department of Education and Pam Muth, Director of the Division of Maternal, Family, Child Health. In addition we spoke to Dr. Lynn Clark, an Anchorage pediatrician specializing in pediatric learning.

² D.J. Safer, J.M. Zito and J.E.M. Fine, "Increased Methylphenidate Usage for Attention Deficit Disorder in the 1990s," *Pediatrics*, Volume 98, Issue 6, pp. 1084-1088, December 1, 1996. Abstract available on the World Wide Web at <http://www.pediatrics.org/cgi/content/abstract/98/6/1084>.

ATTENTION DEFICIT HYPERACTIVITY DISORDER

The condition known as Attention Deficit Hyperactivity Disorder (ADHD) is one of the most commonly diagnosed behavioral disorders in children today. The core symptoms include impulsivity, hyperactivity, and disruptive behavior. These symptoms are often exhibited in an inability to sit still and pay attention in a classroom setting. Other characteristics, however, may include more subtle behaviors such as frequent distraction by innocuous stimuli. The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* diagnostic criteria for ADHD indicates that these types of behaviors must persist for at least six months and to such a degree that is inconsistent with the child's developmental level. These symptoms must also be present in at least two settings (such as at home and at school) and not just one or the other.³

Left untreated ADHD may lead to anti-social tendencies and alienation from peers. Children with this disorder often suffer academically and can exhibit at-risk behavior in adolescence such as teenage pregnancy and criminal activity.

ADHD children are more likely to fail in school and to develop conduct disorders or antisocial personality disorders than are other children. Peers may perceive these children as immature and irritating and avoid or neglect them due to their low frustration tolerance and intrusive bossy behaviors. ADHD is not a benign disorder and may have a lifetime course. In fact, its diagnosis in adults is increasing.⁴

ADHD was first diagnosed in this country in the 1940s. Through the years the condition has had various names: *minimal brain dysfunction*, *brain-injured child syndrome*, *hyperkinetic reaction of childhood*, and most recently *attention deficit disorder*. It was once believed that ADHD was caused by brain injury perhaps from early infection or birth complications, or by the use of refined sugar and food additives. These theories have since been discounted, however, because only a small number of ADHD cases seemed to result from brain injury and a restricted diet only seemed to help about 5 percent of children suffering from ADHD.⁵

With the rapid advancement in brain research in the past decade, new theories have developed that ADHD may be connected to brain chemistry. Russell Barkley, a leading expert on ADHD, reports that recent twin studies conducted in this country and in Europe offer the most conclusive evidence that genetics can contribute to the disorder. He indicates that one of the largest studies ever conducted on genetics and ADHD, through the University of Oslo, concluded:

ADHD has a heritability approaching 80 percent, meaning that up to 80 percent of the differences in attention, hyperactivity and

³ Attachment A includes the detailed list of behaviors that must exist, and for how long, before a diagnosis for ADHD can be given.

⁴ Ballard, Shirley, Bolan, Morna, et al., "Neurological Basis of Attention-Deficit/Hyperactivity Disorder," *Adolescence*, December 22, 1997.

⁵ "Attention Deficit Hyperactivity Disorder: Decade of the Brain," National Institute of Health Publication, <http://www.nimh.nih.gov/publicat/adhd.html> (accessed December 31, 1998). A copy is included as Attachment B.

impulsivity between people with ADHD and those without the disorder can be explained by genetic factors.⁶

Barkley contends that ADHD may be caused by the brain's inability to inhibit impulses. Part of the problem is that certain receptors in the brain which control the ability to focus attention on performing a specific task and curb impulsiveness do not respond to the brain's natural chemicals (specifically dopamine and norepinephrine). This chemical "block" makes the ability to stick with a mundane task almost impossible.

This may account for the success of the use of psychostimulants such as Ritalin to treat behavioral problems in ADHD sufferers. Despite the progress in scientific research, however, there is still no known cause or test for ADHD.

THE EFFECT OF RITALIN IN TREATING ADHD

By far, the most common treatment of ADHD, currently, is the use of psychostimulants such as Methylphenidate, also known as Ritalin. The drug has proven to be very effective in controlling the most adverse behaviors of ADHD. A recent article published in *JAMA* states as follows:

[m]edications have been unequivocally shown . . . to reduce core symptoms of hyperactivity, impulsivity, and inattentiveness. They improve classroom behavior and academic performance; diminish oppositional and aggressive behaviors; promote increased interaction with teachers, family, and others; and increase participation in leisure time activities.⁷

Ritalin, created in 1955, was approved by the Food and Drug Administration for use in treating children with behavioral problems in 1961. Use of the drug to treat children with symptoms of ADHD continued through the 1970s and increased dramatically in the 1980s and 1990s.

Basically, Ritalin helps patients concentrate on specific tasks. The drug balances brain chemicals so that individuals can respond more selectively to impulses. With the use of Ritalin, ADHD patients can neurologically filter the overload of external stimuli and concentrate on the task at hand.

According to the NIH, Ritalin has not proven to be addictive in children and there is no evidence that children will suffer harm if they stop taking the drug. Generally, children do not experience a "high" when taking it, nor does it make them sleepy. Possible side effects include weight loss, loss of appetite, and insomnia. The NIH recommends that individuals taking the drug be carefully monitored and receive ongoing follow-up treatment, especially if side effects occur. It is also

⁶ Russell Barkley, "Attention-Deficit Hyperactivity Disorder," *Scientific American*, September, 1998. <http://www.sciam.com/1998/0998issue/0998barkley.html> (accessed January 12, 1999). A copy is included as Attachment C.

⁷ Larry Goldman, Myron Genel, Rebecca Besman, and Priscilla Stanetz, "Diagnosis and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents," *JAMA*, April 8, 1998, Vol. 279, No. 14. A copy of this article is included as Attachment D.

recommended that patients stop taking the medication periodically to monitor core symptoms and to test if the medication is still needed.⁸

OVERDIAGNOSIS OF ADHD AND OVERPRESCRIPTION OF RITALIN

Concerns have arisen in recent years over the increase in production of Ritalin and the possibility that it is being overprescribed. There is also a general perception by the public that doctors are too quick to diagnose ADHD in children.

A recent study on this subject, conducted by researchers from Johns Hopkins University, indicates that there has been an increase in the prevalence of Ritalin treatment of ADHD in the 1990s, but, in their estimation, the increase does not suggest an overdiagnosis of ADHD and overprescription of Ritalin. The researchers surveyed Ritalin patients in five regions in the United States and concluded:

[T]he findings from regional and national databases indicate that on average, there has been a 2.5-fold increase in the prevalence of methylphenidate treatment of youths with ADD between 1990 and 1995. In all, approximately 2.8% (or 1.5 million) of US youths aged 5 to 18 were receiving this medication in mid-1995. The increase in methylphenidate treatment for ADD appears largely related to an increased duration of treatment; more girls, adolescents, and inattentive youths on the medication; and a recently improved public image of this medication treatment. . . . [In conclusion] the database findings presented serve to correct exaggerated media claims of a 6-fold expansion of methylphenidate treatment . . .⁹

The perception in the media that the diagnosis of ADHD and Ritalin use is at increased proportions could also be a result of changes in the clinical approach to the disorder. The *JAMA* article indicates that there are several significant reasons for the increase in the number of individuals with ADHD and in Ritalin use. Among these are a more general awareness and acceptance that ADHD actually exists by the public and the medical community; a broader definition of core symptoms including inattentiveness which may not manifest itself in hyperactivity; more confidence by medical experts that the drug does not inhibit physical growth in children; and finally increased medical use of the drug by adults.

Nevertheless, an increase in the use of Ritalin is still a genuine concern to the general public and has prompted strong debate in the media and in the medical community. A recent book, *Running on Ritalin: A Physician Reflects on Children, Society and Performance in a Pill* by Dr. Lawrence Diller, examines some of the cultural changes and assumptions that have occurred in the 1990s and how these changes may correlate to the rise in Ritalin use. In his book, Dr. Diller, a behavioral pediatrician, does not dispute the fact that Ritalin is an effective treatment for ADHD.

⁸ "Attention Deficit Hyperactivity Disorder: Decade of the Brain," NIH Publication (see Attachment B). "Ritalin Stimulant Medication Information Page," prepared by Pediatric Neurological Associates, February 24, 1998. <http://www.pediatricneurology.com/ritalin.html> (accessed December 29, 1998). A copy is included as Attachment E.

⁹ D.J. Safer, J.M. Zito, and E.M. Fine, "Increased Methylphenidate Usage for Attention Deficit Disorder in the 1990s," *Pediatrics*.

He does, however, feel that if doctors only prescribe Ritalin without examining the current lifestyle of families they do a disservice to ADHD patients. Dr. Diller elaborates in a recent interview on National Public Radio:

The fact that Ritalin works per se has been known and known for 50 years. What it tells us is at the moment, we're tending to view our children's problems as a chemical imbalance. And I think that is a limited view. I think rather this should be viewed more as a living imbalance between what our children's brains can deliver and what's being expected from them and what the responses are from the environment. . . . Ritalin allows a person to address [a] living imbalance in a more – an easier fashion. But if I only prescribe Ritalin and I don't bring up to that family, or the large of society, the factors – economic, social, cultural – that are involved in this large living imbalance . . . I'm complicitous.¹⁰

POTENTIAL ILLICIT USE AND DISTRIBUTION OF RITALIN

Since Ritalin is generally prescribed to children and adolescents, there is concern that the drug is more vulnerable to potential illicit use. A 1998 survey conducted in Wisconsin found that some students who had prescriptions for Ritalin had been pressured to sell or give the drug to other non-Ritalin using classmates. The study, conducted by a Wisconsin-based clinic that treats ADHD patients, found that 16 percent of students had been approached to sell, give, or trade their medication. The survey also reported that not all schools had written policies regarding prescription drugs and that security for stored prescription drugs was sometimes lax. The report urged more strict monitoring of prescription drugs on school grounds.¹¹

Recent studies, however, have concluded that although there is potential for the abuse of any stimulant drug by youths, the evidence does not point to a serious Ritalin abuse problem nationwide. It has been speculated that one reason for this may be that the actual effects of Ritalin take up to an hour to cause an affect in the brain. Ritalin is taken orally and is drawn to the brain slowly, up to 60 minutes. Generally, if a drug produces a strong reaction quickly it has more potential for abuse. This leads experts to the conclusion that the use of Ritalin rarely leads to addiction.¹² Some nonmedical use of Ritalin has been reported, however, usually through snorting or injecting the "cooked" tablets. The *JAMA* article explains:

There is little disagreement that stimulants as a class have marked abuse potential, and their misuse can have severe adverse medical and social consequences. However, stimulants

¹⁰ Dr. Lawrence Diller as interviewed by Barbara Bogave, host of *Fresh Air*, a radio interview program produced by National Public Radio, September 10, 1998.

¹¹ "Researchers Find Potential for Ritalin Abuse in Schools," *Mental Health Net*, June 15, 1998. Available at <http://www.cmhc.com/articles/adhd3.htm> (accessed December 21, 1998). A copy is included as Attachment F.

¹² "New Research Helps Explain Ritalin's Low Abuse Potential When Taken as Prescribed," National Institute on Drug Abuse Advisory, September 29, 1998. Available at <http://www.nida.nih.gov/MedAdv/MA-929.html> (accessed January 26, 1998). A copy is included as Attachment G.

differ in their ability to induce euphoria and thus liability to abuse. Almost all of the reports of abuse of methylphenidate itself have been of polysubstance-abusing adults who have tried to solubilize the tablets and inject them, . . . while nonmedical stimulant use may be somewhat more common among adolescents in recent years, little use is of methylphenidate itself, and the pattern of use for the vast majority appears to be experimental and not of the type (regular, heavy, injecting, etc.) likely to lead to serious adverse consequences.

Although it doesn't appear to be a widespread problem at this time, the National Institute of Drug Abuse is aware of the potential for abuse, and the U.S. Drug Enforcement Administration strictly controls the manufacture and distribution of Ritalin.¹³

RECENT NIMH AND NIH STUDIES ON ADHD

Two recent studies of ADHD and the use of Ritalin have recently been conducted¹ by national health organizations. Both resulted in a call for more long term studies of the use of the drug and its effect on the disorder in the long run.

The National Institute of Mental Health (NIMH) has just completed one of the largest and longest clinical trials ever conducted on children and ADHD. The study lasted 14 months and involved 576 children in six cities. The subjects were divided into four groups: one group received just drugs; one received just therapy (such as parent training, teacher counseling, and intensive work on social skills); the third group received both drugs and therapy; and the fourth group, used as a control, received whatever treatment was available.

Although the results of the study have not been published, the NIMH's findings were presented at the annual meeting of the American Academy of Child and Adolescent Psychiatry in October 1998. The study concluded that, in the months these children were evaluated, *drugs and therapy* and *drugs alone* proved to be the most effective. The researchers warn, however, that this conclusion should not be interpreted to mean that ADHD can be successfully and completely treated with drugs

The children getting nondrug therapy received intensive treatment for nine months, including eight weeks at a special summer camp, but then treatment leveled off. The children on drugs, by contrast, got their doses like clockwork for the full period of the study, three times a day, seven days a week. "There are few, if any, psychosocial researchers who would say that five months after you stop treatment, children would do as well as those children still taking drugs," says Dr. William Pelham, [leading researcher in the NIMH study], "Everybody

¹³ "NIDA Infobox on Ritalin," National Institute on Drug Abuse, February 1998. This information is available at <http://www.nida.nih.gov/Infobox/ritalin.html> (accessed December 31, 1998). A copy is included as Attachment H.

knows that, in the short run, medication has a whopping effect."¹⁴

Clinical trials have proven that Ritalin works in the short run. But the need for long term trials on ADHD is evident in the NIMH study (researchers will continue to monitor the subjects in this recent study for the next six years).

This is also apparent in findings published by the NIH, which conducted a Consensus Development Conference in November 1998. This two-day public session brought together medical experts from all over the country to discuss and evaluate the diagnosis and treatment of ADHD.

The results of this conference were published in a consensus statement shortly after the conference ended. Among other things, the participants concluded as follows: further research is needed to develop a more precise, age and gender specific test for ADHD; a consensus is needed in the medical community about which patients should be treated with Ritalin; improved awareness in the health community and a consistent set of diagnostic procedures and practice guidelines are needed to appropriately assess and treat the disorder; and most importantly, long term studies on treatment of ADHD, especially among adolescents, must be undertaken.¹⁵

OTHER SOURCES OF INFORMATION ON ADHD AND RITALIN

Medical experts agree that children who may have ADHD should be evaluated thoroughly before they are prescribed a drug such as Ritalin. It is recommended that children undergo a complete diagnostic evaluation including psychological testing and laboratory tests. An ADHD expert takes into account the child's home and school environments, and parental involvement with the child's development. The child's teachers should also be consulted for observational information.

We have included with this report a helpful information pamphlet published by the NIMH. The pamphlet includes information on the steps involved in making a diagnosis for ADHD and the options available to parents for treatment. The pamphlet also lists a number of sources of information and support for ADHD patients. These include references to numerous books on the subject, some written for children and teens with ADHD, as well as a list of national support groups and organizations that deal with the disorder.¹⁶

I hope you find this information useful. Please do not hesitate to contact us if you have questions or need additional information.

¹⁴ Susan Brink, "Doing Ritalin Right," *U.S. News & World Report*, November 23, 1998, pp. 76-81. This article highlights the findings from the NIMH study. A copy is included as Attachment I.

¹⁵ "Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder—Draft Report," National Institute of Health Consensus Statement Online, November 16-18, 1998. This information is available at http://www.odp.od.nih.gov/consensus/cons110/110_statement.htm (accessed January 26, 1999). A copy is included as Attachment J.

¹⁶ "Attention Deficit Hyperactivity Disorder: Decade of the Brain," NIH Publication (see Attachment B).

LIST OF ATTACHMENTS

Attachment A – “Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder,”
Diagnostic Statistical Manual of Mental Disorders, Fourth Edition

Attachment B – “Attention Deficit Hyperactivity Disorder: Decade of the Brain,”
NIH Publication

Attachment C – Russell Barkley, “Attention-Deficit Hyperactivity Disorder,”
Scientific American, September, 1998

Attachment D – Larry Goldman, Myron Genel, Rebecca Besman, Priscilla Stanetz,
“Diagnosis and Treatment of Attention- Deficit/Hyperactivity Disorder in Children
and Adolescents,” *JAMA*, April 8, 1998

Attachment E – “Ritalin Stimulant Medication Information Page,” prepared by
Pediatric Neurological Associates

Attachment F – “Researchers Find Potential for Ritalin Abuse in Schools,” *Mental
Health Net*, June 15, 1998

**Attachment G – “New Research Helps Explain Ritalin's Low Abuse Potential
When Taken as Prescribed,”** National Institute on Drug Abuse Advisory,
September 29, 1998

Attachment H – “NIDA Infobox on Ritalin,” National Institute on Drug Abuse,
February 1998

**Attachment I – Susan Brink, “Doing Ritalin Right,” *U.S. News & World Report*,
November 23, 1998**

**Attachment J - “Diagnosis and Treatment of Attention Deficit Hyperactivity
Disorder—Draft Report,” NIH Consensus Statement Online, November 16-18,
1998**

Attachment A

"Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder,"
Diagnostic Statistical Manual of Mental Disorder, Fourth Edition

Table 1.—Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder*

- A. Either (1) or (2):**
- (1) inattention: 6 (or more) of the following symptoms of inattention have persisted for at least 6 mo to a degree that is maladaptive and inconsistent with developmental level:
 - (a) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
 - (b) often has difficulty sustaining attention in tasks or play activities
 - (c) often does not seem to listen when spoken to directly
 - (d) often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
 - (e) often has difficulty organizing tasks and activities
 - (f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
 - (g) often loses things necessary for tasks or activities (eg, toys, school assignments, pencils, books, or tools)
 - (h) is often easily distracted by extraneous stimuli
 - (i) is often forgetful in daily activities
 - (2) hyperactivity-impulsivity: 6 (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 mo to a degree that is maladaptive and inconsistent with developmental level:
 - (a) often fidgets with hands or feet or squirms in seat
 - (b) often leaves seat in classroom or in other situations in which remaining seated is expected
 - (c) often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
 - (d) often has difficulty playing or engaging in leisure activities quietly
 - (e) is often "on the go" or often acts as if "driven by a motor"
 - (f) often talks excessively
 - (g) often blurts out answers before questions have been completed
 - (h) often has difficulty awaiting turn
 - (i) often interrupts or intrudes on others (eg, butts into conversations or games)
- B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 y**
- C. Some impairment from the symptoms is present in 2 or more settings (eg, at school [or work] and at home)**
- D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning**
- E. The symptoms do not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder and are not better accounted for by another mental disorder (eg, mood disorder, anxiety disorder, dissociative disorder, or a personality disorder)**

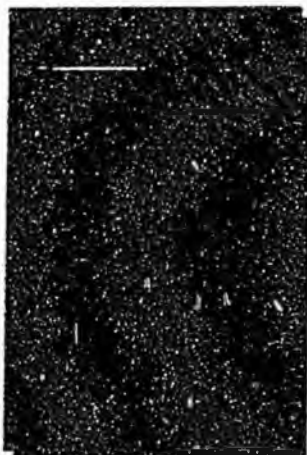
**Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*,¹⁰ code based on type: 314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both criteria A(1) and A(2) are met for the past 6 months; 314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: if criterion A(1) is met but criterion A(2) is not met for the past 6 months; 314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: if criterion A(2) is met but Criterion A(1) is not met for the past 6 months. Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, "In Partial Remission" should be specified.

Reprinted from "Diagnosis and Treatment of Attention-Deficit Hyperactivity Disorder in Children and Adolescents," *JAMA*, April 8, 1998, vol. 279, no. 14.

Attachment B

**“Attention Deficit Hyperactivity Disorder: Decade of the Brain,”
NIH Publication**

Attention Deficit Hyperactivity Disorder



Understanding the Problem

What are the symptoms of ADHD?

Can any other conditions produce these symptoms?

Can other disorders accompany ADHD?

What causes ADHD?

Getting Help

How is ADHD identified and diagnosed?

What are the educational options?

What treatments are available?

Sustaining Hope

Can ADHD be outgrown or cured?

What hope does research offer?

What are sources of information and support?

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Attention Deficit Hyperactivity Disorder

Imagine living in a fast-moving kaleidoscope, where sounds, images, and thoughts are constantly shifting. Feeling easily bored, yet helpless to keep your mind on tasks you need to complete. Distracted by unimportant sights and sounds, your mind drives you from one thought or activity to the next. Perhaps you are so wrapped up in a collage of thoughts and images that you don't notice when someone speaks to you.

For many people, this is what it's like to have Attention Deficit Hyperactivity Disorder, or ADHD. They may be unable to sit still, plan ahead, finish tasks, or be fully aware of what's going on around them. To their family, classmates or coworkers, they seem to exist in a whirlwind of disorganized or frenzied activity. Unexpectedly--on some days and in some situations--they seem fine, often leading others to think the person with ADHD can actually control these behaviors. As a result, the disorder can mar the person's relationships with others in addition to disrupting their daily life, consuming energy, and diminishing self-esteem.

ADHD, once called hyperkinesis or minimal brain dysfunction, is one of the most common mental disorders among children. It affects 3 to 5 percent of all children, perhaps as many as 2 million American children. Two to three times more boys than girls are affected. On the average, at least one child in every classroom in the United States needs help for the disorder. ADHD often continues into adolescence and adulthood, and can cause a lifetime of frustrated dreams and emotional pain.

But there is help...and hope. In the last decade, scientists have learned much about the course of the disorder and are now able to identify and treat children, adolescents, and adults who have it. A variety of medications, behavior-changing therapies, and educational options are already available to help people with ADHD focus their attention, build self-esteem, and function in new ways.

In addition, new avenues of research promise to further improve diagnosis and treatment. With so many American children diagnosed as having attention disorder, research on ADHD has become a national priority. During the 1990s--which the President and Congress have declared the "Decade of the Brain"--it is possible that scientists will pinpoint the biological basis of ADHD and learn how to prevent or treat it even more effectively.

This booklet is provided by the National Institute of Mental Health (NIMH), the Federal agency that supports research nationwide on the brain, mental illnesses, and mental health. Scientists supported by NIMH are dedicated to understanding the workings and interrelationships of the various regions of the brain, and to developing preventive measures and new treatments to overcome brain disorders that handicap people in school, work, and play.

The booklet offers up-to-date information on attention deficit disorders and the role of NIMH-sponsored research in discovering underlying causes and effective treatments. It describes treatment options, strategies for coping, and sources of information and support. You'll find out what it's like to have ADHD from the stories of Mark, Lisa, and Henry. You'll see their early frustrations, their steps toward getting help, and their hopes for the future.

The individuals referred to in this brochure are not real, but their stories are representative of people who show symptoms of ADHD.

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UNDERSTANDING THE PROBLEM

Mark

Mark, age 14, has more energy than most boys his age. But then, he's always been overly active. Starting at age 3, he was a human tornado, dashing around and disrupting everything in his path. At home, he darted from one activity to the next, leaving a trail of toys behind him. At meals, he upset dishes and chattered nonstop. He was reckless and impulsive, running into the street with oncoming cars, no matter how many times his mother explained the danger or scolded him. On the playground, he seemed no wilder than the other kids. But his tendency to overreact--like socking playmates simply for bumping into him--had already gotten him into trouble several times. His parents didn't know what to do. Mark's doting grandparents reassured them, "Boys will be boys. Don't worry, he'll grow out of it." But he didn't.

Lisa

At age 17, Lisa still struggles to pay attention and act appropriately. But this has always been hard for her. She still gets embarrassed thinking about that night her parents took her to a restaurant to celebrate her 10th birthday. She had gotten so distracted by the waitress' bright red hair that her father called her name three times before she remembered to order. Then before she could stop herself, she blurted, "Your hair dye looks awful!"

In elementary and junior high school, Lisa was quiet and cooperative but often seemed to be daydreaming. She was smart, yet couldn't improve her grades no matter how hard she tried. Several times, she failed exams. Even though she knew most of the answers, she couldn't keep her mind on the test. Her parents responded to her low grades by taking away privileges and scolding, "You're just lazy. You could get better grades if you only tried." One day, after Lisa had failed yet another exam, the teacher found her sobbing, "What's wrong with me?"

Henry

Although he loves puttering around in his shop, for years Henry has had dozens of unfinished carpentry projects and ideas for new ones he knew he would never complete. His garage was piled so high with wood, he and his wife joked about holding a fire sale.

Every day Henry faced the real frustration of not being able to concentrate long enough to complete a task. He was fired from his job as stock clerk because he lost inventory and carelessly filled out forms. Over the years, afraid that he might be losing his mind, he had seen psychotherapists and tried several medications, but none ever helped him concentrate. He saw the same lack of focus in his young

son and worried. | [Home](#) | [Public](#) | [Info on Spec Mntl Dis](#) | [Top of Pub](#) |

What Are the Symptoms of ADHD?

The three people you've just met, Mark, Lisa, and Henry, all have a form of ADHD--Attention Deficit Hyperactivity Disorder. ADHD is not like a broken arm, or strep throat. Unlike these two disorders, ADHD does not have clear physical signs that can be seen in an x-ray or a lab test. ADHD can only be identified by looking for certain characteristic behaviors, and as with Mark, Lisa, and Henry, these behaviors vary from person to person. Scientists have not yet identified a single cause behind all the different patterns of behavior--and they may never find just one. Rather, someday scientists may find that ADHD is actually an umbrella term for several slightly different disorders.

At present, ADHD is a diagnosis applied to children and adults who consistently display certain characteristic behaviors over a period of time. The most common behaviors fall into three categories: inattention, hyperactivity, and impulsivity.

Inattention. People who are inattentive have a hard time keeping their mind on any one thing and may get bored with a task after only a few minutes. They may give effortless, automatic attention to activities and things they enjoy. But focusing deliberate, conscious attention to organizing and completing a task or learning something new is difficult.

For example, Lisa found it agonizing to do homework. Often, she forgot to plan ahead by writing down the assignment or bringing home the right books. And when trying to work, every few minutes she found her mind drifting to something else. As a result, she rarely finished and her work was full of errors.

Hyperactivity. People who are hyperactive always seem to be in motion. They can't sit still. Like Mark, they may dash around or talk incessantly. Sitting still through a lesson can be an impossible task. Hyperactive children squirm in their seat or roam around the room. Or they might wiggle their feet, touch everything, or noisily tap their pencil. Hyperactive teens and adults may feel intensely restless. They may be fidgety or, like Henry, they may try to do several things at once, bouncing around from one activity to the next.

Impulsivity. People who are overly impulsive seem unable to curb their immediate reactions or think before they act. As a result, like Lisa, they may blurt out inappropriate comments. Or like Mark, they may run into the street without looking. Their impulsivity may make it hard for them to wait for things they want or to take their turn in games. They may grab a toy from another child or hit when they're upset.

Not everyone who is overly hyperactive, inattentive, or impulsive has an attention disorder. Since most people sometimes blurt out things they didn't mean to say, bounce from one task to another, or become disorganized and forgetful, how can specialists tell if the problem is ADHD?

To assess whether a person has ADHD, specialists consider several critical questions: Are these behaviors excessive, long-term, and pervasive? That is, do they occur more often than in other people the same age? Are they a continuous problem, not just a response to a temporary situation? Do the behaviors occur in several settings or only in one specific place like the playground or the office? The person's pattern of behavior is compared against a set of criteria and characteristics of the disorder. These criteria appear in a diagnostic reference book called the DSM (short for the *Diagnostic and Statistical Manual of Mental Disorders*).

According to the diagnostic manual, there are three patterns of behavior that indicate ADHD. People with ADHD may show several signs of being consistently inattentive. They may have a pattern of being hyperactive and impulsive. Or they may show all three types of behavior.

According to the DSM, signs of inattention include:

- becoming easily distracted by irrelevant sights and sounds
- failing to pay attention to details and making careless mistakes
- rarely following instructions carefully and completely
- losing or forgetting things like toys, or pencils, books, and tools needed for a task

Some signs of hyperactivity and impulsivity are:

- feeling restless, often fidgeting with hands or feet, or squirming
- running, climbing, or leaving a seat, in situations where sitting or quiet behavior is expected
- blurting out answers before hearing the whole question
- having difficulty waiting in line or for a turn

Because everyone shows some of these behaviors at times, the DSM contains very specific guidelines for determining when they indicate ADHD. The behaviors must appear early in life, before age 7, and continue for at least 6 months. In children, they must be more frequent or severe than in others the same age. Above all, the behaviors must create a real handicap in at least two areas of a person's life, such as school, home, work, or social settings. So someone whose work or friendships are not impaired by these behaviors would not be diagnosed with ADHD. Nor would a child who seems overly active at school but functions well elsewhere.

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Can Any Other Conditions Produce These Symptoms?

The fact is, many things can produce these behaviors. Anything from chronic fear to mild seizures can make a child seem overactive, quarrelsome, impulsive, or inattentive. For example, a formerly cooperative child who becomes overactive and easily distracted after a parent's death is dealing with an emotional problem, not ADHD. A chronic middle ear infection can also make a child seem distracted and uncooperative. So can living with family members who are physically abusive or addicted to drugs or alcohol. Can you imagine a child trying to focus on a math lesson when his or her safety and well-being are in danger each day? Such children are showing the effects of other problems, not ADHD.

In other children, ADHD-like behaviors may be their response to a defeating classroom situation. Perhaps the child has a learning disability and is not developmentally ready to learn to read and write at the time these are taught. Or maybe the work is too hard or too easy, leaving the child frustrated or bored.

Tyrone and Mimi are two examples of how classroom conditions can elicit behaviors that look like ADHD. For months, Tyrone shouted answers out in class, then became disruptive when the teacher ignored him. He certainly seemed hyperactive and impulsive. Finally, after observing Tyrone in other situations, his teacher realized he just wanted approval for knowing the right answer. She began to seek opportunities to call on him and praise him. Gradually, Tyrone became calmer and more cooperative.

Mimi, a fourth grader, made loud noises during reading group that constantly disrupted the class. One day the teacher realized that the book was too hard for Mimi. Mimi's disruptions stopped when she was placed in a reading group where the books were easier and she could successfully participate in the lesson.

Like Tyrone and Mimi, some children's attention and class participation improve when the class structure and lessons are adjusted a bit to meet their emotional needs, instructional level, or learning style. Although such children need a little help to get on track at school, they probably don't have ADHD.

It's also important to realize that during certain stages of development, the majority of children that age tend to be inattentive, hyperactive, or impulsive--but do not have ADHD. Preschoolers have lots of energy and run everywhere they go, but this doesn't mean they are hyperactive. And many teenagers go through a phase when they are messy, disorganized, and reject authority. It doesn't mean they will have a

lifelong problem controlling their impulses.

ADHD is a serious diagnosis that may require long-term treatment with counseling and medication. So it's important that a doctor first look for and treat any other causes for these behaviors.

What Can Look Like ADHD?

- Underachievement at school due to a learning disability
- Attention lapses caused by petit mal seizures
- A middle ear infection that causes an intermittent hearing problem
- Disruptive or unresponsive behavior due to anxiety or depression

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Can Other Disorders Accompany ADHD?

One of the difficulties in diagnosing ADHD is that it is often accompanied by other problems. For example, many children with ADHD also have a specific learning disability (LD), which means they have trouble mastering language or certain academic skills, typically reading and math. ADHD is not in itself a specific learning disability. But because it can interfere with concentration and attention, ADHD can make it doubly hard for a child with LD to do well in school.

A very small proportion of people with ADHD have a rare disorder called Tourette's syndrome. People with Tourette's have tics and other movements like eye blinks or facial twitches that they cannot control. Others may grimace, shrug, sniff, or bark out words. Fortunately, these behaviors can be controlled with medication. Researchers at NIMH and elsewhere are involved in evaluating the safety and effectiveness of treatment for people who have both Tourette's syndrome and ADHD.

More serious, nearly half of all children with ADHD--mostly boys--tend to have another condition, called oppositional defiant disorder. Like Mark, who punched playmates for jostling him, these children may overreact or lash out when they feel bad about themselves. They may be stubborn, have outbursts of temper, or act belligerent or defiant. Sometimes this progresses to more serious conduct disorders. Children with this combination of problems are at risk of getting in trouble at school, and even with the police. They may take unsafe risks and break laws--they may steal, set fires, destroy property, and drive recklessly. It's important that children with these conditions receive help before the behaviors lead to more serious problems.

At some point, many children with ADHD--mostly younger children and boys--experience other emotional disorders. About one-fourth feel anxious. They feel tremendous worry, tension, or uneasiness, even when there's nothing to fear. Because the feelings are scarier, stronger, and more frequent than normal fears, they can affect the child's thinking and behavior. Others experience depression. Depression goes beyond ordinary sadness--people may feel so "down" that they feel hopeless and unable to deal with everyday tasks. Depression can disrupt sleep, appetite, and the ability to think.

Because emotional disorders and attention disorders so often go hand in hand, every child who has ADHD should be checked for accompanying anxiety and depression. Anxiety and depression can be treated, and helping children handle such strong, painful feelings will help them cope with and overcome the effects of ADHD.

(Graphic Omitted: Diagram showing the overlapping of other disorders with ADHD.)

Of course, not all children with ADHD have an additional disorder. Nor do all people with learning disabilities, Tourette's syndrome, oppositional defiant disorder, conduct disorder, anxiety, or depression have ADHD. But when they do occur together, the combination of problems can seriously complicate a person's life. For this reason, it's important to watch for other disorders in children who have ADHD.

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What Causes ADHD?

Understandably, one of the first questions parents ask when they learn their child has an attention disorder is "*Why? What went wrong?*"

Health professionals stress that since no one knows what causes ADHD, it doesn't help parents to look backward to search for possible reasons. There are too many possibilities to pin down the cause with certainty. It is far more important for the family to move forward in finding ways to get the right help.

Scientists, however, do need to study causes in an effort to identify better ways to treat, and perhaps some day, prevent ADHD. They are finding more and more evidence that ADHD does not stem from home environment, but from biological causes. When you think about it, there is no clear relationship between home life and ADHD. Not all children from unstable or dysfunctional homes have ADHD. And not all children with ADHD come from dysfunctional families. Knowing this can remove a huge burden of guilt from parents who might blame themselves for their child's behavior.

Over the last decades, scientists have come up with possible theories about what causes ADHD. Some of these theories have led to dead ends, some to exciting new avenues of investigation.

One disappointing theory was that all attention disorders and learning disabilities were caused by minor head injuries or undetectable damage to the brain, perhaps from early infection or complications at birth. Based on this theory, for many years both disorders were called "*minimal brain damage*" or "*minimal brain dysfunction*." Although certain types of head injury can explain some cases of attention disorder, the theory was rejected because it could explain only a very small number of cases. Not everyone with ADHD or LD has a history of head trauma or birth complications.

Another theory was that refined sugar and food additives make children hyperactive and inattentive. As a result, parents were encouraged to stop serving children foods containing artificial flavorings, preservatives, and sugars. However, this theory, too, came under question. In 1982, the National Institutes of Health (NIH), the Federal agency responsible for biomedical research, held a major scientific conference to discuss the issue. After studying the data, the scientists concluded that the restricted diet only seemed to help about 5 percent of children with ADHD, mostly either young children or children with food allergies.

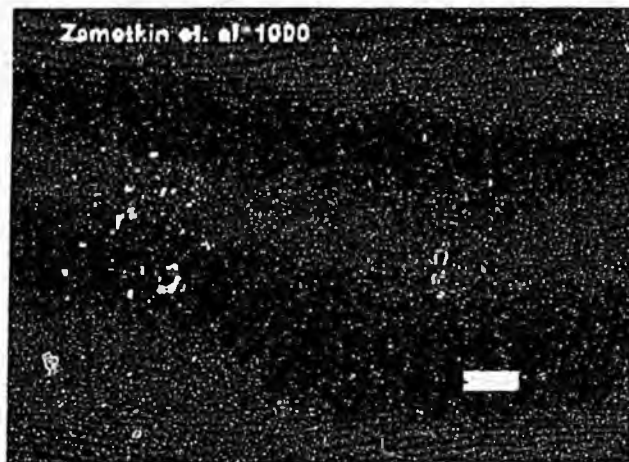
ADHD Is Not Usually Caused by:

- too much TV
- food allergies
- excess sugar
- poor home life
- poor schools

In recent years, as new tools and techniques for studying the brain have been developed, scientists have been able to test more theories about what causes ADHD.

Using one such technique, NIMH scientists demonstrated a link between a person's ability to pay continued attention and the level of activity in the brain. Adult subjects were asked to learn a list of words. As they did, scientists used a PET (positron emission tomography) scanner to observe the brain at work. The researchers measured the level of glucose used by the areas of the brain that inhibit impulses and control attention. Glucose is the brain's main source of energy, so measuring how much is used is a good indicator of the brain's activity level. The investigators found important differences between people who have ADHD and those who don't. In people with ADHD, the brain areas that control attention used

less glucose, indicating that they were less active. It appears from this research that a lower level of activity in some parts of the brain may cause inattention.



Brain scan images produced by positron emission tomography (PET) show differences between an adult with Attention deficit Hyperactivity Disorder (right) and an adult free of the disease (left).

The next step will be to research WHY there is less activity in these areas of the brain. Scientists at NIMH hope to compare the use of glucose and the activity level in mild and severe cases of ADHD. They will also try to discover why some medications used to treat ADHD work better than others, and if the more effective medications increase activity in certain parts of the brain.

Researchers are also searching for other differences between those who have and do not have ADHD. Research on how the brain normally develops in the fetus offers some clues about what may disrupt the process. Throughout pregnancy and continuing into the first year of life, the brain is constantly developing. It begins its growth from a few all-purpose cells and evolves into a complex organ made of billions of specialized, interconnected nerve cells. By studying brain development in animals and humans, scientists are gaining a better understanding of how the brain works when the nerve cells are connected correctly and incorrectly. Scientists at NIMH and other research institutions are tracking clues to determine what might prevent nerve cells from forming the proper connections. Some of the factors they are studying include drug use during pregnancy, toxins, and genetics.

Research shows that a mother's use of cigarettes, alcohol, or other drugs during pregnancy may have damaging effects on the unborn child. These substances may be dangerous to the fetus's developing brain. It appears that alcohol and the nicotine in cigarettes may distort developing nerve cells. For example, heavy alcohol use during pregnancy has been linked to fetal alcohol syndrome (FAS), a condition that can lead to low birth weight, intellectual impairment, and certain physical defects. Many children born with FAS show much the same hyperactivity, inattention, and impulsivity as children with ADHD.

Drugs such as cocaine--including the smokable form known as crack--seem to affect the normal development of brain receptors. These brain cell parts help to transmit incoming signals from our skin, eyes, and ears, and help control our responses to the environment. Current research suggests that drug abuse may harm these receptors. Some scientists believe that such damage may lead to ADHD.

Toxins in the environment may also disrupt brain development or brain processes, which may lead to ADHD. Lead is one such possible toxin. It is found in dust, soil, and flaking paint in areas where leaded gasoline and paint were once used. It is also present in some water pipes. Some animal studies suggest that children exposed to lead may develop symptoms associated with ADHD, but only a few cases have actually been found.

Other research shows that attention disorders tend to run in families, so there are likely to be genetic influences. Children who have ADHD usually have at least one close relative who also has ADHD. And at least one-third of all fathers who had ADHD in their youth bear children who have ADHD. Even more convincing: the majority of identical twins share the trait. At the National Institutes of Health, researchers are also on the trail of a gene that may be involved in transmitting ADHD in a small

number of families with a genetic thyroid disorder.

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GETTING HELP

Mark

In third grade, Mark's teacher threw up her hands and said, "Enough!" In one morning, Mark had jumped out of his seat to sharpen his pencil six times, each time accidentally charging into other children's desks and toppling books and papers. He was finally sent to the principal's office when he began kicking a desk he had overturned. In sheer frustration, his teacher called a meeting with his parents and the school psychologist.

But even after they developed a plan for managing Mark's behavior in class, Mark showed little improvement. Finally, after an extensive assessment, they found that Mark had an attention deficit that included hyperactivity. He was put on a medication called Ritalin to control the hyperactivity during school hours. Although Ritalin failed to help, another drug called Dexedrine did. With a psychologist's help, his parents learned to reward desirable behaviors, and to have Mark take "time out" when he became too disruptive. Soon Mark was able to sit still and focus on learning.

Lisa

Because Lisa wasn't disruptive in class, it took a long time for teachers to notice her problem. Lisa was first referred to the school evaluation team when her teacher realized that she was a bright girl with failing grades. The team ruled out a learning disability but determined that she had an attention deficit, ADHD without hyperactivity. The school psychologist recognized that Lisa was also dealing with depression.

Lisa's teachers and the school psychologist developed a treatment plan that included participation in a program to increase her attention span and develop her social skills. They also recommended that Lisa receive counseling to help her recognize her strengths and overcome her depression.

Henry

When Henry's son entered kindergarten, it was clear that he was going to have problems sitting quietly and concentrating. After several disruptive incidents, the school called and suggested that his son be evaluated for ADHD. As the boy was assessed, Henry realized that he had grown up with the same symptoms that specialists were now finding in his son. Fortunately, the psychologist knew that ADHD can persist in adults. She suggested that Henry be evaluated by a professional who worked with adults. For the first time, Henry was correctly diagnosed and given Ritalin to aid his concentration. What a relief! All the years that he had been unable to concentrate were due to a disorder that could be identified, and above all, treated.

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How Is ADHD Identified and Diagnosed?

Many parents see signs of an attention deficit in toddlers long before the child enters school. For example, as a 3-year-old, Henry's son already displayed some signs of hyperactivity. He seemed to lose interest and dart off even during his favorite TV shows or while playing games. Once, during a game of "catch," he left the game before the ball even reached him!

Like Henry's son, a child may be unable to focus long enough to play a simple game. Or, like Mark,

the child may be tearing around out of control. But because children mature at different rates, and are very different in personality, temperament, and energy level, it's useful to get an expert's opinion of whether the behaviors are appropriate for the child's age. Parents can ask their pediatrician, or a child psychologist or psychiatrist to assess whether their toddler has an attention disorder or is just immature, has hyperactivity or is just exuberant.

Seeing a child as "a chip off the old block" or "just like his dad" can blind parents to the need for help. Parents may find it hard to see their child's behavior as a problem when it so closely resembles their own. In fact, like Henry, many parents first recognize their own disorder only when their children are diagnosed.

In many cases, the teacher is the first to recognize that a child is hyperactive or inattentive and may consult with the school psychologist. Because teachers work with many children, they come to know how "average" children behave in learning situations that require attention and self control. However, teachers sometimes fail to notice the needs of children like Lisa who are quiet and cooperative.

Types of Professionals Who Make the Diagnosis

School-age and preschool children are often evaluated by a school psychologist or a team made up of the school psychologist and other specialists. But if the school doesn't believe the student has a problem, or if the family wants another opinion, a family may need to see a specialist in private practice. In such cases, who can the family turn to? What kinds of specialists do they need?

Specialty	Can diagnose ADHD	Can prescribe medications, if needed	Provides counseling or therapy
Psychiatrists	yes	yes	yes
Psychologists	yes	no	yes
Pediatricians or family physicians	yes	yes	no
Neurologists	yes	yes	no

The family can start by talking with the child's pediatrician or their family doctor. Some pediatricians may do the assessment themselves, but more often they refer the family to an appropriate specialist they know and trust. In addition, state and local agencies that serve families and children, as well as some of the volunteer organizations listed in the back of this booklet, can help identify an appropriate specialist.

Knowing the differences in qualifications and services can help the family choose someone who can best meet their needs. Besides school psychologists, there are several types of specialists qualified to diagnose and treat ADHD. Child psychiatrists are doctors who specialize in diagnosing and treating childhood mental and behavioral disorders. A psychiatrist can provide therapy and prescribe any needed medications. Child psychologists are also qualified to diagnose and treat ADHD. They can provide therapy for the child and help the family develop ways to deal with the disorder. But psychologists are not medical doctors and must rely on the child's physician to do medical exams and prescribe medication. Neurologists, doctors who work with disorders of the brain and nervous system, can also diagnose ADHD and prescribe medicines. But unlike psychiatrists and psychologists, neurologists usually do not provide therapy for the emotional aspects of the disorder. Adults who think they may have ADHD can also seek a psychologist, psychiatrist, or neurologist. But at present, not all specialists are skilled in identifying or treating ADHD in adults.

Within each specialty, individual doctors and mental health professionals differ in their experience with ADHD. So in selecting a specialist, it's important to find someone with specific training and experience in diagnosing and treating the disorder.

Steps In Making a Diagnosis

Whatever the specialist's expertise, his or her first task is to gather information that will rule out other possible reasons for the child's behavior. In ruling out other causes, the specialist checks the child's school and medical records. The specialist tries to sense whether the home and classroom environments are stressful or chaotic, and how the child's parents and teachers deal with the child. They may have a doctor look for such problems as emotional disorders, undetectable (petit mal) seizures, and poor vision or hearing. Most schools automatically screen for vision and hearing, so this information is often already on record. A doctor may also look for allergies or nutrition problems like chronic "caffeine highs" that might make the child seem overly active.

Next the specialist gathers information on the child's ongoing behavior in order to compare these behaviors to the symptoms and diagnostic criteria listed in the *DSM (Diagnostic and Statistical Manual of Mental Disorders)*. This involves talking with the child and if possible, observing the child in class and in other settings.

The child's teachers, past and present, are asked to rate their observations of the child's behavior on standardized evaluation forms to compare the child's behaviors to those of other children the same age. Of course, rating scales are subjective--they only capture the teacher's personal perception of the child. Even so, because teachers get to know so many children, their judgment of how a child compares to others is usually accurate.

The specialist interviews the child's teachers, parents, and other people who know the child well, such as school staff and baby-sitters. Parents are asked to describe their child's behavior in a variety of situations. They may also fill out a rating scale to indicate how severe and frequent the behaviors seem to be.

In some cases, the child may be checked for social adjustment and mental health. Tests of intelligence and learning achievement may be given to see if the child has a learning disability and whether the disabilities are in all or only certain parts of the school curriculum.

In looking at the data, the specialist pays special attention to the child's behavior during noisy or unstructured situations, like parties, or during tasks that require sustained attention, like reading, working math problems, or playing a board game. Behavior during free play or while getting individual attention is given less importance in the evaluation. In such situations, most children with ADHD are able to control their behavior and perform well.

The specialist then pieces together a profile of the child's behavior. Which ADHD-like behaviors listed in the DSM does the child show? How often? In what situations? How long has the child been doing them? How old was the child when the problem started? Are the behaviors seriously interfering with the child's friendships, school activities, or home life? Does the child have any other related problems? The answers to these questions help identify whether the child's hyperactivity, impulsivity, and inattention are significant and long-standing. If so, the child may be diagnosed with ADHD.

Adults are diagnosed for ADHD based on their performance at home and at work. When possible, their parents are asked to rate the person's behavior as a child. A spouse or roommate can help rate and evaluate current behaviors. But for the most part, adults are asked to describe their own experiences. One symptom is a sense of frustration. Since people with ADHD are often bright and creative, they often report feeling frustrated that they're not living up to their potential. Many also feel restless and are easily bored. Some say they need to seek novelty and excitement to help channel the whirlwind in their minds. Although it may be impossible to document when these behaviors first started, most adults with ADHD can give examples of being inattentive, impulsive, overly active, impatient, and disorganized most of their lives.

Until recent years, adults were not thought to have ADHD, so many adults with ongoing symptoms have never been diagnosed. People like Henry go for decades knowing that something is wrong, but not knowing what it is. Psychotherapy and medication for anxiety, depression, or manic-depression fail to help much, simply because the ADHD itself is not being addressed. Yet half the children with ADHD continue to have symptoms through adulthood. The recent awareness of adult ADHD means that many people can finally be correctly diagnosed and treated.

A correct diagnosis lets people move forward in their lives. Once the disorder is known, they can begin to receive whatever combination of educational, medical, and emotional help they need.

An effective treatment plan helps people with ADHD and their families at many levels. For adults with ADHD, the treatment plan may include medication, along with practical and emotional support. For children and adolescents, it may include providing an appropriate classroom setting, the right medication, and helping parents to manage their child's behavior.

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What Are the Educational Options?

Children with ADHD have a variety of needs. Some children are too hyperactive or inattentive to function in a regular classroom, even with medication and a behavior management plan. Such children may be placed in a special education class for all or part of the day. In some schools, the special education teacher teams with the classroom teacher to meet each child's unique needs. However, most children are able to stay in the regular classroom. Whenever possible, educators prefer to not segregate children, but to let them learn along with their peers.

Children with ADHD often need some special accommodations to help them learn. For example, the teacher may seat the child in an area with few distractions, provide an area where the child can move around and release excess energy, or establish a clearly posted system of rules and reward appropriate behavior. Sometimes just keeping a card or a picture on the desk can serve as a visual reminder to use the right school behavior, like raising a hand instead of shouting out, or staying in a seat instead of wandering around the room. Giving a child like Lisa extra time on tests can make the difference between passing and failing, and gives her a fairer chance to show what she's learned. Reviewing instructions or writing assignments on the board, and even listing the books and materials they will need for the task, may make it possible for disorganized, inattentive children to complete the work.

Many of the strategies of special education are simply good teaching methods. Telling students in advance what they will learn, providing visual aids, and giving written as well as oral instructions are all ways to help students focus and remember the key parts of the lesson.

Students with ADHD often need to learn techniques for monitoring and controlling their own attention and behavior. For example, Mark's teacher taught him several alternatives for when he loses track of what he's supposed to do. He can look for instructions on the blackboard, raise his hand, wait to see if he remembers, or quietly ask another child. The process of finding alternatives to interrupting the teacher has made him more self-sufficient and cooperative. And because he now interrupts less, he is beginning to get more praise than reprimands.

In Lisa's class, the teacher frequently stops to ask students to notice whether they are paying attention to the lesson or if they are thinking about something else. The students record their answer on a chart. As students become more consciously aware of their attention, they begin to see progress and feel good about staying better focused. The process helped make Lisa aware of when she was drifting off, so she could return her attention to the lesson faster. As a result, she became more productive and the quality of her work improved.

Because schools demand that children sit still, wait for a turn, pay attention, and stick with a task,

it's no surprise that many children with ADHD have problems in class. Their minds are fully capable of learning, but their hyperactivity and inattention make learning difficult. As a result, many students with ADHD repeat a grade or drop out of school early. Fortunately, with the right combination of appropriate educational practices, medication, and counseling, these outcomes can be avoided.

Right to a Free Public Education

Although parents have the option of taking their child to a private practitioner for evaluation and educational services, most children with ADHD qualify for free services within the public schools. Steps are taken to ensure that each child with ADHD receives an education that meets his or her unique needs. For example, the special education teacher, working with parents, the school psychologist, school administrators, and the classroom teacher, must assess the child's strengths and weaknesses and design an Individualized Educational Program (IEP). The IEP outlines the specific skills the child needs to develop as well as appropriate learning activities that build on the child's strengths. Parents play an important role in the process. They must be included in meetings and given an opportunity to review and approve their child's IEP.

Many children with ADHD or other disabilities are able to receive such special education services under the Individuals with Disabilities Education Act (IDEA). The Act guarantees appropriate services and a public education to children with disabilities from ages 3 to 21. Children who do not qualify for services under IDEA can receive help under an earlier law, the National Rehabilitation Act, Section 504, which defines disabilities more broadly. Qualifying for services under the National Rehabilitation Act is often called "504 eligibility."

Because ADHD is a disability that affects children's ability to learn and interact with others, it can certainly be a disabling condition. Under one law or another, most children can receive the services they need.

Some Coping Strategies for Teens and Adults with ADHD

When necessary, ask the teacher or boss to repeat instructions, rather than guess.

Break large assignments or job tasks into small, simple tasks. Set a deadline for each task and reward yourself as you complete each one.

Each day, make a list of what you need to do. Plan the best order for doing each task. Then make a schedule for doing them. Use a calendar or daily planner to keep yourself on track.

Work in a quiet area. Do one thing at a time. Give yourself short breaks.

Write things you need to remember in a notebook with dividers. Write different kinds of information—like assignments, appointments, and phone numbers—in different sections. Keep the book with you all of the time.

Post notes to yourself to help remind yourself of things you need to

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What Treatments Are Available?

For decades, medications have been used to treat the symptoms of ADHD. Three medications in the class of drugs known as stimulants seem to be the most effective in both children and adults. These are methylphenidate (Ritalin), dextroamphetamine (Dexedrine or Dextrostat), and pemoline (Cylert). For many people, these medicines dramatically reduce their hyperactivity and improve their ability to focus, work, and learn. The medications may also improve physical coordination, such as handwriting and ability in sports. Recent research by NIMH suggests that these medicines may also help children with an accompanying conduct disorder to control their impulsive, destructive behaviors.

Ritalin helped Henry focus on and complete tasks for the first time. Dexedrine helped Mark to sit quietly, focus his attention, and participate in class so he could learn. He also became less impulsive and aggressive. Along with these changes in his behavior, Mark began to make and keep friends.

Unfortunately, when people see such immediate improvement, they often think medication is all that's needed. But these medicines don't cure the disorder, they only temporarily control the symptoms. Although the drugs help people pay better attention and complete their work, they can't increase knowledge or improve academic skills. The drugs alone can't help people feel better about themselves or cope with problems. These require other kinds of treatment and support.

For lasting improvement, numerous clinicians recommend that medications should be used along with treatments that aid in these other areas. There are no quick cures. Many experts believe that the most significant, long-lasting gains appear when medication is combined with behavioral therapy, emotional counseling, and practical support. Some studies suggest that the combination of medicine and therapy may be more effective than drugs alone. NIMH is conducting a large study to check this.

Use of Stimulant Drugs

Stimulant drugs, such as Ritalin, Cylert, and Dexedrine, when used with medical supervision, are usually considered quite safe. Although they can be addictive to teenagers and adults if misused, these medications are not addictive in children. They seldom make children "high" or jittery. Nor do they sedate the child. Rather, the stimulants help children control their hyperactivity, inattention, and other

behaviors.

Different doctors use the medications in slightly different ways. Cylert is available in one form, which naturally lasts 5 to 10 hours. Ritalin and Dexedrine come in short-term tablets that last about 3 hours, as well as longer-term preparations that last through the school day. The short-term dose is often more practical for children who need medication only during the school day or for special situations, like attending church or a prom, or studying for an important exam. The sustained-release dosage frees the child from the inconvenience or embarrassment of going to the office or school nurse every day for a pill. The doctor can help decide which preparation to use, and whether a child needs to take the medicine during school hours only or in the evenings and on weekends, too.

Nine out of 10 children improve on one of the three stimulant drugs. So if one doesn't help, the others should be tried. Usually a medication should be tried for a week to see if it helps. If necessary, however, the doctor will also try adjusting the dosage before switching to a different drug.

Other types of medication may be used if stimulants don't work or if the ADHD occurs with another disorder. Antidepressants and other medications may be used to help control accompanying depression or anxiety. In some cases, antihistamines may be tried. Clonidine, a drug normally used to treat hypertension, may be helpful in people with both ADHD and Tourette's syndrome. Although stimulants tend to be more effective, clonidine may be tried when stimulants don't work or can't be used. Clonidine can be administered either by pill or by skin patch and has different side effects than stimulants. The doctor works closely with each patient to find the most appropriate medication.

Sometimes, a child's ADHD symptoms seem to worsen, leading parents to wonder why. They can be assured that a drug that helps rarely stops working. However, they should work with the doctor to check that the child is getting the right dosage. Parents should also make sure that the child is actually getting the prescribed daily dosage at home or at school—it's easy to forget. They also need to know that new or exaggerated behaviors may also crop up when a child is under stress. The challenges that all children face, like changing schools or entering puberty, may be even more stressful for a child with ADHD.

Some doctors recommend that children be taken off a medication now and then to see if the child still needs it. They recommend temporarily stopping the drug during school breaks and summer vacations, when focused attention and calm behavior are usually not as crucial. These "drug holidays" work well if the child can still participate at camp or other activities without medication.

Children on medications should have regular checkups. Parents should also talk regularly with the child's teachers and doctor about how the child is doing. This is especially important when a medication is first started, re-started, or when the dosage is changed.

The Medication Debate

As useful as these drugs are, Ritalin and the other stimulants have sparked a great deal of controversy. Most doctors feel the potential side effects should be carefully weighed against the benefits before prescribing the drugs. While on these medications, some children may lose weight, have less appetite, and temporarily grow more slowly. Others may have problems falling asleep. Some doctors believe that stimulants may also make the symptoms of Tourette's syndrome worse, although recent research suggests this may not be true. Other doctors say if they carefully watch the child's height, weight, and overall development, the benefits of medication far outweigh the potential side effects. Side effects that do occur can often be handled by reducing the dosage.

It's natural for parents to be concerned about whether taking a medicine is in their child's best interests. Parents need to be clear about the benefits and potential risks of using these drugs. The child's pediatrician or psychiatrist can provide advice and answer questions.

Another debate is whether Ritalin and other stimulant drugs are prescribed unnecessarily for too many children. Remember that many things, including anxiety, depression, allergies, seizures, or problems with the home or school environment can make children seem overactive, impulsive, or

inattentive. Critics argue that many children who do not have a true attention disorder are medicated as a way to control their disruptive behaviors.

Medication and Self-Esteem

When a child's schoolwork and behavior improve soon after starting medication, the child, parents, and teachers tend to applaud the drug for causing the sudden change. But these changes are actually the child's own strengths and natural abilities coming out from behind a cloud. Giving credit to the medication can make the child feel incompetent. The medication only makes these changes possible. The child must supply the effort and ability. To help children feel good about themselves, parents and teachers need to praise the child, not the drug.

It's also important to help children and teenagers feel comfortable about a medication they must take every day. They may feel that because they take medicine they are different from their classmates or that there's something seriously wrong with them. CH.A.D.D. (which stands for Children and Adults with Attention Deficit Disorders), a leading organization for people with attention disorders, suggests several ways that parents and teachers can help children view the medication in a positive way:

- Compare the pills to eyeglasses, braces, and allergy medications used by other children in their class. Explain that their medicine is simply a tool to help them focus and pay attention.
- Point out that they're lucky their problem can be helped. Encourage them to identify ways the medicine makes it easier to do things that are important to them, like make friends, succeed at school, and play.

Myths About Stimulant Medication

- **Myth:**

Stimulants can lead to drug addiction later in life.

- **Fact:**

Stimulants help many children focus and be more successful at school, home, and play. Avoiding negative experiences now may actually help prevent addictions and other emotional problems later.

- **Myth:**

Responding well to a stimulant drug proves a person has ADHD.

- **Fact:**

Stimulants allow many people to focus and pay better attention, whether or not they have ADHD. The improvement is just more noticeable in people with ADHD.

- **Myth:**

Medication should be stopped when the child reaches adolescence.

- **Fact:**

Not so! About 80 percent of those who needed medication as children still need it as teenagers. Fifty percent need medication as adults.

Treatments To Help People With ADHD and Their Families Learn To Cope

Life can be hard for children with ADHD. They're the ones who are so often in trouble at school, can't

finish a game, and lose friends. They may spend agonizing hours each night struggling to keep their mind on their homework, then forget to bring it to school.

It's not easy coping with these frustrations day after day. Some children release their frustration by acting contrary, starting fights, or destroying property. Some turn the frustration into body ailments, like the child who gets a stomachache each day before school. Others hold their needs and fears inside, so that no one sees how badly they feel.

It's also difficult having a sister, brother, or classmate who gets angry, grabs your toys, and loses your things. Children who live with or share a classroom with a child who has ADHD get frustrated, too. They may feel neglected as their parents or teachers try to cope with the hyperactive child. They may resent their brother or sister never finishing chores, or being pushed around by a classmate. They want to love their sibling and get along with their classmate, but sometimes it's so hard!

It's especially hard being the parent of a child who is full of uncontrolled activity, leaves messes, throws tantrums, and doesn't listen or follow instructions. Parents often feel powerless and at a loss. The usual methods of discipline, like reasoning and scolding, don't work with this child, because the child doesn't really choose to act in these ways. It's just that their self-control comes and goes. Out of sheer frustration, parents sometimes find themselves spanking, ridiculing, or screaming at the child, even though they know it's not appropriate. Their response leaves everyone more upset than before. Then they blame themselves for not being better parents. Once children are diagnosed and receiving treatment, some of the emotional upset within the family may fade.

Medication can help to control some of the behavior problems that may have led to family turmoil. But more often, there are other aspects of the problem that medication can't touch. Even though ADHD primarily affects a person's behavior, having the disorder has broad emotional repercussions. For some children, being scolded is the only attention they ever get. They have few experiences that build their sense of worth and competence. If they're hyperactive, they're often told they're bad and punished for being disruptive. If they are too disorganized and unfocused to complete tasks, others may call them lazy. If they impulsively grab toys, butt in, or shove classmates, they may lose friends. And if they have a related conduct disorder, they may get in trouble at school or with the law. Facing the daily frustrations that can come with having ADHD can make people fear that they are strange, abnormal, or stupid.

Often, the cycle of frustration, blame, and anger has gone on so long that it will take some time to undo. Both parents and their children may need special help to develop techniques for managing the patterns of behavior. In such cases, mental health professionals can counsel the child and the family, helping them to develop new skills, attitudes, and ways of relating to each other. In individual counseling, the therapist helps children or adults with ADHD learn to feel better about themselves. They learn to recognize that having a disability does not reflect who they are as a person. The therapist can also help people with ADHD identify and build on their strengths, cope with daily problems, and control their attention and aggression. In group counseling, people learn that they are not alone in their frustration and that others want to help. Sometimes only the individual with ADHD needs counseling support. But in many cases, because the problem affects the family as well as the person with ADHD, the entire family may need help. The therapist assists the family in finding better ways to handle the disruptive behaviors and promote change. If the child is young, most of the therapist's work is with the parents, teaching them techniques for coping with and improving their child's behavior.

Several intervention approaches are available and different therapists tend to prefer one approach or another. Knowing something about the various types of interventions makes it easier for families to choose a therapist that is right for their needs.

Psychotherapy works to help people with ADHD to like and accept themselves despite their disorder. In psychotherapy, patients talk with the therapist about upsetting thoughts and feelings, explore self-defeating patterns of behavior, and learn alternative ways to handle their emotions. As they talk, the therapist tries to help them understand how they can change. However, people dealing with ADHD usually want to gain control of their symptomatic behaviors more directly. If so, more direct kinds of intervention are needed.

Cognitive-behavioral therapy helps people work on immediate issues. Rather than helping people understand their feelings and actions, it supports them directly in changing their behavior. The support might be practical assistance, like helping Henry learn to think through tasks and organize his work. Or the support might be to encourage new behaviors by giving praise or rewards each time the person acts in the desired way. A cognitive-behavioral therapist might use such techniques to help a belligerent child like Mark learn to control his fighting, or an impulsive teenager like Lisa to think before she speaks.

Social skills training can also help children learn new behaviors. In social skills training, the therapist discusses and models appropriate behaviors like waiting for a turn, sharing toys, asking for help, or responding to teasing, then gives children a chance to practice. For example, a child might learn to "read" other people's facial expression and tone of voice, in order to respond more appropriately. Social skills training helped Lisa learn to join in group activities, make appropriate comments, and ask for help. A child like Mark might learn to see how his behavior affects others and develop new ways to respond when angry or pushed.

Support groups connect people who have common concerns. Many adults with ADHD and parents of children with ADHD find it useful to join a local or national support group. Many groups deal with issues of children's disorders, and even ADHD specifically. The national associations listed at the back of this booklet can explain how to contact a local chapter. Members of support groups share frustrations and successes, referrals to qualified specialists, and information about what works, as well as their hopes for themselves and their children. There is strength in numbers—and sharing experiences with others who have similar problems helps people know that they aren't alone.

Parenting skills training, offered by therapists or in special classes, gives parents tools and techniques for managing their child's behavior. One such technique is the use of "time out" when the child becomes too unruly or out of control. During time outs, the child is removed from the agitating situation and sits alone quietly for a short time to calm down. Parents may also be taught to give the child "quality time" each day, in which they share a pleasurable or relaxed activity. During this time together, the parent looks for opportunities to notice and point out what the child does well, and praise his or her strengths and abilities.

An effective way to modify a child's behavior is through a system of rewards and penalties. The parents (or teacher) identify a few desirable behaviors that they want to encourage in the child—such as asking for a toy instead of grabbing it, or completing a simple task. The child is told exactly what is expected in order to earn the reward. The child receives the reward when he performs the desired behavior and a mild penalty when he doesn't. A reward can be small, perhaps a token that can be exchanged for special privileges, but it should be something the child wants and is eager to earn. The penalty might be removal of a token or a brief "time out." The goal, over time, is to help children learn to control their own behavior and to choose the more desired behavior. The technique works well with all children, although children with ADHD may need more frequent rewards.

In addition, parents may learn to structure situations in ways that will allow their child to succeed. This may include allowing only one or two playmates at a time, so that their child doesn't get overstimulated. Or if their child has trouble completing tasks, they may learn to help the child divide a large task into small steps, then praise the child as each step is completed.

Parents may also learn to use stress management methods, such as meditation, relaxation techniques, and exercise to increase their own tolerance for frustration, so that they can respond more calmly to their child's behavior.

Controversial Treatments

Understandably, parents who are eager to help their children want to explore every possible option. Many newly touted treatments sound reasonable. Many even come with glowing reports. A few are pure quackery. Some are even developed by reputable doctors or specialists—but when tested scientifically, cannot be proven to help.

Here are a few types of treatment that have not been scientifically shown to be effective in treating

the majority of children or adults with ADHD:

- biofeedback
- restricted diets
- allergy treatments
- medicines to correct problems in the inner ear
- megavitamins
- chiropractic adjustment and bone re-alignment
- treatment for yeast infection
- eye training
- special colored glasses

A few success stories can't substitute for scientific evidence. Until sound, scientific testing shows a treatment to be effective, families risk spending time, money, and hope on fads and false promises.

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SUSTAINING HOPE

Mark

Today, at age 14, Mark is doing much better in school. He channels his energy into sports and is a star player on the intramural football team. Although he still gets into fights now and then, a child psychologist is helping him learn to control his tantrums and frustration, and he is able to make and keep friends. His grandparents point to him with pride and say, "We knew he'd turn out just fine!"

Lisa

Lisa is about to graduate from high school. She's better able to focus her attention and concentrate on her work, so that now her grades are quite good. Overcoming her depression and learning to like herself have also given her more confidence to develop friendships and try new things.

Lately, she has been working with the school guidance counselor to identify the right kind of job to look for after graduation. She hopes to find a career that will bypass her attention problems and make the best use of her assets and skills. She is more alert and focused and is considering trying college in a year or two. Her counselor reminds her that she's certainly smart enough.

Henry

These days, Henry is successful and happy in his job as a shoe salesman. The work allows him to move around throughout the day, and the appearance of new customers provides the variety he needs to help him stay focused. He recently completed a course in time management, and now keeps lists, organizes his work, and schedules his day. Now that he has harnessed his energy, his ability to think about several things at once allows him to be creative and productive.

He is proud that he and his wife have developed important parenting skills for working with their son, so that he, too, is doing better at home and at school. Henry is also pleased with his new ability to follow through on projects. In fact, he just finished making his son a beautiful wooden toy chest for his birthday.

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Can ADHD Be Outgrown or Cured?

Even though most people don't outgrow ADHD, people do learn to adapt and live fulfilling lives. Mark, Lisa, and Henry are making good lives for themselves--not by being cured, but by developing their personal strengths. With effective combinations of medicine, new skills, and emotional support, people with ADHD can develop ways to control their attention and minimize their disruptive behaviors. Like Henry, they may find that by structuring tasks and controlling their environment, they can achieve personal goals. Like Mark, they may learn to channel their excess energy into sports and other high energy activities. And like Lisa, they can identify career options that build on their strengths and abilities.

As they grow up, with appropriate help from parents and clinicians, children with ADHD become better able to suppress their hyperactivity and to channel it into more socially acceptable behaviors, like physical exercise or fidgeting. And although we know that half of all children with ADHD will still show signs of the problem into adulthood, we also know that the medications and therapy that help children also work for adults.

All people with ADHD have natural talents and abilities that they can draw on to create fine lives and careers for themselves. In fact, many people with ADHD even feel that their patterns of behavior give them unique, often unrecognized, advantages. People with ADHD tend to be outgoing and ready for action. Because of their drive for excitement and stimulation, many become successful in business, sports, construction, and public speaking. Because of their ability to think about many things at once, many have won acclaim as artists and inventors. Many choose work that gives them freedom to move around and release excess energy. But some find ways to be effective in quieter, more sedentary careers. Sally, a computer programmer, found that she thinks best when she wears headphones to reduce distracting noises. Like Henry, some people strive to increase their organizational skills. Others who own their own business find it useful to hire support staff to provide day-to-day management.

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What Hope Does Research Offer?

Although no immediate cure is in sight, a new understanding of ADHD may be just over the horizon. Using a variety of research tools and methods, scientists are beginning to uncover new information on the role of the brain in ADHD and effective treatments for the disorder. Such research will ultimately result in improving the personal fulfillment and productivity of people with ADHD.

For example, the use of new techniques like brain imaging to observe how the brain actually works is already providing new insights into the causes of ADHD. Other research is seeking to identify conditions of pregnancy and early childhood that may cause or contribute to these differences in the brain. As the body of knowledge grows, scientists may someday learn how to prevent these differences or at least how to treat them.

NIMH and the U.S. Department of Education are cosponsoring a large national study--the first of its kind--to see which combinations of ADHD treatment work best for different types of children. During this 5-year study, scientists at research clinics across the country will work together in gathering data to answer such questions as: Is combining stimulant medication with behavior modification more effective than either alone? Do boys and girls respond differently to treatment? How do family stresses, income, and environment affect the severity of ADHD and long-term outcomes? How does needing medicine affect children's sense of competence, self-control, and self-esteem? As a result of such research, doctors and mental health specialists may someday know who benefits most from different types of treatment and be able to intervene more effectively.

NIMH grantees are also trying to determine if there are different varieties of attention deficit. With further study, researchers may find that ADHD actually covers a number of different disorders, each with its own cluster of symptoms and treatment requirements. For example, scientists are exploring whether there are any critical differences between children with ADHD who also have anxiety, depression, or

conduct disorders and those who do not. Other researchers are studying slight physical differences that might distinguish one type of ADHD from another. If clusters of differences can be found, scientists can begin to distinguish the treatment each type needs.

Other NIMH-sponsored research is examining the long-term outcome of ADHD. How do children with ADHD turn out, compared to brothers and sisters without the disorder? As adults, how do they handle their own children? Still other studies seek to better understand ADHD in adults. Such studies give insights into what types of treatment or services make a difference in helping an ADHD child grow into a caring parent and a well-functioning adult.

Animal studies are also adding to our knowledge of ADHD in humans. Animal subjects make it possible to study some of the possible causes of ADHD in ways that can't be studied in people. In addition, animal research allows the safety and effectiveness of experimental new drugs to be tested long before they can be given to humans. One NIH-sponsored team of scientists is studying dogs to learn how new stimulant drugs that are similar to Ritalin act on the brain.

Piece by piece, through studies of humans and animals, scientists are beginning to understand the biological nature of attention disorders. New research is allowing us to better understand the inner workings of the brain as we continue to develop new medications and assess new forms of treatment.

As we learn more about what actually happens inside the brain, we approach a future where we can prevent certain brain and mental disorders, make valid diagnoses, and treat each effectively. This is the hope, mission, and vision of the National Institute of Mental Health.

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What Are Sources of Information and Support?

Several publications, organizations, and support groups exist to help individuals, teachers, and families to understand and cope with attention disorders. The following resources provide a good starting point for gaining insight, practical solutions, and support. Other resources are outpatient clinics of children's hospitals, university medical centers, and community mental health centers. Additional printed information can be found at libraries and book stores.

Books for Children and Teens:

Galvin, M. *Otto Learns about his Medication*. New York: Magination Press, 1988. (for young children)

Gehret, J. *Learning Disabilities and the Don't Give Up Kid*. Fairport, New York: Verbal Images Press, 1990. (for classmates and children with learning disabilities and attention difficulties, ages 7-12)

Gordon, M. *Jumpin' Johnny, Get Back to Work! A Child's Guide to ADHD/Hyperactivity*. DeWitt, New York: GSI Publications, 1991. (for ages 7-12)

Meyer, D.; Vadasy, P.; and Fewell, R. *Living with a Brother or Sister with Special Needs: A Book for Sibs*. Seattle: University of Washington Press, 1985.

Moss, D. *Shelly the Hyperactive Turtle*. Rockville, MD: Woodbine House, 1989. (for young children)

Nadeau, K., and Dixon, E. *Learning to Slow Down and Pay Attention*. Annandale, VA: Chesapeake Psychological Publications, 1993.

Parker, R. *Making the Grade: An Adolescent's Struggle with ADD*. Plantation, FL: Impact Publications, 1992.

Quinn, P., and Stern, J. *Putting on the Brakes: Young People's Guide to Understanding Attention Deficit Hyperactivity Disorder*. New York: Magination Press, 1991. (for ages 8-12)

Thompson, M. *My Brother Matthew*. Rockville, MD: Woodbine House, 1992.

Books for Adults With Attention Disorders:

Adelman, P., and Wren, C. *Learning Disabilities, Graduate School, and Careers: The Student's Perspective*. Lake Forest, IL: Learning Opportunities Program, Barat College, 1990.

Hallowell, E., and Ratey, J. *Driven to Distraction*. New York: Pantheon Books, 1994.

Hartmann, T. *Attention Deficit Disorder: A New Perception*. Lancaster, PA: Underwood-Miller, 1993.

Kelly, K., and Ramundo, P. *You Mean I'm Not Lazy, Stupid, or Crazy?! Cincinnati, OH: Tyrell and Jeremy Press, 1993.*

Weiss, G., and Hechtman, L. (eds). *Hyperactive Children Grown Up*. 2d ed. New York: Guilford Press, 1992.

Weiss, L. *Attention Deficit Disorder in Adults*. Dallas, TX: Taylor Pub. Co., 1992.

Wender, P. *The Hyperactive Child, Adolescence, and Adult: Attention Deficit Disorder Through the Lifespan*. New York: Oxford University Press, 1987.

Books for Parents:

Anderson, W.; Chitwood, S.; and Hayden, D. *Negotiating the Special Education Maze: A Guide for Parents and Teachers*. 2d ed. Rockville, MD: Woodbine House, 1990.

Bain, L. *A Parent's Guide to Attention Deficit Disorders*. New York: Dell Publishing, 1991.

Barkley, R. *Defiant Children*. New York: Guilford Press, 1987.

Child Psychopharmacy Center, University of Wisconsin. *Stimulants and Hyperactive Children*. Madison: 1990. (Order by calling (608) 263-6171.)

Copeland, E., and Love, V. *Attention, Please!: A Comprehensive Guide for Successfully Parenting Children with Attention Disorders and Hyperactivity*. Atlanta, GA: SPI Press, 1991.

Fowler, M. *Maybe You Know My Kid: A Parent's Guide to Identifying, Understanding, and Helping your Child with ADHD*. New York: Birch Lane Press, 1990.

Goldstein, S., and Goldstein, M. *Hyperactivity: Why Won't My Child Pay Attention?* New York: J. Wiley, 1992.

Greenberg, G.; Horn, S.; and Wade F. *Attention Deficit Hyperactivity Disorder: Questions & Answers for Parents*. Champaign, IL: Research Press, 1991.

Ingersoll, B., and Goldstein, S. *Attention Deficit Disorder and Learning Disabilities: Realities, Myths, and Controversial Treatments*. New York: Doubleday, 1993.

Kennedy, P.; Terdal, L.; and Fusetti, L. *The Hyperactive Child Book*. New York: St. Martin's Press, 1993.

Moss, R., and Dunlap, H. *Why Johnny Can't Concentrate: Coping with Attention Deficit Problems*. New York: Bantam Books, 1990.

Silver, L. *Dr. Silver's Advice to Parents on Attention-Deficit Hyperactivity Disorder*. Washington, DC: American Psychiatric Press, 1993.

Vail, P. *Smart Kids with School Problems*. New York: EP Dutton, 1987.

Wilson, N. *Optimizing Special Education: How Parents Can Make a Difference*. New York: Insight Books, 1992.

Windell, J. *Discipline: A Sourcebook of 50 Failsafe Techniques for Parents*. New York: Collier Books, 1991.

Other Resources:

For individuals with a computer and modem, there are on-line bulletin boards where parents, adults with ADHD, and medical professionals share experiences, offer emotional support, and ask and respond to questions.

Two such on-line services include CompuServe [(800) 848-8990] and America Online [(800) 827-6364]. You may also wish to check with other national and local on-line communications companies to see if they offer similar services.

Resources for Teachers and Specialists:

Barkley, R. *Attention Deficit Hyperactivity Disorder* (four 40-minute videocassettes in VHS format). New York: Guilford Publications, 1990.

Copeland, E., and Love, V. *Attention Without Tension: A Teacher's Handbook on Attention Disorders*. Atlanta, GA: 3 C's of Childhood, 1992.

Harris, K., and Graham, S. *Helping Young Writers Master the Craft*. Cambridge, MA: Brookline Books, 1992.

Johnson, D. *I Can't Sit Still-Educating and Affirming Inattentive and Hyperactive Children: Suggestions for Parents, Teachers, and Other Care Providers of Children to Age 10*. Santa Cruz, CA: ETR Associates, 1992.

Parker, H. *The ADD Hyperactivity Handbook for Schools*. Plantation, FL: Impact Publications, 1992.

Related Materials Available from NIH:

Attention Deficit Disorder Information Packet and "Know Your Brain Fact Sheet." Both are available from NIH Neurological Institute, P.O. Box 5801; Bethesda, MD 20824 (800) 352-9424. *Learning Disabilities* (NIH Pub. No. 93-3611) and "Plain Talk about Depression" (NIH Pub. No. 93-3561). These are available by contacting: NIMH, Room 7C-02, 5600 Fishers Lane, Rockville, MD 20857.

Support Groups and Organizations

Attention Deficit Information Network (Ad-IN)
475 Hillside Avenue
Needham, MA 02194
(781) 455-9895

Provides up-to-date information on current research, regional meetings. Offers aid in finding solutions to practical problems faced by adults and children with an attention disorder.

ADD Warehouse
300 NW 70th Avenue
Plantation, FL 33317

(800) 233-9273

Distributes books, tapes, videos, assessment on attention deficit hyperactivity disorders. A central location for ordering many of the books listed above. Call for catalog.

Center for Mental Health Services
Office of Consumer, Family, and Public Information
5600 Fishers Lane, Room 15-105
Rockville, MD 20857
(301) 443-2792

This national center, a component of the U.S. Public Health Service, provides a range of information on mental health, treatment, and support services.

Children and Adults with Attention Deficit Disorders
(CH.A.D.D.)
499 NW 70th Avenue, Suite 101
Plantation, FL 33317
(800) 233-4050

A major advocate and key information source for people dealing with attention disorders. Sponsors support groups and publishes two newsletters concerning attention disorders for parents and professionals.

Council for Exceptional Children
11920 Association Drive
Reston, VA 22091
(703) 620-3660

Provides publications for educators. Can also provide referral to ERIC (Educational Resource Information Center) Clearinghouse for Handicapped and Gifted Children.

Federation of Families for Children's Mental Health
1021 Prince Street
Alexandria, VA 22314
(703) 684-7710

Provides information, support, and referrals through federation chapters throughout the country. This national parent-run organization focuses on the needs of children with broad mental health problems.

HEATH Resource Center
American Council on Education
1 Dupont Circle, Suite 800
Washington, DC 20036
(800) 544-3284

A national clearinghouse on post-high school education for people with disabilities.

Learning Disabilities Association of America
4156 Library Road
Pittsburgh, PA 15234
(412) 341-8077

Provides information and referral to state chapters, parent resources, and local support groups. Publishes news briefs and a professional journal.

National Association of Private Schools
for Exceptional Children

1522 K Street, NW, Suite 1032
Washington, DC 20005
(202) 408-3338

Provides referrals to private special education programs.

National Center for Learning Disabilities
99 Park Avenue, 6th Floor
New York, NY 10016
(212) 687-7211

Provides referrals and resources. Publishes Their World magazine describing true stories on ways children and adults cope with LD.

National Clearinghouse for Alcohol and Drug Information
P.O. Box 2345
Rockville, MD 20847
(800) 729-6686

Provides information on the risks of alcohol during pregnancy, and fetal alcohol syndrome.

National Information Center for Children
and Youth with Disabilities (NICHCY)
P.O. Box 1492
Washington, DC 20013
(800) 695-0285

Publishes free, fact-filled newsletters. Arranges workshops. Advises parents on the laws entitling children with disabilities to special education and other services.

Sibling Information Network
A.J. Papanikou Center
1776 Ellington Road
South Windsor, CT 06074
(203) 648-1205

Publishes a newsletter for and about siblings of children with special needs.

Tourette Syndrome Association
42-40 Bell Boulevard
Bayside, NY 11361
(718) 224-2999

State and local chapters provide national information, advocacy, research, and support.

MESSAGE FROM THE NATIONAL INSTITUTE OF MENTAL HEALTH

Research conducted and supported by the National Institute of Mental Health brings hope to millions of people who suffer from mental illness and to their families and friends. In many years of work with animal as well as human subjects, researchers have advanced our understanding of the brain and vastly expanded the capability of mental health professionals to diagnose, treat, and prevent mental and brain disorders.

Now, in the 1990s, which the President and Congress have declared the "Decade of the Brain," we stand at the threshold of a new era in brain and behavioral sciences. Through research, we will learn even more about mental and brain disorders such as depression, bipolar disorder, schizophrenia, panic disorder, obsessive-compulsive disorder, and attention deficit hyperactivity disorder. And we will be able to use this knowledge to develop new therapies that can help more people overcome mental illness.

The National Institute of Mental Health is part of the National Institutes of Health (NIH), the Federal Government's primary agency for biomedical and behavioral research. NIH is a component of the U.S. Department of Health and Human Services.

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Credits

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Attachment C

**Russell Barkley, "Attention-Deficit Hyperactivity Disorder,"
Scientific American, September, 1998**

SCIENTIFIC AMERICAN			
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Attention-Deficit Hyperactivity Disorder



Image: Yan Nascimbene

A new theory suggests the disorder results from a failure in self-control. ADHD may arise when key brain circuits do not develop properly, perhaps because of an altered gene or genes

by Russell A. Barkley

As I watched five-year-old Keith in the waiting room of my office, I could see

SUBTOPICS:
The Search for a Cause

From Genes to Behavior

Prescribing Self-Control

SIDEBARS:
Diagnosing ADHD

A Psychological Model of ADHD

ILLUSTRATION:
Brain Structures

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why his parents said he was having such a tough time in kindergarten. He nopped from chair to chair, swinging his arms and legs restlessly, and then began to fiddle with the light switches, turning the lights on and off again to everyone's annoyance--all the while talking nonstop. When his mother encouraged him to join a group of other children busy in the playroom, Keith butted into a game that was already in progress and took over, causing the other children to complain of his bossiness and drift away to other activities. Even when Keith had the toys to himself, he fidgeted aimlessly with them and seemed unable to entertain himself quietly. Once I examined him more fully, my initial suspicions were confirmed: Keith had attention-deficit hyperactivity disorder (ADHD).

Since the 1940s, psychiatrists have applied various labels to children who are hyperactive and inordinately inattentive and impulsive. Such youngsters have been considered to have "minimal brain dysfunction," "brain-injured child syndrome," "hyperkinetic reaction of childhood," "hyperactive child syndrome" and, most recently, "attention-deficit disorder." The frequent name changes reflect how uncertain researchers have been about the underlying causes of, and even the precise diagnostic criteria for, the disorder.

Within the past several years, however, those of us who study ADHD have begun to clarify its symptoms and causes and have found that it may have a genetic underpinning. Today's view of the basis of the condition is strikingly different from that of just a few years ago. We are finding that ADHD is not a disorder of attention per se, as had long been assumed. Rather it arises as a developmental failure in the brain circuitry that underlies inhibition and self-control. This loss of self-control in turn impairs other important brain functions crucial for maintaining attention, including the ability to defer immediate rewards for later, greater gain.

ADHD involves two sets of symptoms: inattention and a combination of hyperactive and impulsive behaviors. Most children are more active, distractible and impulsive than adults. And they are more inconsistent, affected by momentary events and dominated by objects in their immediate environment. The younger the children, the less able they are to be aware of time or to give priority to future events over more immediate wants. Such behaviors are signs of a problem, however, when children display them significantly more than their peers do.

Boys are at least three times as likely as girls to develop the disorder; indeed, some studies have found that boys with ADHD outnumber girls with the condition by nine to one, possibly because boys are genetically more prone to disorders of the nervous system. The behavior patterns that typify ADHD usually arise between the ages of three and five. Even so, the age of onset can vary widely: some children do not develop symptoms until late childhood or even early adolescence. Why their symptoms are delayed remains unclear.

Huge numbers of people are affected. Many studies estimate that between 2 and 9.5 percent of all school-age children worldwide have ADHD; researchers have identified it in every nation and culture they have studied. What is more, the condition, which was once thought to ease with age, can persist into adulthood. For example, roughly two thirds of 158 children with ADHD my colleagues and I evaluated in the 1970s still had the disorder in their twenties. And many of those who no longer fit the clinical description of ADHD were still having significant adjustment problems at work, in school or in other social settings.

To help children (and adults) with ADHD, psychiatrists and psychologists must

better understand the causes of the disorder. Because researchers have traditionally viewed ADHD as a problem in the realm of attention, some have suggested that it stems from an inability of the brain to filter competing sensory inputs, such as sights and sounds. But recently scientists led by Joseph A. Sergeant of the University of Amsterdam have shown that children with ADHD do not have difficulty in that area; instead they cannot inhibit their impulsive motor responses to such input. Other researchers have found that children with ADHD are less capable of preparing motor responses in anticipation of events and are insensitive to feedback about errors made in those responses. For example, in a commonly used test of reaction time, children with ADHD are less able than other children to ready themselves to press one of several keys when they see a warning light. They also do not slow down after making mistakes in such tests in order to improve their accuracy.

The Search for a Cause

No one knows the direct and immediate causes of the difficulties experienced by children with ADHD, although advances in neurological imaging techniques and genetics promise to clarify this issue over the next five years. Already they have yielded clues, albeit ones that do not yet fit together into a coherent picture.

Imaging studies over the past decade have indicated which brain regions might malfunction in patients with ADHD and thus account for the symptoms of the condition. That work suggests the involvement of the prefrontal cortex, part of the cerebellum, and at least two of the clusters of nerve cells deep in the brain that are collectively known as the basal ganglia. In a 1996 study F. Xavier Castellanos, Judith L. Rapoport and their colleagues at the National Institute of Mental Health found that the right prefrontal cortex and two basal ganglia called the caudate nucleus and the globus pallidus are significantly smaller than normal in children with ADHD. Earlier this year Castellanos's group found that the vermis region of the cerebellum is also smaller in ADHD children.

The imaging findings make sense because the brain areas that are reduced in size in children with ADHD are the very ones that regulate attention. The right prefrontal cortex, for example, is involved in "editing" one's behavior, resisting distractions and developing an awareness of self and time. The caudate nucleus and the globus pallidus help to switch off automatic responses to allow more careful deliberation by the cortex and to coordinate neurological input among various regions of the cortex. The exact role of the vermis region is unclear, but early studies suggest it may play a role in regulating motivation.

What causes these structures to shrink in the brains of those with ADHD? No one knows, but many studies have suggested that mutations in several genes that are normally very active in the prefrontal cortex and basal ganglia might play a role. Most researchers now believe that ADHD is a polygenic disorder--that is, that more than one gene contributes to it.

Early tips that faulty genetics underlie ADHD came from studies of the relatives of children with the disorder. For instance, the siblings of children with ADHD are between five and seven times more likely to develop the syndrome than children from unaffected families. And the children of a parent who has ADHD have up to a 50 percent chance of experiencing the same difficulties.

The most conclusive evidence that genetics can contribute to ADHD, however, comes from studies of twins. Jacquelyn J. Gillis, then at the University of Colorado, and her colleagues reported in 1992 that the ADHD risk of a child whose identical twin has the disorder is between 11 and 18 times greater than

that of a nontwin sibling of a child with ADHD; between 55 and 92 percent of the identical twins of children with ADHD eventually develop the condition.

One of the largest twin studies of ADHD was conducted by Helene Gjone and Jon M. Sundet of the University of Oslo with Jim Stevenson of the University of Southampton in England. It involved 526 identical twins, who inherit exactly the same genes, and 389 fraternal twins, who are no more alike genetically than siblings born years apart. The team found that ADHD has a heritability approaching 80 percent, meaning that up to 80 percent of the differences in attention, hyperactivity and impulsivity between people with ADHD and those without the disorder can be explained by genetic factors.

Nongenetic factors that have been linked to ADHD include premature birth, maternal alcohol and tobacco use, exposure to high levels of lead in early childhood and brain injuries--especially those that involve the prefrontal cortex. But even together, these factors can account for only between 20 and 30 percent of ADHD cases among boys; among girls, they account for an even smaller percentage. (Contrary to popular belief, neither dietary factors, such as the amount of sugar a child consumes, nor poor child-rearing methods have been consistently shown to contribute to ADHD.)

Which genes are defective? Perhaps those that dictate the way in which the brain dopamine, one of the chemicals known as neurotransmitters that convey messages from one nerve cell, or neuron, to another. Dopamine is secreted by neurons in specific parts of the brain to inhibit or modulate the activity of other neurons, particularly those involved in emotion and movement. The movement disorders of Parkinson's disease, for example, are caused by the death of dopamine-secreting neurons in a region of the brain underneath the basal ganglia called the substantia nigra.

Some impressive studies specifically implicate genes that encode, or serve as the blueprint for, dopamine receptors and transporters; these genes are very active in the prefrontal cortex and basal ganglia. Dopamine receptors sit on the surface of certain neurons. Dopamine delivers its message to those neurons by binding to the receptors. Dopamine transporters protrude from neurons that secrete the neurotransmitter; they take up unused dopamine so that it can be used again. Mutations in the dopamine receptor gene can render receptors less sensitive to dopamine. Conversely, mutations in the dopamine transporter gene can yield overly effective transporters that scavenge secreted dopamine before it has a chance to bind to dopamine receptors on a neighboring neuron.

In 1995 Edwin H. Cook and his colleagues at the University of Chicago reported that children with ADHD were more likely than others to have a particular variation in the dopamine transporter gene DAT1. Similarly, in 1996 Gerald J. LaHoste of the University of California at Irvine and his co-workers found that a variant of the dopamine receptor gene D4 is more common among children with ADHD. But each of these studies involved 40 or 50 children--a relatively small number--so their findings are now being confirmed in larger studies.

From Genes to Behavior

How do the brain-structure and genetic defects observed in children with ADHD lead to the characteristic behaviors of the disorder? Ultimately, they might be found to underlie impaired behavioral inhibition and self-control, which I have concluded are the central deficits in ADHD.

Self-control--or the capacity to inhibit or delay one's initial motor (and perhaps emotional) responses to an event--is a critical foundation for the performance of any task. As most children grow up, they gain the ability to engage in mental activities, known as executive functions, that help them deflect distractions, recall goals and take the steps needed to reach them. To achieve a goal in work or play, for instance, people need to be able to remember their aim (use hindsight), prompt themselves about what they need to do to reach that goal (use forethought), keep their emotions reined in and motivate themselves. Unless a person can inhibit interfering thoughts and impulses, none of these functions can be carried out successfully.



**BRAIN
STRUCTURES**

In the early years, the executive functions are performed externally: children might talk out loud to themselves while remembering a task or puzzling out a problem. As children mature, they internalize, or make private, such executive functions, which prevents others from knowing their thoughts. Children with ADHD, in contrast, seem to lack the restraint needed to inhibit the public performance of these executive functions.

The executive functions can be grouped into four mental activities. One is the operation of working memory--holding information in the mind while working on a task, even if the original stimulus that provided the information is gone. Such remembering is crucial to timeliness and goal-directed behavior: it provides the means for hindsight, forethought, preparation and the ability to imitate the complex, novel behavior of others--all of which are impaired in people with ADHD.

The internalization of self-directed speech is another executive function. Before the age of six, most children speak out loud to themselves frequently, reminding themselves how to perform a particular task or trying to cope with a problem, for example. ("Where did I put that book? Oh, I left it under the desk.") In elementary school, such private speech evolves into inaudible muttering; it usually disappears by age 10 [see "Why Children Talk to Themselves," by Laura E. Berk; *Scientific American*, November 1994]. Internalized, self-directed speech allows one to reflect to oneself, to follow rules and instructions, to use self-questioning as a form of problem solving and to construct "meta-rules," the basis for understanding the rules for using rules--all quickly and without tipping one's hand to others. Laura E. Berk and her colleagues at Illinois State University reported in 1991 that the internalization of self-directed speech is delayed in boys with ADHD.

A third executive mental function consists of controlling emotions, motivation and state of arousal. Such control helps individuals achieve goals by enabling them to delay or alter potentially distracting emotional reactions to a particular event and to generate private emotions and motivation. Those who rein in their immediate passions can also behave in more socially acceptable ways.

The final executive function, reconstitution, actually encompasses two separate processes: breaking down observed behaviors and combining the parts into new actions not previously learned from experience. The capacity for reconstitution gives humans a great degree of fluency, flexibility and creativity; it allows individuals to propel themselves toward a goal without having to learn all the needed steps by rote. It permits children as they mature to direct their behavior across increasingly longer intervals by combining behaviors into ever longer chains to attain a goal. Initial studies imply that children with ADHD are less

capable of reconstitution than are other children.

I suggest that like self-directed speech, the other three executive functions become internalized during typical neural development in early childhood. Such privatization is essential for creating visual imagery and verbal thought. As children grow up, they develop the capacity to behave covertly, to mask some of their behaviors or feelings from others. Perhaps because of faulty genetics or embryonic development, children with ADHD have not attained this ability and therefore display too much public behavior and speech. It is my assertion that the inattention, hyperactivity and impulsivity of children with ADHD are caused by their failure to be guided by internal instructions and by their inability to curb their own inappropriate behaviors.

Prescribing Self-Control

If, as I have outlined, ADHD is a failure of behavioral inhibition that delays the ability to privatize and execute the four executive mental functions I have described, the finding supports the theory that children with ADHD might be helped by a more structured environment. Greater structure can be an important complement to any drug therapy the children might receive. Currently children (and adults) with ADHD often receive drugs such as Ritalin that boost their capacity to inhibit and regulate impulsive behaviors. These drugs act by inhibiting the dopamine transporter, increasing the time that dopamine has to bind to its receptors on other neurons.

Such compounds (which, despite their inhibitory effects, are known as psychostimulants) have been found to improve the behavior of between 70 and 90 percent of children with ADHD older than five years. Children with ADHD who take such medication not only are less impulsive, restless and distractible but are also better able to hold important information in mind, to be more productive academically, and to have more internalized speech and better self-control. As a result, they tend to be liked better by other children and to experience less punishment for their actions, which improves their self-image.

My model suggests that in addition to psychostimulants--and perhaps antidepressants, for some children--treatment for ADHD should include training parents and teachers in specific and more effective methods for managing the behavioral problems of children with the disorder. Such methods involve making the consequences of a child's actions more frequent and immediate and increasing the external use of prompts and cues about rules and time intervals. Parents and teachers must aid children with ADHD by anticipating events for them, breaking future tasks down into smaller and more immediate steps, and using artificial immediate rewards. All these steps serve to externalize time, rules and consequences as a replacement for the weak internal forms of information, rules and motivation of children with ADHD.

In some instances, the problems of ADHD children may be severe enough to warrant their placement in special education programs. Although such programs are not intended as a cure for the child's difficulties, they typically do provide a smaller, less competitive and more supportive environment in which the child can receive individual instruction. The hope is that once children learn techniques to overcome their deficits in self-control, they will be able to function outside such programs.

There is no cure for ADHD, but much more is now known about effectively coping with and managing this persistent and troubling developmental disorder. The day is not far off when genetic testing for ADHD may become available and

more specialized medications may be designed to counter the specific genetic deficits of the children who suffer from it.

Related Links

[Online Diagnostic Evaluation Information](#) from the National Institutes for Mental Health [Ask the Experts](#)

[Paying Attention](#), *Scientific American*, August 1996

[Controversy over ADHD diagnosis](#)

[Personal Stories](#)

[Attention!](#), a quarterly magazine from Children and Adults with Attention Deficit Disorder

[Information just for kids with ADHD](#)

[Interrupt-Driven](#), an article on ADD from *Wired* magazine

[ADHD Links](#)

Further Reading

THE EPIDEMIOLOGY OF ATTENTION-DEFICIT HYPERACTIVITY DISORDER. Peter Szatmari in *Child and Adolescent Psychiatric Clinics of North America*, Vol. 1. Edited by G. Weiss. W. B. Saunders, 1992.

HYPERACTIVE CHILDREN GROWN UP. Gabrielle Weiss and Lily Trokenberg Hechtman. Guilford Press, 1993.

TAKING CHARGE OF ADHD: THE COMPLETE, AUTHORITATIVE GUIDE FOR PARENTS. R. A. Barkley. Guilford Press, 1995.

DOPAMINE D4 RECEPTOR GENE POLYMORPHISM IS ASSOCIATED WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER. G. J. LaHoste et al. in *Molecular Psychiatry*, Vol. 1, No. 2, pages 121-124; May 1996.

The Author

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Attachment D

**Larry Goldman, Myron Genel, Rebecca Besman, Priscilia Stanetz,
"Diagnosis and Treatment of Attention-Deficit/Hyperactivity
Disorder in Children and Adolescents," *JAMA*, April 8, 1998**

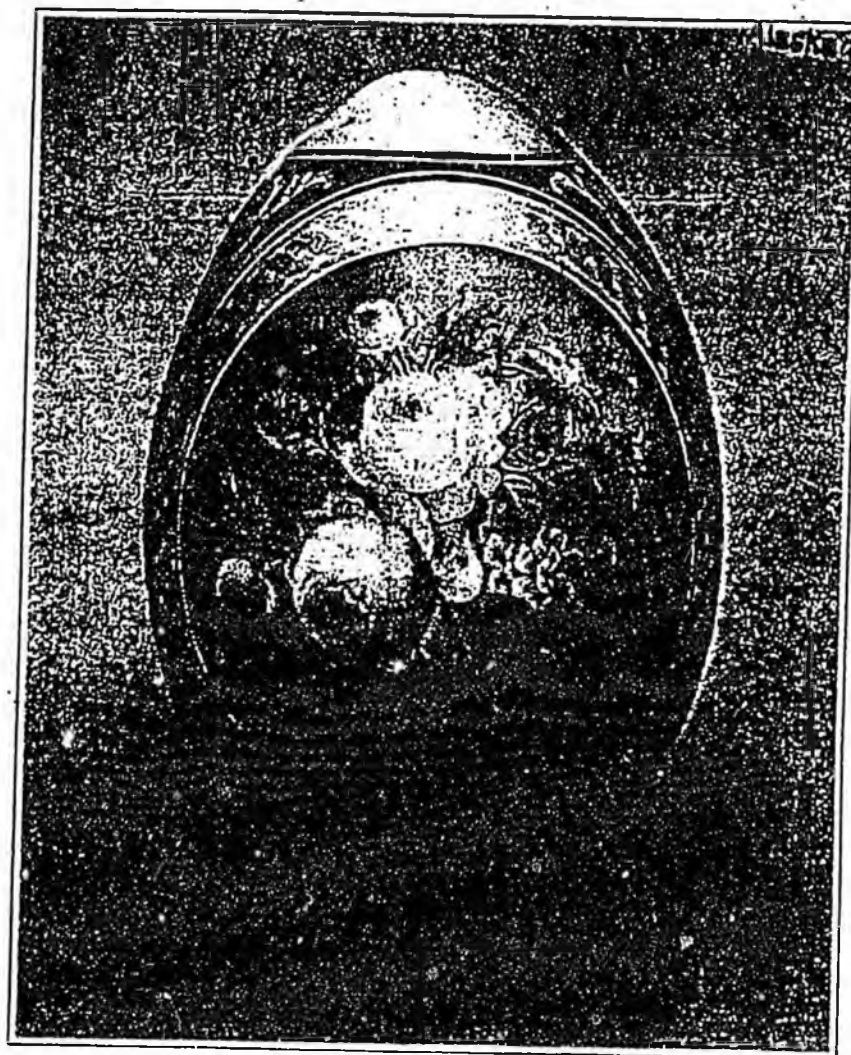
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April 8, 1998

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Diagnosis and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents

Larry S. Goldman, MD; Myron Genel, MD; Rebecca J. Bezman, MD; Priscilla J. Slanetz, MD, MPH;
for the Council on Scientific Affairs, American Medical Association

Objective.—To deal with public and professional concern regarding possible overprescription of attention-deficit/hyperactivity disorder (ADHD) medications, particularly methylphenidate, by reviewing issues related to the diagnosis, optimal treatment, and actual care of ADHD patients and of evidence of patient misuse of ADHD medications.

Data Sources.—Literature review using a National Library of Medicine database search for 1975 through March 1997 on the terms *attention deficit disorder with hyperactivity, methylphenidate, stimulants, and stimulant abuse and dependence*. Relevant documents from the Drug Enforcement Administration were also reviewed.

Study Selection.—All English-language studies dealing with children of elementary school through high school age were included.

Data Extraction.—All searched articles were selected and were made available to coauthors for review. Additional articles known to coauthors were added to the initial list, and a consensus was developed among the coauthors regarding the articles most pertinent to the issues requested in the resolution calling for this report. Relevant information from these articles was included in the report.

Data Synthesis.—Diagnostic criteria for ADHD are based on extensive empirical research and, if applied appropriately, lead to the diagnosis of a syndrome with high interrater reliability, good face validity, and high predictability of course and medication responsiveness. The criteria of what constitutes ADHD in children have broadened, and there is a growing appreciation of the persistence of ADHD into adolescence and adulthood. As a result, more children (especially girls), adolescents, and adults are being diagnosed and treated with stimulant medication, and children are being treated for longer periods of time. Epidemiologic studies using standardized diagnostic criteria suggest that 3% to 6% of the school-aged population (elementary through high school) may suffer from ADHD, although the percentage of US youth being treated for ADHD is at most at the lower end of this prevalence range. Pharmacotherapy, particularly use of stimulants, has been extensively studied and generally provides significant short-term symptomatic and academic improvement. There is little evidence that stimulant abuse or diversion is currently a major problem, particularly among those with ADHD, although recent trends suggest that this could increase with the expanding production and use of stimulants.

Conclusions.—Although some children are being diagnosed as having ADHD with insufficient evaluation and in some cases stimulant medication is prescribed when treatment alternatives exist, there is little evidence of widespread overdiagnosis or misdiagnosis of ADHD or of widespread overprescription of methylphenidate by physicians.

JAMA 1998;279:1100-1107

From the Council on Scientific Affairs, American Medical Association, Chicago, Ill.

This report was presented at the 1997 House of Delegates Annual Meeting as Report 5 of the Council on Scientific Affairs. The recommendations were adopted, and the remainder of the report was filed.

This report is not intended to be construed or to serve as a standard of medical care. Standards of medical care are determined on the basis of all the facts and

circumstances involved in an individual case and are subject to change as scientific knowledge and technology advance and patterns of practice evolve. This report reflects the scientific literature as of March 1997.

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ATTENTION-DEFICIT/hyperactivity disorder (ADHD) is a common neuropsychiatric syndrome with onset in childhood, most commonly becoming apparent (and thus coming to medical attention) during the first few years of grade school. ADHD may be associated with a number of comorbid psychiatric conditions as well as with impaired academic performance and with both patient and family emotional distress. While it was previously thought that the disorder remitted before or during adolescence, it has become well established that many patients will have an illness course that persists well into adulthood. Pharmacological treatment, particularly with stimulant medication, is the most-studied aspect of management, although other forms of treatment (eg, behavior therapy, parent training) are important parts of good clinical care.

Despite an enormous body of research into this disorder, various aspects of ADHD have generated controversy over the years. Three features of ADHD in particular seem to have contributed to the controversy: (1) like most mental disorders, its diagnostic criteria involve patient history and behavioral assessment without the availability of laboratory or radiologic confirmation; (2) like many chronic illnesses of childhood, it has an early onset and extended course, thus requiring at times treatment of children and adolescents over many years; and (3) its treatment often includes stimulant medications that have abuse or diversion potential.

Members of the Council on Scientific Affairs at the time this report was written include the following: Mitchell S. Karlan, MD, Los Angeles, Calif (chair); Ronald M. Davis, MD, Detroit, Mich (chair-elect); Roy D. Altman, MD, Miami, Fla; Rebecca J. Bezman, MD, Chicago, Ill; Scott D. Delichman, MD, MPH, Decatur, Ga; Myron Genel, MD, New Haven, Conn; John P. Howe III, MD, San Antonio, Tex; Nancy H. Nielsen, MD, PhD, Buffalo, NY; Joseph A. Riggs, MD, Haddon Field, NJ; Priscilla J. Slanetz, MD, MPH, Boston, Mass; Michael A. Williams, MD, Baltimore, Md; Donald C. Young, MD, Iowa City; Larry S. Goldman, MD (staff); Robert C. Rinaldi, PhD (secretary); Linda Bresolin, PhD (assistant secretary).

Debate has centered on the appropriate assessment and "labeling" of children: there have been allegations that the diagnosis is merely applied to control children who exhibit unwanted behaviors in the classroom or elsewhere and that medication is simply used to control such behavior. Along similar lines, concerns have been expressed about whether thorough enough evaluations are being performed by physicians prior to prescribing medication. Apart from diagnostic issues, concerns have been raised about young children taking medications for lengthy periods of time. In addition, some critics have complained that overemphasis on psychopharmacological treatment has led to neglect of other treatment modalities or served as a distraction from family problems or school shortcomings. It should be stressed that these issues have been raised polemically or theoretically, rather than on the basis of particular scientific findings.

Another concern has been raised by the dramatic increase in methylphenidate (Ritalin) hydrochloride production and use in the United States in the past decade. This has raised questions about whether there has been a true increase in the prevalence of ADHD in this time period; a change in diagnostic criteria affecting practice; improved physician recognition of the disorder; a broadened spectrum of indications for use of stimulants; and an increase in stimulant abuse, diversion, and prescription for profit.

Debate over ADHD within the research and medical communities has been mild and mostly concerned with nuances in the diagnostic and treatment paradigms.¹ By contrast, highly inflammatory public relations campaigns and pitched legal battles have been waged (particularly by groups such as the Church of Scientology) that seek to label the whole idea of ADHD as an illness a "myth" and to brand the use of stimulants in children as a form of "mind control."^{2,3} These efforts, which have been widely reported in the news media, have created a climate of fear among physicians, parents, and educators and have sown anxiety and confusion among the general public.^{4,5} It is thus most important to separate legitimate concerns raised by scientific studies from abstract, distorted, or mendacious information from other sources.

There are 6 main questions that underlie this professional and public concern and that this report will address by reviewing the pertinent research:

1. Is there an agreed-on set of diagnostic criteria for ADHD that reflects sufficient reliability and validity so as to delineate a clinically meaningful syndrome?

2. What is the epidemiology of ADHD, and how can the apparent disparities in prevalence in different populations be explained?

3. What is the course of the illness, and what are the adverse consequences of the illness that would justify treatment?

4. What constitutes optimal treatment for ADHD, and how do stimulants fit into it?

5. What are the adverse consequences of using stimulants, and in particular, what is known about the risks of abuse and diversion?

6. Are children being appropriately assessed and treated in clinical settings to ensure that diagnostic criteria are being used appropriately; ie, is there evidence of underdiagnosis, overdiagnosis, or misdiagnosis?

METHODS

The National Library of Medicine database was searched for 1975 through March 1997 for English-language articles covering school-aged children. Search terms were *attention deficit disorder with hyperactivity, methylphenidate, stimulants, and stimulant abuse and dependence*. Articles concerned with diagnostic and outcomes issues were used. Drug Enforcement Administration (DEA) data also were incorporated.

DIAGNOSIS OF ADHD

Hyperactivity in children was first described clinically in 1902, and the first report of stimulant use to treat hyperactivity in that condition was in 1937.⁶ The high frequency of "soft" neurologic findings led to designating the condition "minimal brain dysfunction," with the expectation that a consistent neurologic lesion or set of lesions would eventually be found.⁷

The first empirically based official set of diagnostic criteria for what is now referred to as ADHD was delineated in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* in 1980.⁸ Early focus on the centrality of hyperactivity shifted toward giving weight to attentional problems and impulsivity as well, which was later reflected in the 1987 revision (*Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition [DSM-III-R]*).⁹ The current classification (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition [DSM-IV]*) of the disorder now allows subtyping as predominantly inattentive type, predominantly hyperactive type, or combined type.¹⁰ These successive changes in diagnostic criteria reflect a combination of empiri-

cal research findings and expert committee consensus. The complete *DSM-IV* criteria can be found in Table 1.

The *DSM-IV* criteria emphasize several factors:

The symptoms specified in the criteria must be present for at least 6 months, ensuring that persistent rather than transient symptoms will be included.

The symptoms must be "maladaptive and inconsistent with developmental level." This ensures that the symptoms are of sufficient severity to cause problems and that the child's age and neurodevelopment are considered in evaluating symptoms.

The symptoms must be present across 2 or more settings, ie, school problems alone do not meet criteria for the diagnosis.

The symptoms are not better explained by another disorder, such as mood disorder, psychosis, or pervasive developmental disorder (autism).

Taken as a whole, these criteria require an illness pattern that is enduring and has led to impairment. To make this diagnosis appropriately, the clinician must be familiar with normal development and behavior, gather information from several sources to evaluate the child's symptoms in different settings, and construct an appropriate differential diagnosis for the presenting complaints. This helps, for example, to distinguish children with ADHD from unaffected children whose parents or teachers are mislabeling normal behavior as pathological. The diagnostic criteria as used by appropriate examiners demonstrate high interrater reliability of individual items and of overall diagnosis.¹¹

A number of other psychiatric, medical, and neurologic disorders (eg, traumatic brain injury, epilepsy, depression) can lead to disturbances in attention and/or activity level.¹² Thus, the diagnosis of "primary" ADHD is made when there is no evidence from the history, physical examination, or laboratory findings of another condition producing the clinical picture.

The goals of the actual examination of the child are to determine whether he or she meets diagnostic criteria and to look for conditions other than ADHD that might simulate it. Too much focus on a child's behavior in the physician's office or the child's own observations may lead to a missed diagnosis, while overreliance on parental reports of abnormal behavior alone may lead to overdiagnosis.¹³

A number of rating scales and psychological testing instruments may be used in the assessment of suspected ADHD, but none of these should be used in isolation to make or refute the diagnosis. Scales such as the Conners, SNAP-IV,

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Table 1.—Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder*

- A. Either (1) or (2):**
- (1) **Inattention:** 6 (or more) of the following symptoms of inattention have persisted for at least 6 mo to a degree that is maladaptive and inconsistent with developmental level:
 - (a) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
 - (b) often has difficulty sustaining attention in tasks or play activities
 - (c) often does not seem to listen when spoken to directly
 - (d) often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
 - (e) often has difficulty organizing tasks and activities
 - (f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
 - (g) often loses things necessary for tasks or activities (eg, toys, school assignments, pencils, books, or tools)
 - (h) is often easily distracted by extraneous stimuli
 - (i) is often forgetful in daily activities
 - (2) **Hyperactivity-impulsivity:** 6 (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 mo to a degree that is maladaptive and inconsistent with developmental level:
 - (a) often fidgets with hands or feet or squirms in seat
 - (b) often leaves seat in classroom or in other situations in which remaining seated is expected
 - (c) often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
 - (d) often has difficulty playing or engaging in leisure activities quietly
 - (e) is often "on the go" or often acts as if "driven by a motor"
 - (f) often talks excessively
 - (g) often blurts out answers before questions have been completed
 - (h) often has difficulty awaiting turn
 - (i) often interrupts or intrudes on others (eg, bursts into conversations or games)
- B.** Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 y
- C.** Some impairment from the symptoms is present in 2 or more settings (eg, at school [or work] and at home)
- D.** There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning
- E.** The symptoms do not occur exclusively during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder and are not better accounted for by another mental disorder (eg, mood disorder, anxiety disorder, dissociative disorder, or a personality disorder)

**Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*,¹⁶ code based on type: 314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both criteria A(1) and A(2) are met for the past 6 months; 314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: if criterion A(1) is met but criterion A(2) is not met for the past 6 months; 314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: if criterion A(2) is met but Criterion A(1) is not met for the past 6 months. Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, "In Partial Remission" should be specified.

and Disruptive Behavior Disorder Scale are more helpful in assessing and monitoring response to treatment than in making a diagnosis. Neuropsychological tests that focus on sustained attention such as the Continuous Performance Task, the Wisconsin Card-Sorting Test, Test of Variables of Attention, the Matching Familiar Figures Test, and the Wechsler Intelligence Scale for Children-Revised are similarly not diagnostic.¹

Thus, the overall approach to diagnosis may involve (1) a comprehensive interview with the child's adult caregivers; (2) a mental status examination of the child; (3) a medical evaluation for general health and neurologic status; (4) a cognitive assessment of ability and achievement; (5) use of ADHD-focused parent and teacher rating scales; and (6) school reports and other adjunctive evaluations if necessary (speech, language assessment, etc) depending on clinical findings.^{1,14,15} An evaluation can be performed by a clinician with the skills and knowledge to carry out those components.

Attempts to clarify the pathophysiology of ADHD have been made on several fronts. Genetic studies have revealed up to 92% concordance in monozygotic twins and 33% in dizygotics.¹⁶⁻¹⁸ Abnormalities have been noted in mag-

netic resonance imaging studies of the brains of those with ADHD,¹⁹ single-photon emission computed tomography,^{20,21} and neurophysiological studies (heart rate deceleration, electroencephalogram amplitude of response to stimulation, habituation on evoked responses).¹ These findings and others, when taken together, provide increasing support for the concept of ADHD as a neuropsychiatric condition or set of conditions.

Even with the use of carefully applied diagnostic criteria, there remains the issue of the validity of ADHD as a discrete condition.²² With regard to unitary etiology, many medical conditions (eg, heart failure, seizures) are syndromes representing a final common presentation of a number of pathophysiological disturbances. Thus, the absence of a single cause would be a weak argument against the validity of ADHD as a discrete syndrome. The familial, genetic, neuroanatomical, and neurophysiological studies are mounting evidence to date for postdictive validity. Findings with regard to concurrent validity are mixed: there is clearly a great deal of overlap between ADHD and a number of learning conditions and conduct disorder, among other conditions. The strongest evidence of validity has been for course prediction and treatment re-

sponse. Overall, ADHD is one of the best-researched disorders in medicine, and the overall data on its validity are far more compelling than for many medical conditions.^{11,23,24}

EPIDEMIOLOGY OF ADHD

A number of studies have examined the prevalence of ADHD in various populations. The patient sample used is critical because of variations in different settings: at least 10% of behavior problems seen in general pediatrics settings are due to ADHD, while children with ADHD make up to 50% of some child psychiatric populations.¹⁶ In general, most ADHD patients in the United States are cared for by pediatricians and family practitioners, while child psychiatrists, neurologists, and behavioral pediatricians tend to see refractory patients and those with significant comorbidity. Community studies have yielded prevalences between 1.7% and 16%, depending on the population and the diagnostic methods. These studies are summarized in Table 2.

These results suggest that across fairly diverse populations (geographically, racially, socioeconomically) there exists a sizable percentage of school-aged children with ADHD. The evolution of criteria from *DSM-III* to *DSM-IV*, although based on a progressively larger empirical base,²⁶ has broadened the case definition, so that more children appear to be affected. This is largely a function of the increased emphasis on attentional problems as opposed to a more narrow focus on hyperactivity in earlier diagnostic sets. As a result, girls have been diagnosed as having ADHD more frequently than they were in the past.²⁷

ILLNESS COURSE AND COMORBIDITY OF ADHD

Longer-term follow-up studies of children with ADHD as well as "lookback" studies of symptomatic adults who can be retrospectively diagnosed as having had childhood ADHD show that there is symptomatic persistence into adulthood in many cases. On average, symptoms diminish by about 50% every 5 years between the ages of 10 and 25 years. Hyperactivity itself declines more quickly than impulsivity or inattentiveness.^{28,29}

A number of psychiatric conditions co-occur with ADHD. Between 10% and 20% of children with ADHD in both community and clinical samples have mood disorders, 20% have conduct disorders, and up to 40% may have oppositional defiant disorder.⁴⁰ Bipolar disorder is being increasingly recognized.⁴¹ Only about 7% of those with ADHD have tics or Tourette syndrome, but 60% of those with Tourette syndrome have ADHD,

raising questions about common etiologic mechanisms. Learning disorders (especially reading disorder) and subnormal intelligence also are increased in the total population of those with ADHD and vice versa.⁴² Overall, perhaps as many as 65% of children with ADHD will have 1 or more comorbid conditions, although their presence will not be recognized without appropriate questioning and evaluation.⁴⁴ In general, when ADHD is untreated there is a gradual accumulation of adverse processes and events that increase the risk of serious psychopathology later in life.⁴⁴ Whether this can be reversed by long-term treatment remains unknown.

The relationship between substance use disorders and ADHD is complex. Children with ADHD who do not have comorbid conditions have a risk of substance use disorders that is no different from children without ADHD up to the age of about 14 years. The risk of developing substance use disorders in those with ADHD is increased in adolescents, and the risk ratio increases further in adulthood, regardless of whether there is comorbidity. Persistence of ADHD symptoms and family history of both ADHD and substance use disorders are risk factors for their development. Highly potent risk factors are the presence of comorbid conduct disorder or bipolar disorder. There is debate about whether long-term treatment of ADHD may decrease the risk of subsequent development of substance use disorders.⁴⁶

One prospective study, which followed an ADHD cohort over an average of 16 years along with a matched control group, found an 11-fold increase in ongoing ADHD symptoms (11% vs 1%), a 9-fold increase in antisocial personality disorder (18% vs 2%), and a 4-fold higher rate of drug use disorder (16% vs 4%).⁴⁷ The strongest predictors of persistence of psychopathology are psychiatric comorbidity and family history of ADHD.⁴⁸

TREATMENT OF ADHD

Methylphenidate, created in 1955, now accounts for more than 90% of the stimulant use in ADHD in the United States. A racemic mixture of amphetamines (Adderall), dextroamphetamine sulfate (Dexedrine and others), and pemoline (Cylert) are also used. Methylphenidate is strongly favored by US physicians, perhaps because the overuse of amphetamines for treatment of obesity and their misuse in the 1960s gave that class of drugs a reputation as more problematic than methylphenidate.

There have been more than 170 studies involving more than 6000 school-aged children using stimulant medication for ADHD. The response rate for any single

Table 2.—Prevalence Studies of Attention-Deficit/Hyperactivity Disorder

Site	Source, y	Criteria*	Prevalence, %
New Zealand	Anderson et al, ¹⁸ 1987	DSM-III	6.7
New York, NY	Cohen, ²⁰ 1988	DSM-III	3-6
Ontario	Szatmari et al, ²² 1989	DSM-III	6.3
Puerto Rico	Bird et al, ²³ 1988	DSM-III	9.5-16.1
US inner city	Newcorn et al, ²⁴ 1989	DSM-III†	12.9
Pittsburgh, Pa	Costello et al, ²⁵ 1988	DSM-III-R	2.6
Iowa	Lindgren et al, ³¹ 1990	DSM-III‡	2.8
Germany	Baumgaertel et al, ³² 1995	DSM-III§	9.6
London, England	Esser et al, ³³ 1990	DSM-III-R	1.7
Mannheim, Germany	Esser et al, ³³ 1990	DSM-III-R	4.2
United States	Pelham et al, ³⁴ 1992	DSM-III-R	2.5-4.0
Tennessee	Wolraich et al, ³⁵ 1996	DSM-III-R¶	7.3
United States	Shaffer et al, ³⁶ 1996	DSM-III-R	4.1

*DSM-III indicates Diagnostic and Statistical Manual of Mental Disorders, Third Edition†; DSM-III-R, Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition†; and DSM-IV, Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.†

†Prevalence of 18.9% using DSM-III-R.

‡Prevalence of 6.1% using DSM-III-R.

§Prevalence of 9.0% primarily inattentive, 3.5% primarily hyperactive, 4.8% combined (17.8% total) using DSM-IV, 10.9% using DSM-III-R.

¶Prevalence of 5.4% primarily inattentive, 2.4% primarily hyperactive, 3.6% combined (total 11.4%) using DSM-IV.

stimulant drug in ADHD is approximately 70%, and up to 90% of children will respond to at least 1 stimulant without major adverse events if drug titration is done carefully. A "response" in this context means a statistically or clinically significant reduction in hyperactivity or increase in attention as rated by parents, teachers, and/or research raters. There have been only about a half-dozen studies in adolescents.^{49,50}

Medications have been unequivocally shown (ie, by double-blind, placebo-controlled studies) to reduce core symptoms of hyperactivity, impulsivity, and inattentiveness. They improve classroom behavior and academic performance; diminish oppositional and aggressive behaviors; promote increased interaction with teachers, family, and others; and increase participation in leisure time activities. Finally, stimulants have demonstrated improvement in irritability, anxiety, and nail biting.⁵¹ A recent meta-analysis found that the effect of stimulants on behavior and cognition may be severalfold greater than the effects on academic achievement.⁵²

Contrary to earlier assertions, the response to stimulant medications in those with ADHD is not "paradoxical": the direction of changes in behavioral measures in those with ADHD, those with conditions other than ADHD (eg, learning disabilities, depression), and normal controls is the same. Thus, a favorable response to stimulants does not confirm a diagnosis of ADHD (nor, of course, does a nonresponse refute the diagnosis). A nonspecific performance-enhancing effect may mask other problems and delay use of other interventions.^{53,54}

In addition to their value in childhood and adult ADHD, methylphenidate and other stimulants may play a role in the treatment of other medical conditions,

including narcolepsy, as a short-term treatment for depression in the medically ill, as potentiating agents with conventional antidepressants for major depressive disorder, as potentiating agents with opiates for pain control, and to reduce apathy in dementia and some other brain diseases.⁵⁵⁻⁵⁷ The number of patients receiving these drugs for these indications probably represents no more than a small percentage of all stimulant use in the United States.

For patients with ADHD who are intolerant of or unresponsive to stimulants, a number of other drugs have proven useful in clinical practice, including tricyclic antidepressants⁵⁸ and bupropion hydrochloride, a newer antidepressant that blocks the reuptake of norepinephrine and dopamine.⁵⁹ Serotonin-specific reuptake inhibitors have not been effective to date.⁶⁰ Centrally acting α -blocking drugs (clonidine, guanfacine hydrochloride) have been helpful in some children, but data are still limited.^{60,61} Subsets of children seem to have some response to lithium carbonate.⁶¹ Neuroleptic medication is occasionally effective, but the risk of tardive dyskinesia makes this a problematic long-term approach.¹⁴ By contrast, some 20 studies have refuted the efficacy of dietary manipulations (eg, the Feingold diet) in ADHD.⁶²

It is important to emphasize that pharmacotherapy alone, while highly effective for short-term symptomatic improvement, has not yet been shown to improve the long-term outcome for any domain of functioning (classroom behavior, learning, impulsivity, etc). This may be a function of several factors: most studies have been carried out only for a short term, there may have been inadequate dosage titration to maximize the number of responders, and dose-re-

sponse relationships may be different for different domains.^{63,64}

Swanson⁶⁵ published a careful review of all review studies of stimulant use in children in 1993. He found overwhelming evidence for temporary improvement of core symptoms (hyperactivity, inattention, and impulsivity) as well as the associated features of defiance, aggression, and negative social skills. On the other hand, changes that point toward longer-term improvement (eg, in academic outcome, antisocial behavior, or arrest rate) were not found, and only small effects were observed on learning and achievement.

Children should be reevaluated periodically while not taking medications to see if the medications are still appropriate and necessary.

Multimodal therapy, ie, integrating pharmacotherapy with a number of environmental, educational, psychotherapeutic, and school-based approaches, is a tailored approach that seems intuitively powerful, matching the child's particular problems to selections from a menu of focused treatment interventions. In a few studies, multimodal therapy has affected long-term results, although how applicable these findings are beyond research settings remains unclear.^{65,66} While three quarters of treatment review articles assert that multimodal therapy is superior to medication or psychosocial interventions separately, there is in fact little empirical evidence to support such a conclusion.⁶²

Nonmedication approaches include parent education; parent management training (contingency management in individual or group setting; this technique decreases disruptive behavior, increases parents' self-confidence, and decreases family stress); classroom environmental manipulations (special class, seating in class, etc); contingency management and daily report cards by teacher; individual psychotherapy for depression, anxiety, and low self-esteem; impulse and social skills control training; support groups such as Children and Adults With Attention Deficit Disorder and Attention Deficit Disorder Association for families; and summer treatment programs.^{15,67}

Some experts feel that stimulants alone may be adequate for cases of ADHD without comorbidity, but that additional treatments are necessary where there are co-occurring conditions. Behavioral therapy has not proved effective alone, although it has been when combined with pharmacotherapy.¹ Since psychosocial treatments may be labor-intensive and expensive, it is important to establish when and which treatments are indicated. A large multisite study is

currently being carried out by the National Institute of Mental Health to clarify the role of multimodal treatment: carefully evaluated children will be randomized to receive standard community care, medication alone, psychosocial treatments alone, or multimodal therapy (medication and psychosocial treatments together).^{68,69}

A number of textbooks^{1,14} and many review articles^{60,62,70} are available to practitioners. The Academy of Child and Adolescent Psychiatry's practice parameters⁷¹ have recently been released. A recent American Academy of Pediatrics position paper emphasizes the need for careful evaluation and monitoring of children with ADHD, and it stresses that drugs be used as part of an overall care plan.⁷²

ADVERSE EFFECTS OF STIMULANTS

Adverse effects from stimulants are generally mild, short lived, and responsive to dosing or timing adjustments. The most common effects are insomnia, decreased appetite, stomach ache, headache, and jitteriness. Some children will exhibit motor tics while on stimulants: whether this reflects a true drug effect or an "unmasking" of a latent tic disorder is unknown. A small percentage of children experience cognitive impairment that responds to dosage reduction or drug cessation. Rare cases of psychosis have occurred. Pemoline has been infrequently associated with hepatic toxic effects, so periodic monitoring of liver enzymes is necessary.^{14,19}

Concerns had been raised about the effects of chronic stimulant ingestion on growth and development. It is unclear whether children's heights are affected by long-term use of these medications.⁷³⁻⁷⁵

A great deal of concern has been raised by the DEA and others about the potential for abuse or diversion of stimulant medication: production (and use) of methylphenidate in the United States has risen from less than 2000 kg in 1986 to 9000 kg in 1995, with a tripling between 1990 and 1995 alone. By contrast, amphetamine production rose from 400 to 1000 kg in the same period. More than 90% of US-produced methylphenidate is used in the United States.

The reasoning for the concern about possible overproduction of methylphenidate has been expressed as follows: Stimulants at times are abused by adolescents and adults; those with ADHD are at increased risk of developing a substance use disorder; methylphenidate and other stimulants may either become the drug abused by those with ADHD, or they may serve as a "gateway" to other drug use; and even if they do not

abuse their medication themselves, children and adolescents with access to stimulants will be under pressure to divert their medication to those who will.

There is little disagreement that stimulants as a class have marked abuse potential, and their misuse can have severe adverse medical and social consequences. However, stimulants differ in their ability to induce euphoria and thus liability to abuse. Almost all of the reports of abuse of methylphenidate itself have been of polysubstance-abusing adults who have tried to solubilize the tablets and inject them (with disastrous results from talc granulomatosis in some cases).⁷⁰ This last problem in particular led Sweden to withdraw methylphenidate from the market in that country entirely in 1968.⁷⁶

It is clear that there is a fair amount of use of stimulants by adolescents. The annual school survey of drug use conducted by the University of Michigan has shown an increase from 6.2% to 9.9% of eighth-graders reporting nonmedical stimulant use in the preceding year between 1991 and 1994. However, lifetime nonmedical methylphenidate use has remained essentially constant around 1% during the same period. Sixty percent of students who used any stimulants reported using them fewer than 6 times in their lifetime, and 80%, fewer than 20 times. Only 4% reported any injection use of stimulants.⁷⁷ Thus, while nonmedical stimulant use may be somewhat more common among adolescents in recent years, little use is of methylphenidate itself, and the pattern of use for the vast majority appears to be experimental and not of the type (regular, heavy, injecting, etc) likely to lead to serious adverse consequences.

Drug Abuse Warning Network data on emergency department visit monitoring show a 6-fold increase between 1990 and 1995 in mentions of methylphenidate. A "mention" simply indicates that the patient listed the drug as one taken: it is not necessarily the drug leading to the emergency department visit, nor is there any medical confirmation. The rate of cocaine mentions, by contrast, is 40 to 50 times higher. The methylphenidate cases are overwhelmingly young women, not the population (ie, male adolescents) felt to be at highest risk for abusing prescription methylphenidate. The DEA has had reports of thefts of methylphenidate, street sales, drug rings, illegal importation from outside the United States, and illegal sales by health professionals. There have also been reports of theft of school supplies of methylphenidate.⁷⁷

On the other hand, abuse of methylphenidate by patients with ADHD or

their family members has been reported rarely. Only 2 cases of methylphenidate abuse by adolescents with ADHD have been described,^{76,77} and only 2 cases of methylphenidate abuse by parents of children taking it for ADHD have been reported.⁸⁰ While there is no way to know how many cases may have been unrecognized or unreported, such a minimal published experience is quite remarkable in light of the population exposed.

Under Section 306(a) of the Controlled Substances Act, production limitations of methylphenidate, a Schedule II drug, are established by the attorney general (using information developed by the DEA). The attorney general also receives input from the secretary of health and human services (using information provided by the Food and Drug Administration [FDA]). In 1988 a DEA administrative law judge ruled that the method used by the DEA in 1986 to calculate methylphenidate production quotas failed to provide for legitimate medical need, leading to several policy changes. In 1993 there were some methylphenidate shortages because of a delay in publishing proposed quotas in the *Federal Register*, leading to a streamlining of the procedures for final quota notice approval.⁷⁷ American Medical Association (AMA) policy was adopted at the 1993 Interim Meeting (100.975, *AMA Policy Compendium*) calling on the AMA to work with the DEA and the FDA to ensure adequate supplies of methylphenidate and other Schedule II drugs.⁸¹

CURRENT PRACTICE

It is clear from the discussion of diagnostic assessment that ADHD simply cannot be diagnosed in a typical 15-minute primary care office visit. Taking the necessary multiple histories, performing a careful examination, and obtaining appropriate testing will require several visits and may require a multidisciplinary team approach, specialty consultation, or both in some cases. Nonetheless, there have been descriptions of such assessments in typical pediatric settings.^{12,82} Few data exist on actual practice habits in terms of what diagnostic criteria (if any) are used by clinicians, how they are applied, or exactly what a minimally satisfactory level of investigation entails.

A national survey of physicians⁸³ found that 5.3% of elementary school children in pediatrics practices were diagnosed as having ADHD, and 4.2% were diagnosed by family practitioners. When explicit *DSM-III-R* criteria were used, however, only 72% of those assigned a diagnosis of ADHD by their physicians would have received the di-

agnosis based on a structured interview. Only 53% of the physician diagnoses included teachers' reports. Eighty-eight percent of the physician-diagnosed children were prescribed methylphenidate, and 85% of the parents reported that the medication was helpful. Only 22% of the parents reported treatment with behavioral modification, and in 70% of those cases that modality was recommended by someone other than the treating physician. Eleven percent received counseling from the physician, and no parents queried judged it effective. The authors of this survey drew attention to the mismatch between physician diagnosis from a single source, often an unreliable one, and the use of stimulant medication. They also stressed the low rates of use of nonpharmacological treatment by their physician sample.

Safer and Krager⁸⁴ conducted regular surveys of school nurses in Baltimore County, Maryland, to look for methylphenidate prescribing. They found that 6% of the school-aged children received this treatment and that methylphenidate accounted for over 90% of the pharmacological treatment provided for ADHD.

There is evidence to suggest that stimulants in ADHD populations are simply being used more broadly, for longer periods, and without interruptions in recent years than was done previously. Overall, there has been a 2.5-fold increase in the prevalence of child and adolescent methylphenidate treatment from 1990 to 1995, so that some 2.8% of US youth between the ages of 5 and 18 years were taking this medication in mid 1995. A recent national study found no evidence of overdiagnosis of ADHD or overprescription of methylphenidate.⁸⁵

Several of the community studies cited in Table 2 also looked at which children diagnosed as having ADHD by researchers had been so diagnosed by clinicians or were receiving treatment. In the New Zealand sample, 43% of the children found to have ADHD by the researchers had been referred for medical care for this problem.²⁵ In the Tennessee study, only 15% to 40% of the children diagnosed by researchers with ADHD had been so diagnosed clinically, and only 21% to 32% were receiving pharmacotherapy.²⁵

Swanson et al⁸⁶ addressed the increase in US methylphenidate usage by showing that from 1990 to 1993 the number of patients diagnosed as having ADHD increased from 900 000 to 2 million, and the number of outpatient visits for the condition rose from 1.7 million to 4.2 million. The percentage of patients given methylphenidate remained around 70%. Thus,

the amount of methylphenidate produced per 1 million patients increased from 1.98 g to 2.53 g, a 27% increase.

There are several important clinical reasons for the increased diagnosis and stimulant treatment of ADHD. These include increased public and physician awareness and acceptance of the condition; acceptance of a broader case definition as appropriate; greater knowledge of the illness course, justifying lengthier treatment (eg, of adolescents); fewer interruptions in treatment because of diminished concerns about growth retardation; and increased treatment of adults.

Finally, with regard to cross-national data, there is some consensus that most non-US clinicians are more likely to rely on older, more stringent diagnostic criteria, reserve the diagnosis for only the most obvious or severe cases, or even be reluctant to diagnose ADHD at all. Physicians from countries with strong psychoanalytic traditions may be particularly reluctant to use discrete diagnostic criteria at all. Physicians in the United Kingdom, for example, tend to use a *DSM-II* approach, so they place more emphasis on hyperactivity and therefore diagnose ADHD far less frequently than their US counterparts. When physicians in the United Kingdom are instructed in applying US criteria, however, they diagnose ADHD as often as their US counterparts do in US children. Thus, the apparent discrepancy is more a matter of case recognition than actual prevalence. Canadian physicians, who tend to use later *DSM* criteria, diagnose and treat children at rates similar to those seen in the United States.⁸⁰

CONCLUSIONS

1. ADHD is a childhood neuropsychiatric syndrome that has been studied thoroughly over the past 40 years. Available diagnostic criteria for ADHD are based on extensive empirical research and, if applied appropriately, lead to the diagnosis of a syndrome with high inter-rater reliability, good face validity, and high predictability of course and medication responsiveness. ADHD is one of the best-researched disorders in medicine, and the overall data on its validity are far more compelling than for most mental disorders and even for many medical conditions. Nonetheless, the pathophysiology of ADHD remains unknown, although a number of neurophysiological theories are under investigation. ADHD demonstrates a very high heritability.

2. The diagnostic criteria for ADHD are designed to be used by a clinician familiar with childhood development and behavioral disorders. Application of

the diagnostic criteria requires time and effort to obtain a careful history from parents, teachers, and the child. As with almost all mental disorders, there is as yet no confirmatory genetic, radiologic, biochemical, neurophysiological, or neuropsychological test for ADHD, but such examinations may be helpful at times in evaluating presenting complaints suggestive of ADHD.

3. ADHD is associated with significant potential comorbidity and functional impairment, and its presence at any age increases the risk of behavioral and emotional problems at subsequent stages of life. It is thus a chronic illness with persistence common into adolescence and beyond.

4. Epidemiologic studies using standardized diagnostic criteria suggest that 3% to 6% of the school-aged population may have ADHD. A few studies have suggested a somewhat lower prevalence, but others, particularly those using newer, broader criteria, yield prevalences well above 6%. These studies have been conducted in a number of different countries and encompass a range of racial and socioeconomic backgrounds in the populations examined.

5. The percentage of US youth being treated for ADHD is at most at the lower end of this prevalence range. More cases of ADHD are being recognized and treated, and the duration of treatment is increasing. However, ADHD is also diagnosed inappropriately at times because of failure to do a thorough enough evaluation or to use established diagnostic criteria.

6. Pharmacotherapy, particularly stimulants, has been extensively studied. Medication alone generally provides significant short-term symptomatic and academic improvement, but response to stimulant medication is not specific to ADHD, and it is currently unknown whether long-term outcomes will be altered. The risk-benefit ratio of stimulant treatment in ADHD must be evaluated and monitored on an ongoing basis in each case, but in general is highly favorable.

7. Optimal treatment of ADHD involves an individualized plan based on any comorbidity as well as child and family preferences. This treatment generally will include pharmacotherapy (usually with stimulant medication) along with adjunctive psychoeducation, behavioral therapy, environmental changes, and, at times, supportive psychotherapy of the child, the family, or both. Nonpharmacological treatment modalities are well accepted by parents and probably significantly underused in primary care settings.

8. There should be documentation in the medical record showing evidence that appropriate diagnostic criteria for

ADHD have been met, that common comorbid conditions have been assessed, that there is a clear treatment plan, and that there is appropriate follow-up, including medication monitoring for efficacy, adverse effects, and ongoing need.

9. There is little evidence to suggest that stimulant abuse or diversion is currently a major problem, particularly among those with ADHD, although recent trends suggest that this could increase with the expanding production and use of stimulants. Clinicians need to be mindful of the risk of abuse and diversion: in addition to keeping careful records of medication prescribed, they may consider alternatives to stimulant use in patients at high risk (eg, patient or family member with substance use disorders or bipolar or conduct disorder co-occurrent in the patient).

RECOMMENDATIONS

The following statements, recommended by the Council on Scientific Affairs, were adopted as AMA policy at the 1997 Annual AMA Meeting.

1. The AMA encourages physicians to use standardized diagnostic criteria in making the diagnosis of ADHD, such as the American Psychiatric Association's *DSM-IV*, as part of a comprehensive evaluation of children and adolescents presenting with attentional or hyperactivity complaints.

2. The AMA encourages the creation and dissemination of practice guidelines for ADHD by appropriate specialty societies and their use by practicing physicians and will assist in making physicians aware of their availability.

3. The AMA encourages efforts by medical schools, residency programs, medical societies, and continuing medical education programs to increase physician knowledge about ADHD and its treatment.

4. The AMA encourages the use of individualized therapeutic approaches for children diagnosed as having ADHD, which may include pharmacotherapy, psychoeducation, behavioral therapy, school-based and other environmental interventions, and psychotherapy as indicated by clinical circumstances and family preferences.

5. The AMA encourages physicians and medical groups to work with schools to improve teachers' abilities to recognize ADHD and appropriately recommend that parents seek medical evaluation of potentially affected children.

6. The AMA reaffirms Policy 100.975, to work with the FDA and the DEA to help ensure that appropriate amounts of methylphenidate and other Schedule II drugs are available for clinically warranted patient use.

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Attachment E

**“Ritalin Stimulant Medication Information Page,” prepared by
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Ritalin and Related Stimulant Medications

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What are stimulant medications?

Ritalin (methylphenidate), Dexedrine (dextroamphetamine), and Cylert (pemoline) are sometimes called "stimulants". When prescribed for people who have Attention Deficit Hyperactivity Disorder (ADHD), they stimulate parts of the brain which are not filtering out distractions as well as they should. They are not tranquilizers or sedatives. The children appear "calmer" because they are more focused, not because they are sedated.

How can these medicines help?

They can improve attention span, decrease distractibility, increase ability to finish tasks, improve ability to follow directions, decrease hyperactivity, and improve ability to think before acting (decrease impulsivity).

Legibility of handwriting and completion of school work and homework can improve. Aggression and stubbornness may decrease in youngsters with ADHD.

Stimulant medication is not the only answer for ADHD! The medicine often works best when used together with special help in school and behavior modification procedures at home and school. Some youngsters and families also benefit from individual, family, or group psychotherapy. If stimulant medications do not help, or cause side effects that are a problem, you can discuss other medications with the doctor.

How long does the medicine last?

Ritalin and Dexedrine last 3 - 4 hours. Sustained-release Ritalin (SR), Dexedrine Spansules, and Cylert may last at least 6 - 8 hours.

How will the doctor monitor this medicine?

From time to time, the physician (or nurse) will check height, weight, pulse, and blood pressure. When Cylert is used, blood is taken to check on the liver function and blood count -- usually before starting the medicine, and occasionally afterward. The doctor will ask for regular reports from your child's teacher(s) to check on learning and behavior.

What side effects can this medicine have?

Any medication may have side effects, including allergy to the medication. Because each patient is different, your doctor will work with you to get the most positive effects and the fewest negative effects from the medication. The list below may not include rare or unusual side effects. It is important to note that except for a fraction of the children who experience mild appetite or sleep problems, *the vast majority of people have no significant side effects from Ritalin.*

- Lack of appetite (Handle by encouraging a good breakfast, and afternoon and eve snacks; give medicine after meals, rather than before. Problem usually resolves.)
- Trouble falling asleep, which usually improves over several weeks.
- Headaches
- Stomachaches
- Irritability, crankiness, crying, or emotional sensitivity.
- Rapid pulse or increased blood pressure.
- Rarely, as the medicine wears off, hyperactivity or bad moods get worse than beto medicine was started. This is called "rebound". The doctor can make dosage adjustments to help this problem.
- A few children may not grow quite as fast as usual. This is why the height and we are checked regularly. Growth catches up if the medicine is stopped.
- Occasionally, nervous habits (like picking at skin) or stuttering may appear.
- Muscle tics or twitches, jerking movements.
- Sadness which lasts more than a few days.
- Any behavior which is very unusual for your child.

Please talk to the doctor if you suspect the medicine is causing a problem.

What could happen if this medicine is stopped suddenly?

There are no medical problems in doing this. A few youths may experience irritability, trouble sleeping, or increased hyperactivity for a day or two, if they have been on daily medication for a long time, especially at above average doses. Occasionally, it is better to stop the medication gradually, over a week or so.

How long will this medicine be needed?

There is no way to know how long a person will need to take the medicine. The parent, the doctor, and the school will work together to find out what is right for each young person.

Sometimes the medicine is needed for only a few years, but some people may need help from medicine even as adults.

What else should I know about this medicine?

Many people have incorrect information about this medicine. If you hear anything that worries you, please check with the doctor.

This medicine does not cause illegal drug use or addiction.

This medicine does not stop working at puberty.

Some young people take the medicine three or four times a day, every day. Others only need to take it twice a day or once a day on school days. Your doctor and you will work out what is best.

If a dose is missed, just pick up with the regular dose at the next scheduled time. Do not double up the next dose.

It is important not to chew Ritalin Sustained Release tablets or Dexedrine Spansules, because this releases too much medicine all at once.

If the medicine seems to stop working, it may be because it is not being given regularly (especially at school), because your child has gained weight and needs a higher dose, or because something at school or at home, or in the neighborhood, is upsetting your child. Please discuss your concerns with the doctor.

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See also our page on [Attention Deficit/Hyperactivity](#) and [Other Rx for ADD](#)

Selected Web site

[Internet Mental Health](#) has an excellent pharmacy section

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Attachment F

"Researchers Find Potential for Ritalin Abuse in Schools," *Mental Health Net*, June 15, 1998



Researchers Find Potential For Ritalin Abuse In Schools

June 15, 1998

WASHINGTON, MD -- Researchers have discovered wide variations in rules and enforcement procedures in schools that they say pose a potential for abuse of Ritalin (methylphenidate) and other prescribed stimulant medication taken by children with attention deficit hyperactivity disorder (ADHD).

Want to learn more about ADHD? Browse through our comprehensive listing of [Attention Deficit/Hyperactivity Disorder](#) resources.

Cynthia Musser and colleagues at the Marshfield Clinic's Medical Research Foundation in Wisconsin, surveyed 53 school principals in rural areas and small towns in central Wisconsin, then anonymously surveyed 73 schoolchildren in rural sections of central Wisconsin and northern Michigan who had been prescribed Ritalin for at least five years.

They found that some schools store the medications unlocked. Some students carry their medication with them. Sixteen percent of the children said they had been asked to sell, give, or trade their medication to others. Yet, both school principals and students said they saw no problems of medication abuse.

Study findings are published in this month's issue of the Journal of Developmental and Behavioral Pediatrics.

"The potential for abuse exists with 16 percent [of the students] having been asked to either sell, give or trade their stimulant medication," the researchers write. "Although the survey did not address whether the children had actually given, sold, or traded their medication, it is possible that some of them did, given the significance of peer pressure. The potential for unauthorized access or theft also exists at all grade levels."

Most schools, they report, keep medication in a locked cabinet in a central location. Most students either carry their own medication or store it in a school office, nurse's office or principal's office.

The researchers recommend that states and schools adopt and enforce policies regarding the use and dispensing of medication, and that school administrators, teachers, health care providers and affected families all be consulted to develop such policies.

"It is incumbent on the physician to educate parent and child regarding the appropriate use, as well as the potential for abuse of these drugs," the researchers write. "Monitoring prescription usage, periodic follow-up and continuing education of parents, teaching staff and child should all be part of a multimodal treatment plan for [ADHD]."

Findings are limited because the students completed their surveys at home and may have been influenced by parents. The researchers also note that results from a largely rural population might not be the same as for other geographic areas where diagnosis and treatment approaches might differ.

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Attachment G

"New Research Helps Explain Ritalin's Low Abuse Potential When Taken as Prescribed," National Institute on Drug Abuse Advisory, September 29, 1998



NIDA Media Advisory

Contact: Beverly Jackson or Sheryl
Massaro

FOR RELEASE, Tuesday, September 29, 1998, 12:00 p.m. E.S.T.

301-443-6245

New Research Helps Explain Ritalins Low Abuse Potential When Taken As Prescribed

New research sheds light on why individuals taking therapeutic doses of methylphenidate rarely abuse it or become addicted, even though it is a stimulant with properties similar to those of cocaine and amphetamines. Ritalin, an oral form of methylphenidate, is the drug prescribed most frequently for children, adolescents, and adults diagnosed with Attention Deficit Hyperactivity Disorder (ADHD).

Findings reported in the October 1, 1998, issue of the *American Journal of Psychiatry* confirm that oral doses of methylphenidate do not reach peak concentrations in the brain until 60 minutes after ingestion, compared to 5 minutes for cocaine or 9 minutes for methylphenidate taken intravenously. The fact that Ritalin taken orally is drawn so slowly into the brain is a likely reason why patients do not experience a high from this means of use. In general, if brain concentrations of a substance peak quickly, the potential for abuse and addiction increases, as an individual experiences the drug more dramatically and, thus, is more likely to try to repeat the experience more frequently.

"This research is important for a number of reasons", said Dr. Alan I. Leshner, director of the National Institute on Drug Abuse (NIDA), National Institutes of Health, which contributed funding for the research. "First, it helps clarify why Ritalin rarely leads to abuse and addiction when taken properly as a treatment for ADHD. Second, it helps explain why non-ADHD individuals might abuse methylphenidate or become addicted to it when they take the drug intravenously or when they crush and inhale the pills. It is extremely important to clarify that different methods of taking a medication can alter its medicinal effects and can make it more or less dangerous in ways totally unrelated to its clinical indications."

Ritalin is not a new medication - for about 30 years it has been prescribed, increasingly, to treat ADHD. Estimates indicate that about 5 to 10 percent of the general population have the disorder. Exactly how methylphenidate works to calm ADHD individuals is not completely understood, but the drug has long been thought to block reuptake of dopamine in the brain. The current research, conducted by Dr. Nora Volkow and colleagues at the Department of Energy's Brookhaven National Laboratory and the State University of New York at Stony Brook, is the first to measure the drug's actual effectiveness in blocking the molecular gatekeepers to dopamine uptake, known as dopamine transporters (DATs). Since DATs are target sites for the action of cocaine and other stimulating drugs of abuse as well, the researchers also evaluated methylphenidate for its abuse potential.

Using positron emission tomography (PET) scanning, which enables researchers to measure levels of DAT blockage in the brain, the Brookhaven researchers studied the effects of oral methylphenidate in seven healthy young adults who did not have ADHD. These individuals also were asked to rate the subjective effects of methylphenidate by verbally rating their feelings of "drug effects", "restlessness", or being "high". Calibrated for subject weight, a range of oral doses was tested that included doses commonly used therapeutically.

The researchers found that, taken orally at the levels currently prescribed for ADHD (0.25 mg/kg to 1.0 mg/kg), methylphenidate is very effective at blocking DATs and is likely to occupy more than 50 percent of them in the brain. It is believed that this level of occupancy may be necessary for therapeutic efficacy.

The oral doses of methylphenidate, however, did not produce a "high" in all but one of the subjects in this study, in contrast with cocaine which, in previous Brookhaven research, was shown to produce a "high" when the drug reached a level blocking 60 percent of the DATs. The researchers believe the explanation for the lack of experienced "high" has to do with the amount of time it takes orally administered methylphenidate to reach peak concentration in the brain. In a parallel PET study using a baboon, the scientists found that it took a full 60 minutes for peak concentrations to be reached after oral administration of methylphenidate.

Importantly, previous research has shown that the more quickly a drug works, the greater the perceived "high". Hence, the route of administration may make a difference in the kind of "high" produced by methylphenidate. "When the drug is abused", Dr. Volkow notes, "it tends to be snorted or used intravenously. That causes brain concentrations to rise and spike very rapidly, and this likely accounts for the 'high' the abuser experiences".

NIDA supports more than 85 percent of the world's research on the health aspects of drug abuse and addiction. The Institute also carries out a large variety of programs to ensure the rapid dissemination of research information and its implementation in policy and practice. Fact sheets on health effects of drugs of abuse and other topics can be ordered free of charge in English and Spanish by calling NIDA Infobox at 1-888-NIH-NIDA (-644-6432) or 1-888-TTY-NIDA (-889-6432) for the deaf. These fact sheets and information on other research funded by NIDA can be found on the NIDA home page at <http://www.nida.nih.gov>.

On November 16-18, 1998, the National Institutes of Health will sponsor a *Consensus Development Conference on the Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder*. Primary sponsors of the meeting are NIDA, the National Institute of Mental Health, and the NIH Office of Medical Applications of Research. For information about the conference, call 301-592-3320.

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Attachment H

**"NIDA Infobox on Ritalin," National Institute on Drug Abuse,
February 1998**

NIDA Infobox

National Institute on Drug Abuse
National Institutes of Health

Call toll-free: 1-888-NIH-NIDA (1-888-644-6432)
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NIDA's Home Page: <http://www.nida.nih.gov/>

Ritalin 020

Ritalin, the trade name for methylphenidate, is a medication prescribed for children with an abnormally high level of activity or with attention-deficit hyperactivity disorder (ADHD) and is also occasionally prescribed for treating narcolepsy. It stimulates the central nervous system, with effects similar to but less potent than amphetamines and more potent than caffeine.

Although we do not understand fully how it works, Ritalin has a notably calming effect on hyperactive children and a "focusing" effect on those with ADHD. When taken as prescribed, Ritalin is a valuable medicine. Further, research funded by the National Institute of Mental Health has shown that people with ADHD do not get addicted to their stimulant medications at treatment dosages.

Because of its stimulant properties, however, in recent years there have been reports of its abuse by people for whom it is not a medication. At their December 1996 meeting, members of NIDA's Community Epidemiology Work Group (CEWG)* noted that:

- Illicit methylphenidate appears to be more available in Texas and Michigan than elsewhere in the country, with Michigan historically having one of the highest per capita levels of distribution.
- In Chicago, some stimulant users mix Ritalin (or "West Coast") with heroin, or with both cocaine and heroin for a more potent effect.
- In Detroit and Minneapolis/St. Paul, middle and high school students crush and inhale the drug or take the pill orally.
- In Phoenix, some adults have been admitted to treatment programs for abusing the drug from their children's prescriptions.
- In Boston, according to reports by youth treatment providers, adolescents continue to abuse the drug, which is most easily available through diverted prescriptions. Drug abuse treatment staffs in Boston also report an increase in abuse among adults.

Because stimulant medicines such as Ritalin do have potential for abuse, the U.S. Drug Enforcement Administration (DEA) has placed stringent controls on their manufacture, distribution, and prescription. For example, DEA requires special licenses for these activities, and prescription refills are not allowed. States may impose further regulations, such as limiting the number of dosage units per prescription.

In January 1996, the U.S. Food and Drug Administration (FDA) announced that in studies of rodents given methylphenidate (Ritalin), the drug produced a "weak signal" for the potential to cause liver cancer. The cancer occurred in male mice, but not in female mice or rats. FDA continues to regard Ritalin as a safe and effective drug, but says the potential risk needs to be considered and further studied because of the increasing and often long-term use of Ritalin in

children. The FDA also noted that the kind of liver tumor found in mice is extremely rare in people, and its occurrence in recent years has not increased despite an increase in the use of Ritalin.

For more information on treating ADHD, please call the National Institute of Mental Health, National Institutes of Health, at 301-443-4513 or visit their internet address at <http://www.nimh.nih.gov>.

* CEWG is a NIDA-sponsored network of researchers from 20 major U.S. metropolitan areas and selected foreign countries who meet semi-annually to discuss the current epidemiology of drug abuse.

CEWG's most recent report is *Epidemiologic Trends in Drug Abuse, Volumes I and II, December 1996*.

For additional information about NIDA send e-mail to Information@lists.nida.nih.gov

This page last updated Friday, February 27, 1998.

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Attachment I

**Susan Brink, "Doing Ritalin Right," *U.S. News & World Report*,
November 23, 1998**

Doing Ritalin right

Sure, it works—but there are big flaws in the way it's being given

BY SUSAN BRINK

In schools across America, as many as 1 million children line up every day for a glass of water and a little yellow pill called Ritalin. Doctors prescribe it, parents hesitantly agree to it, and school nurses supervise the ritual of handing it out because they believe the pill will calm children down and stop them from clowning around or goofing off. The ultimate reward, they hope, will be academic and social success.

A long-awaited study by the National Institute of Mental Health shows that drugs like Ritalin calm kids down even better than previously thought—as long as the children continue taking them. But there's no proof that in the long run the drugs help kids get better grades or build better lives. Children with what is now called attention deficit hyperactivity disorder, or ADHD—the most common rea-

son for taking Ritalin and similar stimulants—are at higher risk than their peers of dropping out, of becoming smokers, of abusing alcohol or drugs, even of spending time in prison. This study provides stronger evidence than ever that medication can shift troubled kids to a better track. But it echoes the frustrating finding of earlier studies that a little yellow pill is not enough, by itself, to keep them there.

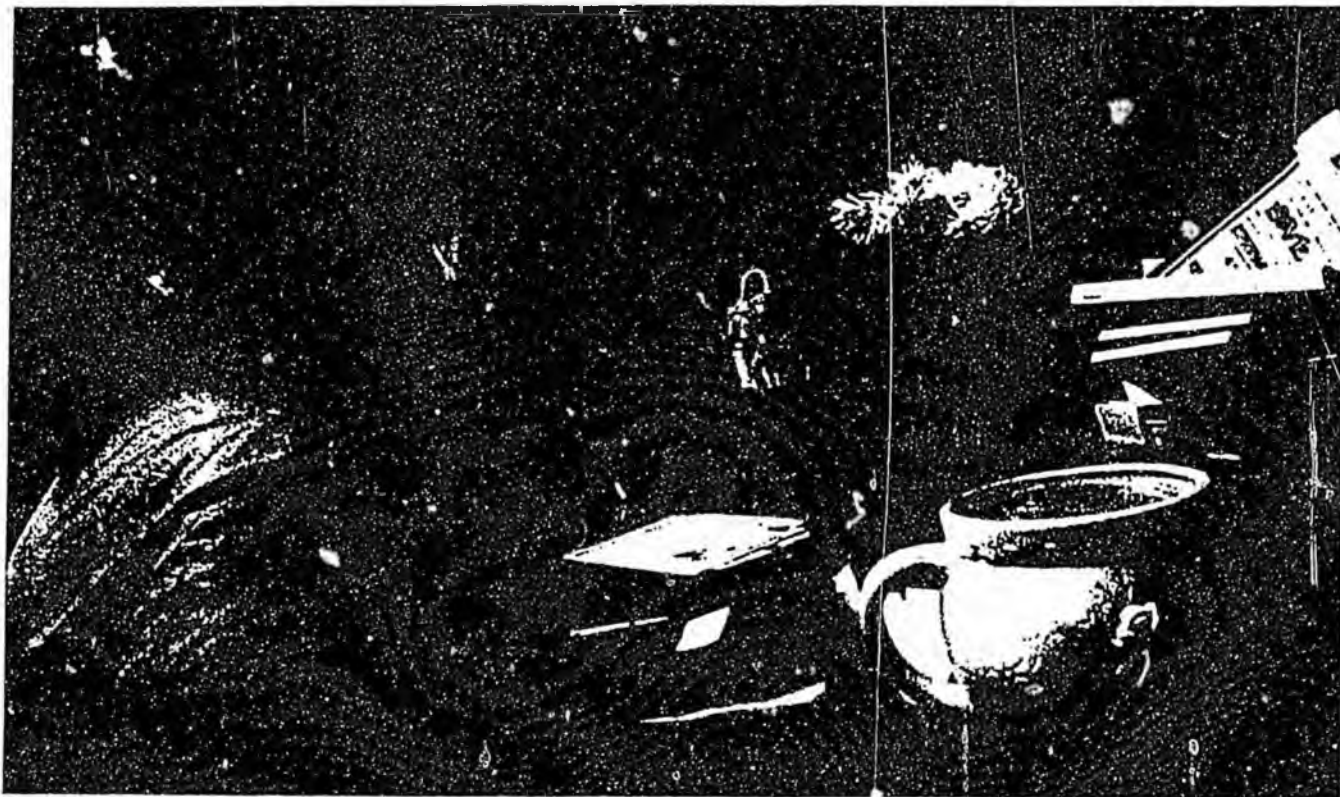
Lost potential. The study also suggests that society could do much better by the children diagnosed with ADHD. One way to interpret its findings is this: Assuming a million kids have ADHD, 690,000 of them will get better the way they're typically treated, though many will still have symptoms of the disorder. But if those 1 million kids were treated in the most effective way science has devised, 850,000 of them could get better.

The study, as yet unpublished, was presented last month at the annual meeting

of the American Academy of Child and Adolescent Psychiatry in Anaheim, Calif. It is based on the largest clinical trial ever conducted by the National Institute of Mental Health, or NIMH. It is NIMH's first clinical trial involving children and the longest active treatment study of ADHD.

Its strongest finding is that drugs work. Closely monitored treatment with stimulant drugs (Ritalin is one of four commonly prescribed, and its use has increased 700 percent in this decade) can erase enough symptoms of ADHD to eliminate the diagnosis for 82 to 85 percent of children. That may reassure parents who are giving their children the typical twice-daily dose, but the study also suggests that three times a day works better, with a nighttime dose about half the size of the first two. Researchers monitored the ef-

PHOTOGRAPHY BY
MARC ASNIN—SABA FOR USN&WR



WHIRLWIND. It doesn't take much to distract Faith Harris, 7, from her homework. Her mother's job is to keep her on track.



DAYDREAMER. At school and play, Jimmy Reinicke, 11 (standing), can get engrossed in one subject to the exclusion of everything else.

fect of the drug closely, through talks with both parents and teachers—first weekly, then monthly—altering the dose or changing drugs as necessary.

How often does that happen in everyday cases? Hardly ever, says William Pelham, one of the principal investigators of the NIMH study and director of the Attention Deficit Hyperactivity Disorder Program and Summer Treatment Program at SUNY-Buffalo. (There are 16 such state-of-the-art summer treatment camps; for information, call 716-833-2143.) "That kind of prescribing is an extreme rarity," says Pelham. "If one tenth of 1 percent of kids are getting medicated like this, I'd be astonished. It should be 100 percent."

Straight A's. Doctors also get a daily behavioral report card from teachers to help them decide whether a drug was working and the dosage was right. That kind of communication rarely happens in the real world. But "without that report card, it's like asking a physician to manage a diabetic without data on blood sugar," says Mark Wolraich, director of Vanderbilt University's child development center.

Few things are clear about this disorder—not even what to call it, despite the

fact that it's the most commonly diagnosed behavioral disorder in children. One early term was minimal brain dysfunction; another was hyperkinesis. Then it was called attention deficit disorder, or ADD—a term that still has wide currency. The behavior associated with it seemed essentially disruptive and impulsive; kids with the disorder, it was thought, would jump from Legos to Matchbox cars, from a hula hoop to a Superman doll, shoving their best friends to the ground in the process. Many children with the disorder are disruptive and impulsive. But others are more quietly distracted, their attention diverted by something as innocuous as a blowing leaf, which they then lose interest in if a bird flies by.

Two New York children illustrate the difference between the hyperactive and the inattentive. Faith Harris, now 7, was a whirlwind even as a baby. She'd shake a rattle once, throw it down, then grab a ball. She'd push the ball, but before it stopped, she'd pick up her teddy bear. And she'd forget about that if she saw a shadow move across the wall. "She was the busiest baby I ever saw," says her mother, Jean.

By the time Faith was 4 years old, she

had been diagnosed with ADHD. A doctor recommended Ritalin, and before she was 5, Faith was taking the drug twice a day. But after six months, Harris and the child's doctor agreed the drugs were having no effect. Faith is one of a minority of children for whom such drugs don't work. She struggles mightily to sit still, pay attention, and get her schoolwork done.

Jimmy Reinicke, 11, is primarily inattentive (actually, boys are more often hyperactive than inattentive, whereas most girls with ADHD are primarily inattentive). When Jimmy was in first grade, the bell rang for lunch and the teacher asked the class to line up. The noisy 6-year-olds scrambled out of their desks and marched out into the hall; the teacher slammed the door shut behind her. But Jimmy didn't notice. His mother doesn't know exactly what he was doing—maybe examining his new crayons. Suddenly, he looked up and realized the class had left without him. "His classmates called him Jimmy from Outer Space," says his mother. Jimmy started on Ritalin and switched to a newer drug, Adderall, after showing side effects like anxiety and insomnia. (Other stimulants prescribed are Dexedrine and Cy-

lert.) Jimmy has just started junior high school, a point at which many ADHD children run into trouble because of added academic pressure and personal responsibility. He's doing well so far.

A scientific debate over whether this is one disease with subtypes or two entirely different diseases will take place this week as the National Institutes of Health hosts a consensus conference on ADHD. (A consensus conference draws together the best minds in a field to hash out medical disagreements among them.) The NIMH study looked only at children who were both hyperactive and inattentive, because researchers reasoned they should study children with the most severe form of the disorder. It's not yet clear if the positive findings about the benefit of medication for these children will also apply to children like Jimmy. But children like Faith, if prescribed drugs under such close scrutiny, could increase their odds of getting better.

Zero absolutes. What is clear, from studies of twins and of patterns within families, is that children inherit a tendency toward ADHD. In fact, multiple genetic components contribute to an array of symptoms; so do a child's surroundings. But there's no biological marker, no brain scan, no blood test, no definitive psychological test that absolutely diagnoses ADHD. Some doctors and teachers see it in every child who misbehaves; others don't even believe it exists.

Scientists think ADHD occurs in part because certain receptors in the brain involved in focusing attention and reining in impulsiveness fail to respond to the brain's natural chemicals, dopamine and norepinephrine. The interactions between the chemicals and the receptors help most of us stick with tedious chores like balancing the checkbook (they also prevent most of us from blurting out spontaneous observations about the boss's ideas). Medications like Ritalin are thought to increase those chemicals and to stimulate the inhibitory receptors, producing the odd result of a stimulant drug's acting to increase inhibition. The drugs enter the body quickly and leave just as quickly, curing nothing but letting a child focus on the important work of learning.

The NIMH study, which lasted 14 months, looked at 576 children in six cities, sorting them into four groups. One received drugs. One got "psychosocial therapy," which meant parent training, teacher counseling, and intensive work on the children's social skills, and a third got

both drugs and therapy. A fourth group, used as a control, received whatever treatment happened to be available. Drugs alone worked; slightly better were drugs in combination with other therapy. Both approaches worked far better than psychosocial treatment alone or standard outside treatment.

Researchers fear the results will be misinterpreted as evidence that all ADHD children need is a good, mind-altering drug. But it's not that simple. The chil-

study's finding that medication alone has no long-term benefit on how children do academically is frustrating. And an observation that the children receiving combination therapy (drugs plus behavior modification taught at school, at home, and with other kids their age) did slightly better than those on drugs alone was also inconclusive: It remains to be seen how each group of children, 7 to 9 years old when the study began, fares in adolescence.

Meanwhile, about 25 percent of parents

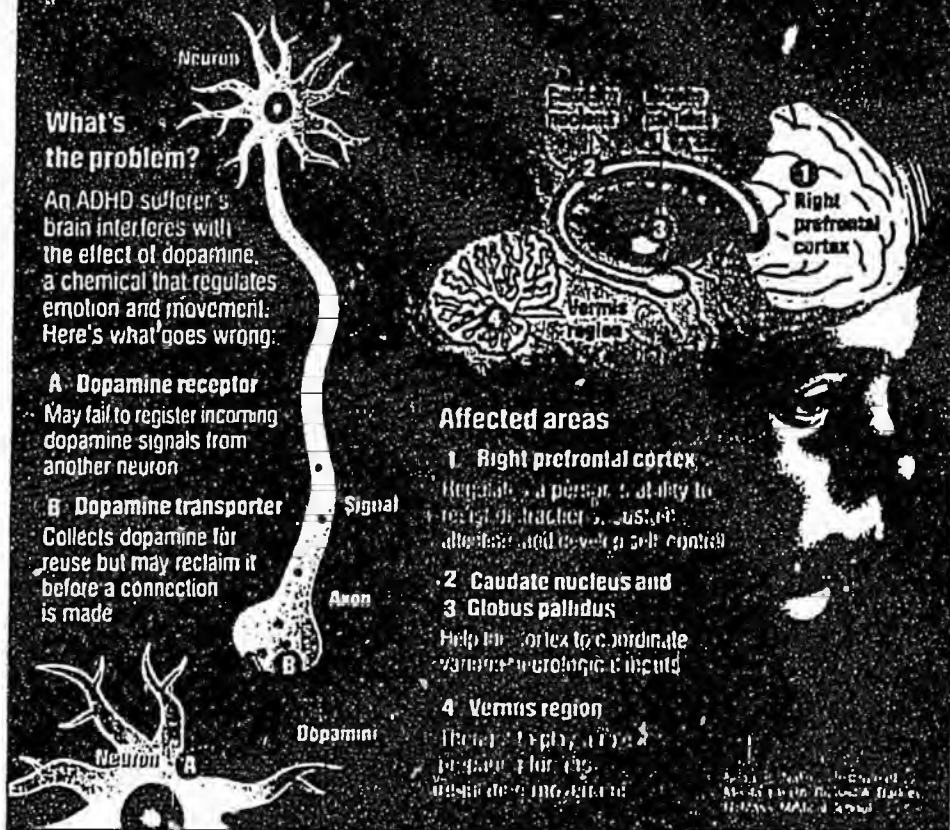
Missed connections

Attention deficit hyperactivity disorder (ADHD) may result from the brain's inability to catch up on cues.

What's the problem?

An ADHD sufferer's brain interferes with the effect of dopamine, a chemical that regulates emotion and movement. Here's what goes wrong:

- A Dopamine receptor**
May fail to register incoming dopamine signals from another neuron
- B Dopamine transporter**
Collects dopamine for reuse but may reclaim it before a connection is made



Affected areas

- 1 Right prefrontal cortex**
Regulates a person's ability to resist distraction, control attention and to exert self-control
- 2 Caudate nucleus and Globus pallidus**
Help the cortex to coordinate various neurologic functions
- 3 Vermis region**
Helps regulate posture and balance

dren getting nondrug therapy received intensive treatment for nine months, including eight weeks at a special summer camp, but then treatment leveled off. The children on drugs, by contrast, got their doses like clockwork for the full period of the study, three times a day, seven days a week. "There are few, if any, psychosocial researchers who would say that five months after you stop treatment, children would do as well as those children still taking drugs," says Pelham. "Everybody knows that, in the short run, medication has a whopping effect."

It's the long run that's uncertain. The

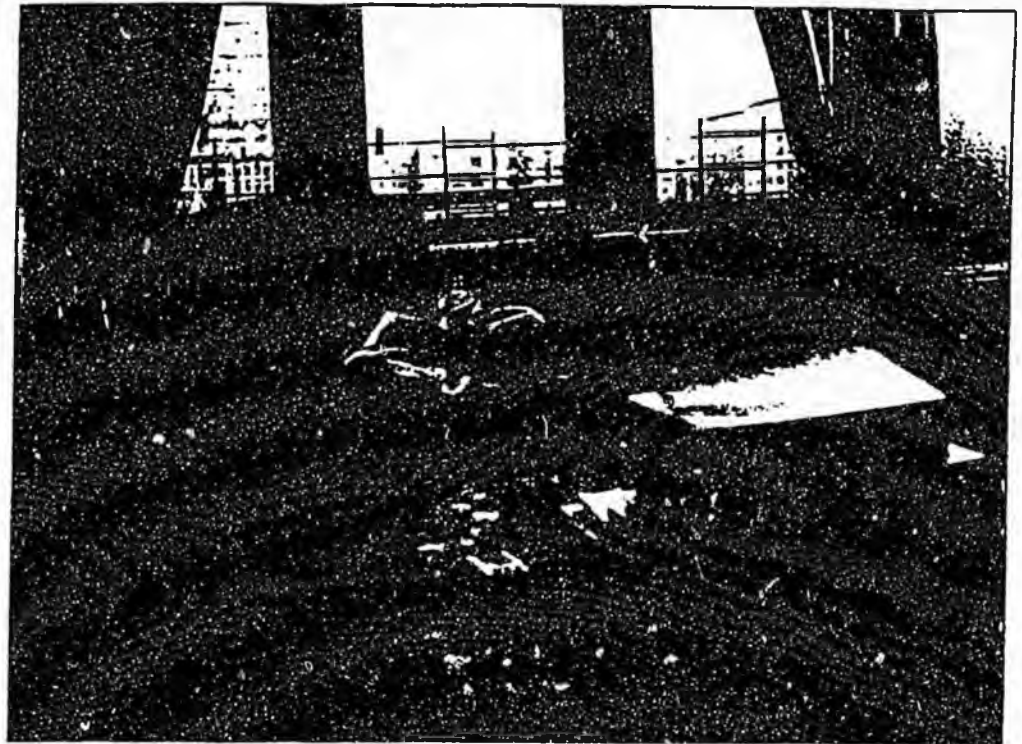
adamantly refuse to give their children drugs for the disorder, says Peter Jensen, associate director for child and adolescent research at NIMH and one of the lead investigators on the study. "Probably about 1 in 3 children with ADHD is getting treated with a drug," says Jensen. "There is probably dramatic *undertreatment* with drugs."

But some experts think there is overtreatment as well. "What's maddening is that I see it in both directions," says Glen Elliott, director of child and adolescent psychiatry at the University of California-San Francisco. He sees children who could benefit from drugs but whose fam-

ilies refuse medication. He also sees families for whom an ADHD diagnosis is "getting them off the hook. They've got a kid who's a pain in the rear and they want a drug."

Problem child. The pressure doesn't always come from parents; sometimes the school system insists on a brain-disorder label. A Midwestern professor, for example, who wants to protect his daughter's privacy by not using his name, talks about endless phone calls from teachers about his child, who as a preschooler liked to play by herself. Now 7, she grew up the only child in a quiet, academic household, and when she went to school she had trouble getting along with kids her age. She'd play alone, quietly working a puzzle, say, and her teachers were alarmed. Boys would bully her, and she'd retreat.

"First it was the teacher. Then the school counselor. Then the heavies in the school, the principal, start to show up. You go to meetings, and everybody thinks your child has a problem," he said. Doctors and therapists each had a different diagnosis—ADHD, anxiety disorder, obsessive-compulsive disorder, depression—and each diagnosis called for a different drug. But at home, his daughter did well; her grades and reading skills were so good that she was able to advance directly from kindergarten to second grade. The professor continues to refuse drug treatment, and his greatest concern is that his daughter has been labeled "abnormal." "Social conformity and mental health are becoming the same terms," he says. "The person with a different perspective is seen



FOCUSED DOSE. Ann Collin gives her 9-year-old son, Willie (above), Ritalin before he studies.

as a candidate for medication."

Lawrence Diller, a San Francisco pediatrician who specializes in ADHD, often prescribes stimulant drugs for children but believes that treating a disorder has become confused with enhancing performance in an increasingly competitive society. Diller wrote *Running on Ritalin: A Physician Reflects on Children, Society, and Performance in a Pill* (Bantam, 1998, \$26), and he lays the blame for a lot of children's behavioral problems on social conditions: Parents are away from home too much, large classes demand conventional behavior, and quirky kids get labeled and lost. "I just don't believe a pill is

the moral equivalent of good parenting and good schooling," says Diller. "I prescribe it because I recognize I can't change the larger social and cultural factors. My job is to relieve suffering, and Ritalin, in the short term, will ease suffering."

It may ease suffering, but Ritalin will never cure in the way an antibiotic cures an ear infection. The symptoms of ADHD retreat only for as long as those diagnosed with it keep gulping down the little yellow pills. Parents of 1 million children are pinning their hopes on the theory, as yet unproven, that the respite their children get through Ritalin will buy them the attention span they need to develop. ■

QUESTIONS TO ASK

To drug or not to drug

Testing a child for attention deficit hyperactivity disorder (ADHD) means working with a pediatrician, a child psychiatrist, a child psychologist, or a pediatric neurologist. The specialty matters less than does experience. Beware of therapists

who either push drugs immediately or dismiss drugs completely.

About two thirds of children don't outgrow the disorder, so be wary of advice to wait and see. Most experts agree that medication can help, but it isn't the only solution—parents and teachers need to learn new ways (through rewards and consequences, for example) to teach their kids how to follow rules and sit still. And don't

go to the doctor and accept a prescription after a 15-minute office visit; an evaluation should include medical, psychological, behavioral, and educational assessments. The doctor or therapist should talk both to parents and the child, and get information from teachers before coming to a conclusion.

Once your child is diagnosed, beware of unproven therapies. Sugar doesn't cause ADHD, and a special

diet won't cure it. Many children are still treated with traditional one-on-one therapy, with play therapy in a therapist's office, or with biofeedback, none of which has been proven effective in treating ADHD. Previous studies have proven only three approaches to be effective: medication, behavior therapy (in which parents and teachers are taught how to work with children), and a combination of both. —S.B.

Attachment J

“Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder,” NIH Consensus Statement Online, November 16-18, 1998

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**110. Diagnosis and Treatment of Attention
Deficit Hyperactivity Disorder**

National Institutes of Health
Consensus Development Conference Statement
November 16-18, 1998

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NIH Consensus Statements are prepared by a nonadvocate, non-Federal panel of experts,
based on (1) presentations by investigators working in areas relevant to the consensus
questions during a 2-day public session; (2) questions and statements from conference
attendees during open discussion periods that are part of the public session; and (3) closed
deliberations by the panel during the remainder of the second day and morning of the third.
This statement is an independent report of the consensus panel and is not a policy statement of
the NIH or the Federal Government.

Introduction

Attention deficit hyperactivity disorder (ADHD) is the most commonly
diagnosed behavioral disorder of childhood, estimated to affect 3 to 5 percent
of school-age children. Its core symptoms include a developmentally
inappropriate level of attention and concentration, developmentally
inappropriate levels of activity, distractibility, and impulsivity. Children with
ADHD usually have pronounced difficulties and impairment resulting from the
disorder across multiple settings—in home, at school, and with peers—as well
as resultant long-term adverse effects on later academic, vocational,
social-emotional, and psychiatric outcomes.

Despite the progress in the assessment, diagnosis, and treatment of children and adults with ADHD, the disorder has remained controversial in many public and private sectors. The confusion resulting from diverse, frequently expressed opinions has made many families, health care providers, educators, and policymakers uncertain about the status of the disorder and its long-term consequences, whether it should be treated, and, if so, how. One of the major controversies regarding ADHD concerns the use of psychostimulants to treat the condition. Psychostimulants, including amphetamine, methylphenidate, and pemoline, are by far the most widely researched and commonly prescribed treatments for ADHD. The use of methylphenidate and amphetamine nationwide has increased significantly in recent years. The increased production and use of psychostimulants have intensified the concerns about use, overuse, and abuse. This 2½-day conference brought together national and international experts in the fields of relevant medical research and health care as well as representatives from the public.

After 1½ days of presentations and audience discussion, an independent, non-Federal consensus panel chaired by Dr. David J. Kupfer, Thomas Detre Professor and Chair, Department of Psychiatry, University of Pittsburgh, weighed the scientific evidence and wrote a draft statement that was presented to the audience on the third day. The consensus statement addressed the following key questions:

- What is the scientific evidence to support ADHD as a disorder?
- What is the impact of ADHD on individuals, families, and society?
- What are the effective treatments for ADHD?
- What are the risks of the use of stimulant medication and other treatments?
- What are the existing diagnostic and treatment practices, and what are the barriers to appropriate identification, evaluation, and intervention?
- What are the directions for future research?

The primary sponsors of this conference were the National Institute on Drug Abuse, the National Institute of Mental Health, and the NIH Office of Medical Applications of Research. The conference was cosponsored by the National Institute of Environmental Health Sciences, the National Institute of Child Health and Human Development, the U.S. Food and Drug Administration, and the Office of Special Education Programs, U.S. Department of Education.

1. What Is the Scientific Evidence To Support ADHD as a Disorder?

The diagnosis of ADHD can be made reliably using well-tested diagnostic interview methods. However, we do not have an independent, valid test for ADHD, and there are no data to indicate that ADHD is due to a brain malfunction. Further research to establish the validity of the disorder continues to be a problem. This is not unique to ADHD, but applies as well to most psychiatric disorders, including disabling diseases such as schizophrenia. Evidence supporting the validity of ADHD includes the predictable course of ADHD over time, cross-national studies revealing similar risk factors, familial aggregation of ADHD (which may be genetic or environmental), and heritability. Further efforts to validate the disorder are needed: careful description of the cases, use of specific diagnostic criteria, repeated followup studies, family studies (including twin and adoption studies), epidemiologic studies, and treatment studies. To the maximum extent possible, such studies should include various controls, including normal subjects and those with other

clinical disorders.

Such studies may provide suggestions about subgrouping of patients that will turn out to be associated with different outcomes, responses to different treatment, and varying patterns of familial characteristics and illnesses. As homogeneous subgroups become identified, they can facilitate efforts to delineate alterations in structure and function.

Certain issues about the diagnosis of ADHD have been raised that indicate the need for further research to validate diagnostic methods.

1. Clinicians who diagnose this disorder have been criticized for merely taking a percentage of the normal population who have the most evidence of inattention and continuous activity and labeling them as having a disease. In fact, it is unclear whether the signs of ADHD represent a bimodal distribution in the population or one end of a continuum of characteristics. This is not unique to ADHD as other medical diagnoses, such as essential hypertension and hyperlipidemia, are continuous with the normal population, yet the utility of diagnosis and treatment have been proven. Nevertheless, related problems of diagnosis include differentiating this entity from other behavioral problems and determining the appropriate boundary between the normal population and those with ADHD.
2. ADHD often does not present as an isolated disorder, and comorbidities (coexisting conditions) may act as confounders in any research studies. This may account for some of the inconsistencies in research findings.
3. Although the prevalence of ADHD in the United States has been estimated at about 3 to 5 percent, it is clear that wider ranges of prevalence have been reported. The reported rate in some other countries is much lower. This indicates a need for better study of ADHD in different populations and better definition of the disorder.
4. All formal diagnostic criteria for ADHD were designed for diagnosing young children and have not been adjusted for older children and adults. Therefore, appropriate revision of these criteria to aid in the diagnosis of these individuals is encouraged.
5. In summary, there is validity in the diagnosis of ADHD, defining a maladjustive cluster of characteristics.

2. What Is the Impact of ADHD on Individuals, Families, and Society?

Children with ADHD experience an inability to sit still and pay attention in class and the negative consequences of such behavior. They experience peer rejection and engage in a broad array of disruptive behaviors. Their academic and social difficulties have far-reaching and long-term consequences. These children have higher accident rates, and later in life, children with ADHD in combination with conduct disorders experience drug abuse, antisocial behavior, and accidents of all sorts. For many individuals, the impact of ADHD continues into adulthood.

Families who have children with ADHD, as with other behavioral disorders and chronic diseases, experience increased levels of parental frustration, marital discord, and divorce. In addition, the direct costs of medical care for children and youth with ADHD are substantial. These costs represent a serious

burden for many families because they frequently are not covered by health insurance.

In the larger world, these individuals consume a disproportionate share of resources and attention from the health care system, criminal justice system, schools, and other social service agencies. Methodologic problems preclude precise estimates of the cost of ADHD to society. However, these costs are large. For example, additional national public school expenditures on behalf of students with ADHD may have exceeded \$3 billion in 1995. Moreover, ADHD, often in conjunction with coexisting conduct disorders, contributes to societal problems such as violent crime and teenage pregnancy.

Families of children impaired by the symptoms of ADHD are in a very difficult position. An already painful decision-making process is often made substantially worse by the media war between those who overstate the benefits of treatment and those who overstate the dangers of treatment.

3. What Are the Effective Treatments for ADHD?

A wide variety of treatments have been used for ADHD including, but not limited to, various psychotropic medications, psychosocial treatment, dietary management, herbal and homeopathic treatments, biofeedback, meditation, and perceptual stimulation/training. Of these treatment strategies, medications and psychosocial interventions have been the major focus of research. Studies on the efficacy of medication and psychosocial treatments for ADHD have focused primarily on a condition equivalent to DSM-IV combined type, meeting criteria for Inattention and Hyperactivity/Impulsivity. Until recently, most randomized clinical trials have been short term, up to approximately 3 months. Overall, these studies support the efficacy of stimulants and psychosocial treatments for ADHD. However, there are no long-term studies testing stimulants or psychosocial treatments lasting several years. There is no information on the long-term outcomes of medication-treated ADHD individuals in terms of educational and occupational achievements, involvement with the police, or other areas of social functioning.

Short-term trials of stimulants have supported the efficacy of methylphenidate (MPH) dextroamphetamine, and pemoline in children with ADHD. Few, if any, differences have been found among these stimulants on average. However, MPH is the most studied and the most often used of the stimulants. These short-term trials have found beneficial effects on the defining symptoms of ADHD and associated aggressiveness as long as medication is taken. However, stimulant treatments do not "normalize" the entire range of behavior problems, and children under treatment still manifest a higher level of some behavior problems than normal children. Of concern are the consistent findings that despite the improvement in core symptoms, there is little improvement in academic achievement or social skills.

Several short-term studies of antidepressants show that desipramine produces improvements over placebo in parent and teacher ratings of ADHD symptoms. Results from studies examining the efficacy of imipramine are inconsistent. Although a number of other psychotropic medications have been used to treat ADHD, the extant outcome data from these studies do not allow for conclusions regarding their efficacy.

Psychosocial treatment of ADHD has included a number of behavioral strategies such as contingency management (e.g., point/token reward systems, timeout, response cost) that typically is conducted in the classroom, parent

training (where the parent is taught child management skills), clinical behavior therapy (parent, teacher, or both are taught to use contingency management procedures), and cognitive-behavioral treatment (e.g., self-monitoring, verbal self-instruction, problem-solving strategies, self-reinforcement).

Cognitive-behavioral treatment has not been found to yield beneficial effects in children with ADHD. In contrast, clinical behavior therapy, parent training, and contingency management have produced beneficial effects. Intensive direct interventions in children with ADHD, such as summer camp programs, have produced improvements in key areas of functioning. However, no randomized control trials have been conducted on the summer camp intervention alone or in combination with medication.

Emerging data suggest that medication using systematic intensive monitoring methods over a period of approximately 1 year may be superior to an intensive set of behavioral treatments on core ADHD symptoms (inattention, hyperactivity/impulsivity, aggression). Combined medication and behavioral treatment added little advantage overall, but combined treatment did result in more improved social skills, and parents and teachers judged this treatment more favorably. Both systematically applied medication and combined treatment were superior to routine community care, which often involved the use of stimulants. An important potential advantage for behavioral treatment is the possibility of improving functioning with reduced dose of stimulants. This possibility was not tested.

There is a long history of a number of other interventions for ADHD. These include dietary replacement, herbal exclusion or supplementation, various vitamin or mineral regimens, biofeedback, perceptual stimulation, and a host of others. Although these interventions have generated considerable interest and there are some controlled and uncontrolled studies using various strategies, the state of the empirical evidence regarding these interventions is uneven, ranging from no data to well-controlled trials. Some of the dietary elimination strategies showed intriguing results suggesting future research.

The current state of the empirical literature regarding the treatment of ADHD is such that at least five important questions cannot be answered. First, it cannot be determined if the combination of stimulants and psychosocial treatments can improve functioning with reduced dose of stimulants. Second, there are no data on the treatment of ADHD, Inattentive type, which might comprise a high percentage of girls. Third, there are no conclusive data on treatment in adolescents and adults with ADHD. Fourth, there is no information on long-term treatment (treatment lasting more than 1 year), which is indicated in this persistent disorder. Finally, given the evidence about the cognitive problems associated with ADHD, such as deficiencies in working memory and language processing deficits, and the demonstrated ineffectiveness of current treatments in enhancing academic achievement, there is a need for application and development of methods targeted to these weaknesses.

4. What Are the Risks of the Use of Stimulant Medication and Other Treatments?

Although little information exists concerning the long-term effects of psychostimulants, there is no conclusive evidence that careful therapeutic use is harmful. When adverse drug reactions do occur, they are usually related to dose. Effects associated with moderate doses may include decreased appetite and insomnia. These effects occur early in treatment and may decrease with continued dosing. There may be negative effects on growth rate, but ultimate height appears not to be affected.

It is well known that psychostimulants have abuse potential. Very high doses of psychostimulants, particularly of amphetamines, may cause central nervous system damage, cardiovascular damage, and hypertension. In addition, higher doses have been associated with compulsive behaviors and, in certain vulnerable individuals, movement disorders. There is a very small percentage of children and adults treated at high doses who have hallucinogenic responses. Drugs used for ADHD other than psychostimulants have their own adverse reactions: tricyclic antidepressants may induce cardiac arrhythmias, bupropion at high doses can cause seizures, and pemoline is associated with liver damage.

The degree of assessment and followup by primary care physicians varies significantly. This variance may contribute to the marked differences in appropriate prescribing practices. Adequate followup is required for any prescribed medications, especially for higher doses of psycho-stimulants. Although an increased risk of drug abuse and cigarette smoking is associated with childhood ADHD (see Question 2), existing studies come to conflicting conclusions as to whether use of psychostimulants increases or decreases the risk of abuse. A major limitation of inferences from observational databases is that the diagnosis of ADHD is confounded with the use of stimulant medication; additional confounders include severity of ADHD and coexisting conditions.

The increased availability of stimulant medications may pose risks for society. The threshold of drug availability that can lead to oversupply and consequent illicit use is unknown. There is little evidence that current levels of production have had a substantial effect on abuse. However, there is a need to be vigilant in monitoring the national indices of use and abuse among high school seniors and Drug Abuse Warning Network (DAWN) emergency room reports.

5. What Are the Existing Diagnostic and Treatment Practices, and What Are the Barriers to Appropriate Identification, Evaluation, and Intervention?

The American Academy of Child and Adolescent Psychiatry has published practice parameters for the assessment and treatment of ADHD. The American Academy of Pediatrics has formed a subcommittee to establish parameters for pediatricians, but those guidelines are not available at this time. Primary care and developmental pediatricians, family practitioners, (child) neurologists, psychologists, and psychiatrists are the providers responsible for assessment, diagnosis, and treatment for most children with ADHD. There exists wide variation among type of practitioner with respect to frequency of diagnosis of ADHD. The type of practitioner also determines the frequency of stimulant prescription management; data indicate that family practitioners prescribe medication more frequently than psychiatrists or pediatricians. This may be due in part to the limited time spent making the diagnosis. This propensity for prescribing medications may remove incentives for establishing educationally relevant interventions. Some practitioners invalidly use response to medication as a diagnostic criterion. Primary care practitioners are less likely to recognize comorbid (coexisting) disorders.

Diagnoses are often made in an inconsistent manner with children sometimes being overdiagnosed and sometimes being underdiagnosed. Some practitioners do not use structured parent questionnaires or rating scales or teacher or school input. Pediatricians, family practitioners, and psychiatrists tend to rely on parent rather than teacher input. There appears to be a "disconnect" between developmental or educational (school-based) assessments and health-related

(medical practice-based) services. There is often poor communication between diagnosticians and those who implement and monitor treatment in schools. In addition, followup may be inadequate and fragmented. This is particularly important to ensure monitoring and early detection of any adverse effect of therapy. School-based clinics with a team approach that includes parents, teachers, school psychologists, and other mental health specialists may be a means to remove these barriers and improve access to assessment and treatment. Ideally, primary care practitioners with adequate time for consultation with such school teams should be able to make an appropriate assessment and diagnosis, but they should also be able to refer to mental health and other specialists when deemed necessary.

What are the barriers to appropriate identification, evaluation, and intervention?

Studies identify a number of barriers to appropriate identification, evaluation, and treatment. Barriers to identification and evaluation arise when central screening programs limit access to mental health services. The lack of insurance coverage of neuropsychological evaluations, behavior modification programs, school consultation, parent management training, and other specialized programs presents a major barrier to accurate classification, diagnosis, and management of ADHD. Substantial cost barriers exist in that diagnosis results in out-of-pocket costs to families for services not covered by managed care or other health insurance. Mental health benefits are carved out of many policies offered to families, and thus access to treatment other than medication might be severely limited. Parity for mental health conditions in insurance plans is essential. Another cost implication lies in the fact that there is no funded special education category for ADHD, which leaves these students underserved. This results in educational and mental health service sources disputing responsibility for coverage of special educational services.

Barriers exist in relationship to gender, race, socioeconomic factors, and geographical distribution of patients seeking identification and evaluation. Other important barriers include those perceived by patients, families, and clinicians. These include lack of information, concerns about risks of medications, loss of parental rights, fear of professionals, social stigma, negative pressures from families and friends against seeking treatment, and jeopardizing jobs and military service. For health care providers, the lack of specialists and difficulties obtaining insurance coverage as outlined above present significant obstacles to care.

6. What Are the Directions for Future Research?

Basic research is needed to better define ADHD. This research includes the following: (1) studies of cognitive development and cognitive processing in ADHD and (2) brain imaging studies before the initiation of medication and following the individual through young adulthood and middle age.

Further research should be conducted with respect to the dimensional aspects of this disorder, as well as the comorbid (coexisting) conditions present in both childhood and adult ADHD. Therefore, an important research need is the investigation of standardized age- and gender-specific diagnostic criteria.

The impact of ADHD should be determined. Studies in this regard include (1) the nature and severity of the impact on individuals, families, and society of adults with ADHD beyond the age of 20 and (2) determination of the financial costs related to diagnosis and care of children with ADHD.

Additional studies are needed to develop a more systematized treatment strategy. These include:

- Studies of the inattentive type of ADHD, especially since it might comprise a higher proportion of girls than the other subtypes.
- Studies of long-term treatment (treatment lasting longer than 1 year), which are needed because of the persistence of the disorder.
- Prospective controlled studies, up to adulthood, of the risks and benefits associated with childhood treatment with psychostimulants.
- Studies to determine the effects of psychotropic therapy on cognitive function and school performance.
- Studies of the effects of instructional treatments on the academic achievement of children with ADHD.
- Studies to determine whether the combination of stimulants and psychosocial treatments can improve functioning with a reduced dose of stimulants.
- Studies to determine the risks and benefits associated with treating children younger than age 5 with stimulants.

Greater attention should be given to developing integrated programs for diagnosis and treatment. These include:

- Model projects to demonstrate methods of training teachers to recognize and provide appropriate special programs for children with ADHD.
- Incorporation of classroom strategies to effectively serve a greater variety of students and thereby reduce the prevalence of ADHD referral and diagnosis.
- Determination of the extent to which individuals with ADHD are being served in postsecondary education and, if so, where they are being served, with what types of accommodations, and with what level of success.

Conclusions

Attention deficit hyperactivity disorder or ADHD is a commonly diagnosed behavioral disorder of childhood that represents a major public health problem. Children with ADHD usually have pronounced difficulties and impairments resulting from the disorder across multiple settings. They also can experience long-term adverse effects on later academic, psychosocial, and psychiatric outcomes.

Despite progress in the assessment, diagnosis, and treatment of ADHD, this disorder and its treatment have remained controversial in many public and private sectors. The major controversy regarding ADHD continues to be the use of psychostimulants both for short-term and long-term treatment.

Although a consistent diagnostic test for ADHD does not exist, evidence supporting the validity of the disorder can be found. Further research will need

to be conducted with respect to the dimensional aspects of ADHD, as well as the comorbid (coexisting) conditions present in both childhood and adult ADHD. Therefore, an important research need is the investigation of standardized age-and gender-specific diagnostic criteria.

The impact of ADHD on individuals, families, schools, and society is profound and necessitates immediate attention because a considerable share of resources from the health care system and various social service agencies is currently devoted to ADHD, often in a nonintegrated manner. Resource allocation based on better cost data leading to integrated care models needs to be developed for individuals with ADHD.

Effective treatments for ADHD have been evaluated primarily for the short term (approximately 3 months). These studies have included randomized clinical trials that have established the efficacy of stimulants and behavioral treatments for positive effects on the defining symptoms of ADHD and associated aggressiveness. Lack of consistent improvement beyond the core symptoms leads to the need for treatment strategies that utilize combined approaches. At the present time, there is a paucity of data providing information on long-term treatment beyond 14 months. Although trials combining drugs and behavioral modalities are underway, conclusive recommendations concerning treatment for the long term cannot be made easily.

The risks of treatment, particularly the use of stimulant medication, are of considerable interest. Substantial evidence exists of wide variations in the use of psychostimulants across communities and physicians, suggesting no consensus among practitioners regarding which ADHD patients should be treated with psychostimulants. As measured by attention/activity indices, patients with varying levels and types of problems (and even possibly unaffected individuals) may benefit from stimulant therapy. However, there is no evidence regarding the appropriate ADHD diagnostic threshold above which the benefits of psychostimulant therapy outweigh the risks.

Existing diagnostic and treatment practices, in combination with the potential risks associated with medication, point to the need for improved awareness by the health service sector concerning an appropriate assessment, treatment, and followup. A more consistent set of diagnostic procedures and practice guidelines is of utmost importance. Current barriers to evaluation and intervention exist across the health and education sectors. The cost barriers and lack of coverage preventing the appropriate diagnosis and treatment of ADHD and the lack of integration with special educational services represent considerable long-term cost for society. The lack of information and education about accessibility and affordability of services must be remedied.

Finally, after years of clinical research and experience with ADHD, our knowledge about the cause or causes of ADHD remains speculative. Consequently, we have no strategies for the prevention of ADHD.

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Psychotropic Drugs

Imagine a society where children are all on psychotropic drugs. Imagine it is the teacher's fault, because they referred all the kids. A society where the drugs are doing more bad than good. That could happen if someone doesn't take the power away from teachers to put kids on psychotropic drugs. This could be a serious problem in the near future.

I believe you should pass Senate Bill No. 230 and save our society's children. Senate Bill 230 is trying to limit teachers influence on putting kids on psychotropic drugs. Psychotropic drugs are drugs to calm children down like Ritalin or to treat mental disabilities like Depression. Teachers sometimes recommend these drugs to parents of disobedient kids for behavior problems. According to the *Journal of the American Medical Association*, from 1991 to 1995, the number of preschoolers on antidepressants increased 200 percent, and the number of children ages 2 to 4 taking stimulants more than doubled. Chemically treating our children at the rate we are now, may lead to problems in our society that will require emotional and financial costs, to correct. These medications are being prescribed to children at increasingly younger ages, and I believe this is because of the school influence.

There are some children for whom Ritalin may be their best option. However, there are countless others that are being drugged unnecessarily. There are some downsides to Ritalin like:

Ritalin is derived from the same family as cocaine.

Ritalin lasts only four hours.

Ritalin treats only some of the symptoms of ADD.

Ritalin provides superficial healing, does not treat the root of the problem.

Ritalin can cause side effects such as appetite loss, anxiety, insomnia, fits, headaches, stomach aches.

Ritalin use is responsible for causing children to begin a habit of taking drugs.

Ritalin may need to be taken over entire life span.

Stimulant drugs were found to have a short-term effectiveness of 60 to 80 percent in reducing the hyperactivity, distractibility, and impulsiveness of school-age children. Studies beginning in the 1960s showed that children who took stimulants for hyperactivity over several years did just as poorly in later life as the group of hyperactive children who took no medication. Doctors sharply criticized the lack of a uniform system for diagnosing and treating ADHD, saying the Health Department had largely ignored National Health and Medical Research Council recommendations published in 1997. Dr Florence Levy, from the Sydney Children's Hospital, has expressed concern at the frequency of incorrect diagnosis before.

The facts are stark. The numbers of kids on psychotropic drugs is rising. School influence is forcing parents to put their kids on psychotropic drugs by threatening to take it to Social Services and even reporting them. Most teachers probably have never been to medical school and can't diagnose that kind of disorder. If there is I'd like to meet them. But for now we need to limit what schools can do.

Ritalin is commonly used psychotropic drug.

Subject: Comment on SB 230

Date: Sat, 27 Apr 2002 18:53:27 -0800

From: "Christina T. Zafren" <czafren@alaska.com>

To: Randy Phillips <Senator_Randy_Phillips@legis.state.ak.us>,
Jerry Ward <Senator_Jerry_Ward@legis.state.ak.us>,
Robin Taylor <Senator_Robin_Taylor@legis.state.ak.us>,
Loren Leman <Senator_Loren_Leman@legis.state.ak.us>,
Lyman Hoffman <Senator_Lyman_Hoffman@legis.state.ak.us>,
Dave Donley <Senator_Dave_Donley@legis.state.as.us>,
Bettye Davis <Senator_Bettye_Davis@legis.state.ak.us>,
Johnny Ellis <Senator_Johnny_Ellis@legis.state.ak.us>,
Lyda Green <Senator_Lyda_Green@legis.state.ak.us>,
John Cowdery <Senator_John_Cowdery@legis.state.ak.us>

CC: theo lexmond <tlex@kpbsd.k12.ak.us>

Alaska School Psychologists Association
10181 Curvi Street
Anchorage, AK 99507
March 24, 2002

Dear Senators,

The Alaska School Psychologists Association would like to register concern with Senate Bill No. 230.3 relating to recommending or refusing psychotropic drugs as a treatment for children and to the evaluation and treatment of children with behavioral or psychological problems². Our specific concerns are with AMENDMENT AS47.33120 (A) SUBSECTION 9 - creating policies prohibiting school personnel from discussion of the possible use and benefits of psychotropic drugs for students with behavioral and/or emotional problems.

As professionals, we believe that legislation, such as SUBSECTION 9, is **unnecessary** and **ill-advised** for the following reasons:

SUBSECTION 9 is **unnecessary** because school psychologists' ethical standards already prohibit us from acting outside our areas of professional expertise and knowledge. School psychologists who deviate from these ethical standards will be dealt with administratively and/or through the Professional Teaching Practices Commission. State regulation of this administrative function is therefore unnecessary.

SUBSECTION 9 is **ill-advised** because:

It may be interpreted as prohibiting any discussion by knowledgeable school personnel (e.g. school psychologists) of the options available for families in addressing a variety of emotional and/or behavioral disorders which are manifested by their children, our students. School psychologists are frequently asked by families to help them decide when to seek outside referrals. The information provided to parents by school psychologists is based on the most reliable and current professional recommendations. Additionally, outside referring agencies and mental health professionals frequently rely upon the observations and feedback of school psychologists regarding the efficacy of various psychotropic medications when this is prescribed to our students. This subsections could be interpreted as preventing a school psychologist from performing such a vital role for our families and students.

It could be interpreted as making school districts responsible for the cost of obtaining medical evaluations if these referrals were made as part of a Special Education evaluation.

It currently delineates the only appropriate referral as one to a licensed physician when an appropriate initial referral for a student with behavioral and or emotional problems may be to a licensed mental health provider such as an outpatient psychologist, social worker, rather than only to a licensed physician.

Please take under consideration our concerns as you evaluate this bill. If you have any questions, please do not hesitate to contact us. We would be available for further consultation and/or testimony before a subcommittee.

Sincerely,

Chris Tower Zafren,
Nationally Certified School Psychologist

cc: Theo Lexmond, President ASPA

Subject: Please hold a hearing on the amended S.B. 230

Date: Wed, 17 Apr 2002 10:19:55 -0400

From: "john breeding" <wildcolt@flash.net>

To: <Senator_Lyda_Green@legis.state.ak.us>

CC: <Senator_Bettye_Davis@legis.state.ak.us>

TEXAS

Dear Senator Green,

I am aware that the amended version of Senate Bill 230, relating to the use of psychotropic drugs in the schools, is pending another hearing in your committee. As you know, my organization strongly supports this bill as an important step in protecting parents from pressure and coercion to use psychotropic drugs on their children, and in helping to refocus educators on the very real and important practices of teaching children.

Variations of this bill have been passed in Minnesota, Connecticut and Utah. They are being heard just now in several states, including California, Arizona and Missouri. It is crucial that this issue be fully confronted as the national trends continue toward more and younger children being placed on these dangerous drugs.

As I mentioned in an earlier message to you, it is most often our women legislators who are championing this cause on behalf of our children and families. I beg you to give this amended bill a full hearing as soon as possible. The lives of our children, the integrity of our families, and the safety and effectiveness of our schools are all at stake.

Please use your leadership to ensure a full hearing on this bill, for the good of all our children.

Sincerely,

John Breeding, PhD
Texans For Safe Education

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: _____
 Bill Version: SB 230
 () Publish Date: _____

Revision Date/Time (Note if correction): 1/16/2002 9:11 am Dept. Affected: Health & Social Services
 Title: PSYCHOTROPIC DRUGS FOR TREATMENT OF CHILDREN IN BRU: Purchased Services
NEED OF AID Component: Foster Care Special Need
 Sponsor: DAVIS
 Requestor: SENATE (HES) Component Number: 2238

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
-----------------------------	--	--	--	--	--	--

CHANGE IN REVENUES (0)						
---------------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: _____

Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

Section 1 of this bill does not impact this department. Sections 2 and 3 amend CINA statute AS 47.10.019. This statute places limits on the court's determinations in finding a minor to be a child in need of aid. This amendment adds a subsection which prohibits the court from finding a minor to be a child in need of aid and prohibits the department from taking custody of a child solely on the basis of an allegation or finding that the child's parent or legal custodian refuses to administer or consent to the administration of psychotropic medication.

Should this bill become law, the department does not anticipate any fiscal impact. The bill has impact on practice only.

Prepared by: Debbie Loveid Phone _____
 Division: Family & Youth Services Date/Time _____
 Approved by: Elmer A. Lindstrom, Deputy Commissioner Date 01/24/2002
 Agency: Department of Health & Social Services

For distribution information, call the Governor's Legislative Office

Chief find

School Psychologist

22-LS1162VA

*SB 230 provides guidance to teachers
Teachers may make suggestions, intending
to be helpful, however they may not be right*

SENATE BILL NO. 230

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SECOND LEGISLATURE - SECOND SESSION

BY SENATOR DAVIS

Introduced: 1/14/02

Referred: Health, Education and Social Services, Judiciary

A BILL

FOR AN ACT ENTITLED

1 "An Act relating to recommending or refusing psychotropic drugs as a treatment for
2 children and to the evaluation and treatment of children with behavioral or
3 psychological problems."

4 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

5 * **Section 1.** AS 14.33.120(a) is amended to read:

6 (a) Each governing body shall adopt a written school disciplinary and safety
7 program. The program required under this subsection must include written

8 (1) standards for student behavior and safety that reflect community
9 standards and that include, at a minimum, basic requirements for respect and honesty;
10 standards required under this paragraph must be developed and periodically reviewed
11 with the collaboration of members of each school, parents, teachers, and other persons
12 responsible for the students at a school; a governing body may require that standards
13 developed under this paragraph be consistent for all schools in an attendance area or
14 the district;

1 (2) standards relating to when a teacher is authorized to remove a
2 student from the classroom for

3 (A) failure to follow student behavior and safety standards; or

4 (B) behavior described under AS 14.30.045(1) or (2);

5 (3) procedures for notifying teachers of dangerous students consistent
6 with AS 47.12.310(b);

7 (4) standards relating to when a teacher, teacher's assistant, or other
8 person responsible for students is authorized to use reasonable and appropriate force to
9 maintain classroom safety and discipline as described under AS 14.81.430(a)(2);

10 (5) policies necessary to comply with provisions of state and federal
11 law, including 20 U.S.C. 1400 - 1485 (Individuals with Disabilities Education Act);

12 (6) standards to address needs of students for whom mental health or
13 substance abuse may be a contributing factor to noncompliance with the school
14 disciplinary and safety program;

15 (7) policies for implementing a student conflict resolution strategy,
16 including the nonviolent resolution or mediation of conflicts and procedures for
17 reporting and resolving conflicts;

18 (8) procedures for periodic review and revision of the school
19 disciplinary and safety program;

20 (9) policies prohibiting school personnel from recommending the
21 use of psychotropic drugs for a student and requiring that, if school personnel
22 perceive that a student may have a behavioral or psychological problem, a letter
23 be sent to the parent or other person having care and custody of the child
24 recommending that an appropriate medical or behavioral health evaluation be
25 conducted by a licensed physician.

*accurate info
free choice*

*A home call
intervention
team meeting*

*other
intervening
steps
pos. behavior
post-prog.*

*FD&A-97
Dist's exp. adv.
to pay if in
reference
made*

26 * Sec. 2. AS 47.10.019 is amended to read:

27 **Sec. 47.10.019. Limitations on determinations.** (a) Notwithstanding other
28 provisions of this chapter, the court may not find a minor to be a child in need of aid
29 under this chapter solely on the basis that the child's family is poor, lacks adequate
30 housing, or exhibits a lifestyle that is different from the generally accepted lifestyle
31 standard of the community where the family lives. However, this subsection

1 [SECTION] may not be construed to prevent a court from finding that a child is in
2 need of aid if the child has been subjected to conduct or conditions described in
3 AS 47.10.011 - 47.10.015.

4 * **Sec. 3.** AS 47.10.019 is amended by adding a new subsection to read:

5 (b) Notwithstanding other provisions of this chapter, a court may not find a
6 minor to be a child in need of aid and the department may not take custody of a child,
7 including emergency custody, solely based on an allegation or finding that the child's
8 parent or other person having the care and custody of the child has refused to
9 administer or consent to the administration of a psychotropic drug to the child.

allegation of medical neglect

SUMMARY OF LEGISLATIVE ACTIONS

Legislation Restricting Physician Practice, 2002

California, SB 119: This legislation would criminalize decision-making by physicians if statutory procedures were not followed when a physician prescribes a psychiatric medication to a legal minor. The legislation makes it a crime for a physician to prescribe a psychiatric medication to a legal minor until the physician has received a physical exam from a pediatrician and had all physical conditions treated prior to prescribing the medication; the physician has fully explained all possible side effects to the parents; and has obtained written informed consent from the parents. There are additional physician reporting requirements to the pharmacist and state Board of Pharmacy.

Mississippi, HB 221: Any physician or pharmacist that prescribes Ritalin or fills a prescription for Ritalin shall be subject to suspension of their license to practice and may be fined up to \$5000.

Wisconsin, AB 672: Any physician who diagnoses a child with AD/HD must provide the parents with an explanation of the method used to diagnose, including the results of tests and evaluations; information on alternative treatments; and any potential risks of any medication prescribed for AD/HD. The state is required to prepare materials which all physicians must give parents of children with AD/HD including how using medication may affect health insurance costs and how use of medication may affect a person's future eligibility to serve in the U.S. armed forces. The state must also distribute such information to school officials.

Legislation Restricting Teachers Giving Advice, 2002

Michigan, HB 5085: The legislation would prohibit teachers from diagnosing AD/HD and recommending the use of medication, but teachers could discuss with parents optional treatments for AD/HD, which could include medication. Teachers could discuss behavioral, learning, or emotional problems of children with the parents and could recommend professional assessments.

Utah, HB 123: This bill would make teachers criminally liable for referring a student's behavioral problems to anyone outside the school other than the parent. Any statement to the parent must be in writing. The school would continue to serve the child even if the parent refused to have a psychiatric, psychological, or behavioral assessment of the child's behavioral problems. Unless conveyed in a letter, teachers would be prohibited from recommending a professional behavioral assessment or recommending that the parents contact physicians, psychologists, or any other health specialist.

Vermont: Legislation would stipulate that schools might not require students with behavioral problems to take psychiatric medication as a condition of staying in schools.

Related Legislative Actions of 2000-2001

California, SB 2098: Requires the state to adopt standards for the administration of psychotropic medications for children under the jurisdiction of the State Department of Youth. This legislation was enacted.

Connecticut, H 5701: Requires that each local and regional board of education shall adopt and implement policies prohibiting any school personnel from recommending the use of psychotropic drugs for any child. The provisions of this section shall not prohibit school medical staff from recommending that an appropriate medical practitioner evaluate a child, or prohibit school personnel from consulting with a practitioner with the consent of the parents or guardian of the child.

States that the refusal of a parent or other person having control of a child to administer or consent to the administration of any psychotropic drug to the child shall not, in and of itself, constitute grounds for the Department of Children and Families to take the child into custody or for any court of competent jurisdiction to order that the child be taken into custody by the department, unless the refusal causes the child to be neglected or abused, as defined in section 46b-120 of the general statutes. Enacted 6/28/01.

CHADD Concerned with Legislative Efforts

Florida, S 682: Requires the state to adopt standards for the use of psychotropic medications for children under the jurisdiction of the State Department of Children and Family Services. This legislation was enacted.

Georgia, HR 1079: Creates a Commission on Psychiatric Medication of School-Age Children and requires the commission to investigate the use of such medications. This legislation was signed into law by the governor.

Hawaii, SCR 92 and SR 70: Both contain the same provisions: Provides that the Department of Health and the Department of Education are jointly requested to increase efforts to educate parents, the school community, and other interested parties with regard to the diagnosis and treatment of children with "attention deficit disorder" or "attention-deficit/hyperactivity disorder" and to study the use and effectiveness of medication utilized to improve the child's educational opportunities, as well as research, examine, and recommend non-medication and other appropriate alternatives.

Requires that the departments submit a report of their findings and recommendations to the Governor and the Legislature no later than twenty days prior to the convening of the Regular Session of 2002. Adopted 4/23/01.

Idaho, H 213: Requires that any pharmacy licensed by the Board of Pharmacists that dispenses the stimulant methylphenidate, commonly known as Ritalin, shall disclose, at the least, the following information:

- (a) Known side effects of prescriptive use of the drug include tachycardia, dizziness, insomnia, depression, abdominal pain, anorexia, loss of appetite, dry mouth and suppression of growth associated with long-term use;
- (b) Ingesting the tablet by any means other than swallowing can result in severe reactions or complications such as blood clots, skin and circulatory problems, and even death;
- (c) No person who takes Ritalin after the age of twelve (12) years is eligible for military service; and
- (d) Distribution of the medication to any other person is a felony offense in Idaho and is also a federal offense.

Specifies that the board is authorized and directed to promulgate rules to ensure that the information in this section is provided by the licensed dispensing pharmacy to each person who takes possession of a Ritalin prescription. Passed House 3/5/01. Regular session adjourned, no carry over to 2002.

Indiana, S 471: Requires that the controlled substances advisory committee shall review the records maintained by the central repository for controlled substances designated by the state police department regarding the prescribing of psychotropic medications to children. Requires that no later than December 1, 2001, the advisory committee shall submit a report to the legislative council, the governor, and the medical licensing board regarding this review. The report required must include the following:

- (1) A comparison of the number of prescriptions written for psychotropic medications for children (A) participating in Medicaid or the children's health insurance program; and (B) not participating in a program described in clause (A).
- (2) A statement by the advisory committee regarding whether the information provided indicates that psychotropic medications are being disproportionately prescribed for children described in subdivision (1)(A).
- (3) Identification of any pattern of prescribing of psychotropic medications for children contrary to the most recent guidelines adopted by the American Academy of Pediatrics and the American Academy of Child and Adolescent Psychiatry. Vetoed by governor 5/11/01.

Maryland, S 742: Creates an advisory council on AD/HD to facilitate communication between educators, families, and physicians and to promote needed reform and training to better serve children with AD/HD, including research into the relationship between AD/HD and learning disabilities. This legislation was enacted.

Minnesota, S 750: A bill for an act relating to education; raising awareness of issues related to student use of sympathomimetic medication; clarifying neglect to indicate that a parent's refusal to provide sympathomimetic medications does not constitute educational neglect; and providing for a study to examine student's Ritalin use.

CHADD Concerned with Legislative Efforts

North Carolina, S 542: Requires that the Department of Health and Human Services and the Department of Juvenile Justice and Delinquency Prevention shall review the feasibility of establishing and maintaining a statewide database containing information on the prescription and administration of psychotropic medications to children who receive state services. Enacted 5/25/01.

New York, A 3162: Amends the mental hygiene law, the social services law and the education law by adding to each, new sections which establish the rights of children in residential care. Included in these enumerated rights is the right to safe medication prescribing practices, including provisions for information about medications and consent for psychotropic medications from the parent or guardian and the right to be free from physical restraint and seclusion, except as otherwise authorized by law or regulation, provided, however, no mechanical restraint or seclusion may be used if the child is under twelve years of age. Passed Assembly 4/2/01.

Oklahoma, H 1965: Authorized the state's courts to order children under court order to take medication as prescribed by the court. This legislation was enacted.

Utah, H 170: Amends the definition of substantiated child abuse to exclude the failure to administer prescribed medication or course of treatment if the parent or legal guardian has not been notified of the opportunity to obtain a physical examination of the minor by a health care professional.

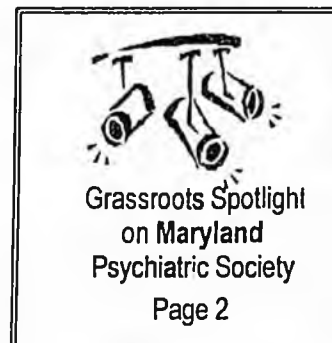
The bill does not specify or define what types of medication. It is intended to be broader than the introduced version of the bill, which specified and defined "psychiatric medication." Enacted 3/15/01.

Virginia, HJR 660: That a joint subcommittee be established to study the effects of attention deficit disorder and attention-deficit/hyperactivity disorder on student academic performance and on public education programs and services. Adopted 2/24/01.

Washington, H 2912: Requires the state to report on children in out-of-home care for longer than 90 days who take psychotropic medication. This legislation was enacted.

June/July 2001

- **CHILDREN / ADOLESCENTS**
- **NONPHYSICIAN PRESCRIBING BILLS**
- **GAY AND LESBIAN ISSUES**
- **GRASSROOTS SPOTLIGHT**
- **OTHER STATE LEGISLATION**



CHILDREN/ADOLESCENTS

CONNECTICUT: Governor John Rowland June 6 signed HB 5701*, now Public Act No. 01-124, related to recommendations for and refusals of the use of psychotropic medications by children. The legislation requires school boards to adopt and implement policies prohibiting school personnel from recommending that a child use psychotropic drugs. It allows (1) school medical staff to recommend appropriate evaluation of a student by a medical practitioner and (2) school personnel to consult with the medical practitioner with the consent of the child's parents or guardian.

The new law also specifies that a parent's refusal to administer or consent to administration of psychotropic medication to a child does not, by itself, constitute grounds for the Department of Children and Families to take the child into custody, or for a court to order that the child be taken into custody, unless that refusal results in the child's abuse or neglect.

Finally, the law requires utilization review companies, when making determinations related to "mental or nervous conditions," to report them separately from all other reported determinations. By law, utilization review companies must annually file with the Insurance Commissioner the number of determinations not to certify an admission, service, procedure, or stay extension and the outcome of appealed determinations.

UTAH: H 170*, signed by Governor Michael Leavitt, excludes from the definition of substantiated child abuse the failure to administer prescribed medication or course of treatment if the parent or legal guardian has not been notified of the opportunity to obtain a physical examination of the minor by a health care professional. The Act authorizes the Division of Child and Family Services to report an individual to the appropriate licensing authority if the division has reason to believe the individual exceeded his/her scope of practice by recommending medication for a minor.

OREGON: HB 2682* grants criminal and civil immunity to a school administrator, teacher or other school employee who administers prescription medication to a student if certain conditions are met. The school employee must

administer the medicine, pursuant to written permission and instructions of the pupil's parents or guardian, and must act in compliance with the instructions of a physician, physician assistant or nurse practitioner. Governor John Kitzhaber has signed HB 2682.



GRASSROOTS SPOTLIGHT

MARYLAND PSYCHIATRIC SOCIETY

A Political Action Committee (PAC) is one component of a successful grassroots program in a state district branch. Maryland Psychiatric Society (MPS), with 760 members, this past year raised \$20,000 for its PAC treasury. How did they raise that much money? By implementing a methodical annual strategy to raise funds and politically involve psychiatrists in Maryland.

Maryland Psychiatric PAC (MPPAC) fundraising consists of a systematic approach relying on a combination of an energetic PAC Chair, Mayer Liebman, M.D., an active PAC Board of Trustees, and assistance from district branch staff. An annual letter to MPS members requesting PAC contributions raises approximately 30% of their funds. Biannual phone-a-thons, scheduled at the end of the state legislative session in April and in the Fall to prepare for the upcoming legislative session, raise 60% of their money. MPPAC board members play a crucial role in the phone-a-thons, individually calling fellow psychiatrists and asking for contributions. In some cases, they call psychiatrists who are not members of MPS, but who do contribute to the PAC.

The MPPAC distributes a semi-annual newsletter to keep PAC contributors and MPS members current and raises approximately 10% of their contributions. The newsletter, *Political Action*, prints articles about lobbying legislators, along with information about the MPS's and the state medical society's legislative agenda. Each winter *Political Action* features an insert with the current contact information for each legislator in the Maryland General Assembly, just in time for members to make their calls about specific bills introduced in Annapolis. Written by MPPAC members, it is a valuable tool of communication for the membership on state legislative issues.

PAC checks are hand delivered by MPPAC members to state legislators, whenever possible. Only when unavoidable are PAC checks mailed into a candidate. In addition to direct contributions to campaigns, early this year the PAC financed a legislative reception in Annapolis. MPPAC held the event on a weekday evening, during the legislative session and walking distance from the legislative office buildings. The event was a culmination of the great efforts by MPPAC as thirty-one legislators mingled with the twenty-four psychiatrists who attended!

The MPPAC has consistently grown since its inception eleven years ago. A successful grassroots advocacy program includes contributing to a PAC to educate legislative candidates, thus bringing greater attention to the priorities of psychiatry. If you are interested in creating or enhancing your district branch PAC and would like to talk over strategies, please contact either Jennifer Gajewski, 410-625-0232, MPS Executive Director, or the Division of Government Relations. APA. 202-682-6060.

NORTH CAROLINA: Session Law 2001-124*, formerly SB 542, directs the Department of Health and Human Services and the Department of Juvenile Justice and Delinquency Prevention to review the need for establishment of a statewide database on the administration of psychotropic medications to children who receive state services. The Departments are to make recommendations to several legislative committees on the costs and feasibility of setting up and maintaining the database in a manner that provides data for the analysis of prescription medication usage by and effects on children. The report is also to provide detailed information on how the database will be maintained to protect medical records and other privacy interests.

DELAWARE: HB 29* states that "No psychotropic drug may be prescribed to any minor unless, prior to prescribing the drug, the practitioner; (i) has had the minor's parent, guardian, or other caregiver read, from the "Physician's Desk Reference Family Guide to Prescription Drugs," the full information on any psychotropic drug being prescribed, and (ii) has obtained a written attestation from the parent, guardian, or caregiver that he or she has read and understood the information provided by the practitioner, including any information on known drug side effects. If the parent, guardian, or caregiver is unable to read the psychotropic drug information, or indicates that he or she does not understand any part of all of the information, the practitioner shall fully explain the information, including side effects, before obtaining the written attestation. The attestation is to be kept on file as part of the child's medical record."

The bill also requires the Department of Health and Social Services, working with "pediatric health care practitioners," and local chapters of the American Academy of Pediatrics and Family Physicians, to develop a brochure in English, and in any other language that is endemic to the area it will be servicing. The brochure should inform parents and guardians about potential drug side effects, as well as general information relating to psychotropic medications prescribed for children.

HB 28*, since withdrawn, would have prohibited any law, regulation, or policy from being established in any school district or public school that requires a student to be placed on a psychotropic drug as a condition of enrollment, or attendance in any class.

NEW JERSEY: AB 3471* prohibits the Superior Court, in proceedings involving alleged cases of child abuse or neglect, from ordering the parent or guardian of a child to administer methylphenidate hydrochloride to the child. Proponents cited a case in New York, in which parents faced child abuse charges when they tried to discontinue the administration of medication to their child and a judge ordered that the child continue to be given the medication.

Citing a "deep concern over the increased use of medication to control behavior in school children," A 2170* would prohibit school personnel from recommending, encouraging, or discussing medication for school pupils without either the pupil or the pupil's parents. In addition, the measure provides that school personnel shall respect the parents' right to refuse psychiatric medication for their children, and shall not suggest nor insist that medication be required for a child's participation in any aspect of school.

VIRGINIA: HJ 660* is a study resolution establishing a joint subcommittee to study the effects of attention deficit disorder and attention deficit hyperactivity disorder on student performance. The subcommittee will also investigate "the improper prescription and illegal use and diversion of Ritalin and OxyContin." Among other things, the legislative subcommittee is to determine the number of students diagnosed as having ADD/ADHD in the public schools, whether they receive treatment and whether the conditions have an effect on absenteeism or disciplinary action; and determine the health conditions for which Ritalin and OxyContin are lawfully prescribed. The study group is also to recommend ways to correct problems associated with the over-prescription and illegal use of the medications.

MINNESOTA: HB 478* clarifies the definition of educational neglect to indicate that a parent's refusal to provide sympathomimetic medications does not constitute educational neglect. The measure also appropriates funds for the Department of Children, Families, and Learning for a study to determine the number and overall incidence rate of Minnesota children diagnosed with ADD or ADHD currently taking sympathomimetic medications. The contractor would be encourage to examine the number of children who take medications at home and not at school, previous interventions tried with the children, types of practitioners who prescribe the medications and "what pressures families have experienced in terms of providing their children with sympathomimetic medications."

HAWAII: The legislature adopted SCR 92*, which requests the Departments of Health and Education to research and examine non-medication alternatives to dealing with children who have difficulty paying attention, have difficulty learning, and display hyperactive behavior. Alternatives would include reallocation of resources to non-medication programs of social, recreational, educational, athletic, artistic, and cultural activities.

Enacted with SCR 92, SR 70* requests the departments to determine whether the diagnosis of children with ADD or ADHD in Hawaii has been excessive, "whether the state's children are being subjected to excessive use of psychiatric drugs to modify their behavior," and to research and recommend non-medication alternatives.

NEW YORK: A 3162* establishes a bill of rights for children in residential care facilities operated by various state agencies, including mental health. Its purpose is to assure that all children will receive appropriate care and treatment, including the right to be free from abuse, to have an individualized treatment plan, to receive safe medication and communication with family members, to recreation, religious freedom, and to an appropriate education. A 3162 passed the Assembly and was referred to the Senate Mental Health and Developmental Disabilities Committee.

CALIFORNIA: Existing law requires court approval to give psychotropic medication to a child in foster care unless the guardian or caregiver has obtained a court order authorizing the caregiver to obtain the medication. AB 225* would impose penalties on physicians for prescribing psychiatric medications for foster children, pharmacists for filling the prescriptions, and foster parents for administering medications to the children. Opponents, including the California Psychiatric Association, have charged the bill would likely decrease the number of physicians willing to see foster children, thereby decreasing access to all medications and other medical treatment for them. The legislation would also force pharmacists to inquire whether a child receiving a prescription is a foster child, a breach of the child's privacy.

AB 681*, as introduced, called for a study of the use of psychotropic medications, especially Ritalin, on foster children. As amended, the bill calls for the Department of Health Services to report on prescription medication of children in foster care and to develop a study of the use of psychotropic medications in foster care in comparison to the pattern of use of psychotropic medications among children in the general population. The study would include the number of foster youth receiving mental health assessments and treatment services, and the number of those children with a diagnosis that meets criteria for which there is a clinical consensus that medication treatment is an acceptable component of care.

ILLINOIS: HB 548* directs the Director of Public Health to appoint an Advisory Council on Psychotropic Drug Therapy for Children and Adolescents. The council is to include child psychiatrists, pharmacologists, child behavioral specialists, educators, and parents of children taking psychotropic medications, child advocates, and representatives of the Department of Children and Family Services. It is to study and analyze mental illness and serious emotional disturbances affecting children and adolescents and the psychotropic medications used to treat those illnesses. It is directed to address the potential impact of psychotropic drugs on children and adolescents, "including the relationship between the use of such drugs and tendencies toward violence or suicide."

NONPHYSICIAN PRESCRIBING

Legislators in two key Louisiana health committees defeated measures (HB 414* and SB 312*) during hearings in Baton Rouge to permit psychologists to prescribe psychotropic medications. With assistance from the APA, the Louisiana District Branch mounted a strong "constituent call-in" and fax message effort to members of the House Health and Welfare Committee.

Psychotropic Drugs

Imagine a society where children are all on psychotropic drugs. Imagine it is the teacher's fault, because they referred all the kids. A society where the drugs are doing more bad than good. That could happen if someone doesn't take the power away from teachers to put kids on psychotropic drugs. This could be a serious problem in the near future.

I believe you should pass Senate Bill No. 230 and save our society's children. Senate Bill 230 is trying to limit teachers influence on putting kids on psychotropic drugs. Psychotropic drugs are drugs to calm children down like Ritalin or to treat mental disabilities like Depression. Teachers sometimes recommend these drugs to parents of disobedient kids for behavior problems. According to the Journal of the American Medical Association, from 1991 to 1995, the number of preschoolers on antidepressants increased 200 percent, and the number of children ages 2 to 4 taking stimulants more than doubled. Chemically treating our children at the rate we are now, may lead to problems in our society that will require emotional and financial costs, to correct. These medications are being prescribed to children at increasingly younger ages, and I believe this is because of the school influence.

There are some children for whom Ritalin may be their best option. However, there are countless others that are being drugged unnecessarily. There are some downsides to Ritalin like:

Ritalin is
commonly
used
psychotropic
drug.

Ritalin is derived from the same family as cocaine.

Ritalin lasts only four hours.

Ritalin treats only some of the symptoms of ADD.

Ritalin provides superficial healing, does not treat the root of the problem.

Ritalin can cause side effects such as appetite loss, anxiety, insomnia, tics, headaches, stomach aches.

Ritalin use is responsible for causing children to begin a habit of taking drugs.

Ritalin may need to be taken over entire life span.

Stimulant drugs were found to have a short-term effectiveness of 60 to 80 percent in reducing the hyperactivity, distractibility, and impulsiveness of school-age children. Studies beginning in the 1960s showed that children who took stimulants for hyperactivity over several years did just as poorly in later life as the group of hyperactive children who took no medication. Doctors sharply criticized the lack of a uniform system for diagnosing and treating ADHD, saying the Health Department had largely ignored National Health and Medical Research Council recommendations published in 1997. Dr Florence Levy, from the Sydney Children's Hospital, has expressed concern at the frequency of incorrect diagnosis before.

The facts are strait. The numbers of kids on psychotropic drugs is rising. School influence is forcing parents to put their kids on psychotropic drugs by threatening to take it to Social Services and even reporting them. Most teachers probably have never been to medical school and can't diagnose that kind of disorder. If there is I'd like to meet them. But for now we need to limit what schools can do.

With the adjournment of legislatures in Illinois, Tennessee and Texas, this means that bills that would have granted psychologists prescribing authority have been defeated in nine states in the 2001 sessions.

Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

NFWL Resolution

NFWL Special Education Sub-Committee
Representative Aisha Abdullah-Odiase, Chairwoman
Passed unanimously on September 28, 2001

Resolution

Whereas:

- The use of psychiatric drugs in our nation's schools has more than doubled in the first half of the last decade and continues to escalate;
- Production of these drugs has increased by more than 700% since 1990.
- The number of schoolchildren taking these drugs is approaching the 4 million mark.
- Recent media stories have brought increased scrutiny to this uniquely American large-scale use of psychotropic drugs in our schools.
- Recent books such as No more ADHD by Dr. Mary Ann Block; Ritalin Nation: Rapid-Fire Culture and the Transformation of Human Consciousness; and Lawrence H. Diller's Running on Ritalin: A Physician Reflects on Children, Society and Performance in a Pill; that has provided important viewpoints and information to the public debate on the dangers of the drugging of our children.
- Public health issues such as lead poisoning, thyroid deficiencies and malnutrition are known to decrease student academic performance.
- Advances in medicine offer additional opportunities to identify and treat underlying physiological abnormalities and deficiencies that may contribute to decreases in student performance. Such abnormalities and deficiencies have been shown to place students at risk of being identified as slow learners or behavioral problems.
- The state of Connecticut has recently passed legislation prohibiting non-medical personnel from suggesting behavioral problems are the result of ADD or ADHD.
- Public officials are frequently asked to provide policy guidance on this issue without a clear understanding of the medical and scientific issues attending the use of psychotropic on our school children.

Be it resolved that the NFWL Special Education Sub-Committee supports:

- A review by scientific, educational and medical professional of the physiological risk factors associated with decreases in academic performance and behavior.
- Recommendations on screening procedures to identify children at risk due to physiological abnormalities and deficiencies.
- Recommendations of non-drug treatment options or model legislation to decrease the occurrence of these risk factors in our school-age population.

Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

Connecticut

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EDUCATION REPORTER

NUMBER 186

THE NEWSPAPER OF EDUCATION RIGHTS

JULY 2001

Connecticut Curbs Promotion of Ritalin

HARTFORD, CT - The Connecticut General Assembly has approved a bill prohibiting educators from recommending psychotropic drugs such as Ritalin for use on school children. (See text below.) The House of Representatives on May 22 approved **H.B. 5701** by a vote of 141-0. The bill has also passed the Senate and is awaiting the Governor's signature.



Lenny Winkler

State Rep. Lenny Winkler (R-Groton) introduced the legislation, citing "the dramatic increase in the amount of psychotropic drugs, such as Ritalin and Prozac, being prescribed for children in recent years." In announcing the bill's passage, she stated that "these drugs are too often prescribed without a thorough medical and psychological evaluation. This bill will go a long way toward preventing unnecessary use of psychotropic drugs in Connecticut."

An emergency room nurse herself, Winkler expressed horror at the list of mind-altering drugs that are taken by some of the children admitted to the hospital. She pointed out that strong "anecdotal evidence" indicates that recommendations of these drugs to parents by school personnel have contributed to the increase in prescriptions. "Because teachers are held in such high esteem," Winkler noted, "their opinions regarding a student's health are taken seriously."

H.B. 5701 also prohibits a parent's refusal to place a child on psychotropic drugs from becoming grounds for the Connecticut Department of Children and Families to take the child into custody.

The law *does* allow schools to recommend that a student undergo a thorough medical examination. With the parents' permission, school officials may still consult with doctors about a child's case. "The school system will always play a vital role in a child's well being," Rep. Winkler affirmed. "But it's extremely important that the diagnosis of any medical condition be performed by a medical professional."

Partial Text of H.B. 5701

An Act Concerning Recommendations For And Refusals Of The Use Of Psychotropic Drugs By Children. . . .

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Each local and regional board of education shall adopt and implement policies prohibiting any school personnel from recommending the use of psychotropic drugs for any child. The provisions of this section shall not prohibit school medical staff from recommending that a child be evaluated by an appropriate medical practitioner, or prohibit school personnel from consulting with such practitioner with the consent of the parents or guardian of such child.

Section 2. The refusal of a parent or other person having control of a child to administer or consent to the administration of any psychotropic drug to such child shall not, in and of itself, constitute grounds for the Department of Children and Families to take such child into custody or for any court of competent jurisdiction to order that such child be taken into custody by the department, unless such refusal causes such child to be neglected or abused, as defined in section 46b-120 of the general statutes.

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General Assembly
January Session,
2001

Substitute Bill No. 5701

AN ACT CONCERNING RECOMMENDATIONS FOR AND REFUSALS OF THE USE OF PSYCHOTROPIC DRUGS BY CHILDREN.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) Each local and regional board of education shall adopt and implement policies (1) prohibiting any school personnel from recommending the use of psychotropic drugs for any child, and (2) requiring that if school personnel perceive that a child may have a behavioral or psychological problem, a letter shall be sent to the parent or other person having control of the child recommending that an appropriate medical or behavioral health evaluation be conducted by a licensed physician.

Sec. 2. (NEW) Notwithstanding any provision of the general statutes or the regulations of Connecticut state agencies, the refusal of a parent or other person having control of a child to administer or consent to the administration of any psychotropic drug to such child shall not, in and of itself, constitute grounds for the Department of Children and Families to take such child into custody or for any court of competent jurisdiction to order that such child be taken into custody by the department.

PH	<i>Joint Favorable Subst.</i>
JUD	<i>Joint Favorable</i>
HS	<i>Joint Favorable</i>
ED	<i>Joint Favorable</i>

OLR Bill Analysis

sHB 5701

AN ACT CONCERNING RECOMMENDATIONS FOR AND REFUSALS OF THE USE OF PSYCHOTROPIC DRUGS BY CHILDREN.

SUMMARY:

This bill requires each local and regional board of education to implement policies (1) prohibiting school personnel from recommending that a child use psychotropic drugs and (2) requiring that a letter be sent to the child's parent or other person in control recommending an appropriate medical or behavioral health evaluation by a physician if school personnel perceive a child has behavioral or psychological problems.

The bill also specifies that a parent's refusal to administer or consent to administration of psychotropic drugs to a child does not, by itself, constitute grounds for (1) the Department of Children and Families (DCF) to take the child into custody or (2) a court to order the child be taken into DCF custody.

EFFECTIVE DATE: October 1, 2001

COMMITTEE ACTION

Public Health Committee

Joint Favorable Substitute

Yea 25 Nay 0

Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

Arizona

1 Be it enacted by the Legislature of the State of Arizona:
2 Section 1. Title 8, Arizona Revised Statutes, is amended by adding
3 chapter 12. to read:

4 CHAPTER 12

5 ADMINISTRATION OF PSYCHIATRIC DRUGS TO CHILDREN

6 ARTICLE 1. GENERAL PROVISIONS

7 8-1101. Administration of psychiatric drug or medication;
8 parental consent; tracking system; violation;
9 classification; definition

10 A. A PHYSICIAN WHO IS LICENSED PURSUANT TO TITLE 32, CHAPTER 13 OR 17
11 AND WHO WISHES TO PLACE A CHILD ON A PSYCHIATRIC DRUG OR MEDICATION SHALL
12 FIRST:

13 1. OBTAIN THE SIGNED INFORMED CONSENT OF THE CHILD S PARENT OR LEGAL
14 GUARDIAN. IF THE CHILD IS A WARD OF THE STATE, THE PHYSICIAN SHALL OBTAIN
15 THE CONSENT OF THE CHILD S GUARDIAN.

16 2. ALLOW A PEDIATRICIAN CHOSEN BY THE CHILD S PARENT OR LEGAL GUARDIAN
17 TO CONDUCT A PHYSICAL EXAMINATION OF THE CHILD. THE EXAMINATION SHALL TEST
18 FOR ALLERGIES, THYROID FUNCTION, ENDOCRINE FUNCTION, NUTRITIONAL PROBLEMS,
19 COMMON MEDICATION SENSITIVITIES AND ADVERSE REACTIONS TO ENVIRONMENTAL
20 FACTORS.

21 3. ADDRESS ANY MEDICAL CONDITIONS THAT ARE DISCOVERED PURSUANT TO
22 PARAGRAPH 2 OF THIS SUBSECTION.

23 B. THE DEPARTMENT OF HEALTH SERVICES SHALL TRACK ANNUALLY THE NUMBER
24 OF PSYCHIATRIC DRUGS OR MEDICATIONS PRESCRIBED FOR CHILDREN IN THIS STATE.
25 THE DEPARTMENT SHALL SUBMIT A REPORT OF ITS FINDINGS TO THE GOVERNOR, THE
26 PRESIDENT OF THE SENATE AND THE SPEAKER OF THE HOUSE OF REPRESENTATIVES ON OR
27 BEFORE NOVEMBER 15 EACH YEAR. THE DEPARTMENT SHALL PROVIDE A COPY OF THIS
28 REPORT TO THE SECRETARY OF STATE AND THE DIRECTOR OF THE ARIZONA STATE
29 LIBRARY, ARCHIVES AND PUBLIC RECORDS. THE REPORT SHALL NOT CONTAIN THE NAMES
30 OF ANY CHILD OR ANY CHILD S PARENT OR LEGAL GUARDIAN. A PHYSICIAN SHALL
31 COOPERATE WITH DEPARTMENT REQUESTS FOR INFORMATION.

32 C. A PHYSICIAN WHO VIOLATES THIS SECTION IS GUILTY OF A CLASS 3
33 MISDEMEANOR AND COMMITS AN ACT OF UNPROFESSIONAL CONDUCT.

34 D. FOR THE PURPOSES OF THIS SECTION, "PSYCHIATRIC DRUG OR MEDICATION"
35 MEANS:

- 36 1. ANTICONVULSANTS.
37 2. ANTIDEPRESSANTS.
38 3. BEZADIAZEPINES.
39 4. NEUROLEPTICS.

Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

California

Introduced by Senators Haynes and Oller

January 24, 2001

An act to add Section 725.5 to the Business and Professions Code, relating to the healing arts.

LEGISLATIVE COUNSEL'S DIGEST

SB 119, as introduced, Haynes. Healing arts: prescribing psychiatric medications for minors.

Existing law regulates the practices of healing arts licentiates and designates as unprofessional conduct certain acts committed by these licentiates, including those related to the violation of laws and regulations pertaining to prescription drugs. Under existing law, unprofessional conduct by licentiates is subject both to disciplinary action by the board that licensed the practitioner and to punishment as a crime in certain instances.

This bill would require a physician and surgeon, dentist, optometrist, or podiatrist before prescribing a psychiatric medication, as defined, for a minor to obtain informed consent, as specified, from the minor's parent or legal guardian and confirm that the minor has been examined by a pediatrician to eliminate the possibility that the minor's condition is the result of a physical condition. The bill would additionally require these licentiates to provide the minor's parent or legal guardian with a list of all of the minor's medications to submit when the prescription is dispensed. The bill would make the licentiate's failure to comply with any of these requirements unprofessional conduct.

Because the violation by a physician and surgeon or by a podiatrist of any law regulating dangerous drugs constitutes a crime, this bill would expand the scope of an existing crime by proscribing additional

conduct pertaining to dangerous drugs, thereby imposing a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. Section 725.5 is added to the Business and
2 Professions Code, to read:

3 725.5. (a) The following definitions apply for the purposes of
4 this section:

5 (1) "Legal guardian" means a person who has been appointed
6 the minor's guardian by a court of competent jurisdiction.

7 (2) "Licentiate" means a physician and surgeon, dentist,
8 optometrist, or podiatrist.

9 (3) "Minor" means a person under the age of 18 years who is
10 not married and has not been declared emancipated by a court of
11 law.

12 (4) "Parent" means the natural or adoptive parent of the minor.

13 (5) "Psychiatric medication" means any of the following types
14 of drugs:

15 (A) Anticonvulsants, including, but not limited to,
16 carbamazepine and divalproex sodium.

17 (B) Antidepressants, including, but not limited to, doxepin,
18 lithium, floxetine, fluvoxamine, paroxetine, sertraline,
19 venlafaxine, nefazodone, clomipramine, bupropion,
20 amitriptyline, protriptyline, imipramine, and buspirone.

21 (C) Benzodiazepines, including, but not limited to,
22 methylphenidate, dextroamphetamine, and pemoline.

23 (D) Neuroleptics, including, but not limited to,
24 chlorpromazine, triflupromazine, thioridazine, perphenazine,
25 prochlorperazine, fluphenazine, thiothixene, haloperidol,
26 loxapine, clozapine, and resperadone.

1 (b) Before prescribing a psychiatric medication for a minor, a
2 licentiate shall complete each of the following acts:

3 (1) Confirm that the minor has received a physical examination
4 by a pediatrician chosen by the minor's parent or legal guardian to
5 eliminate the possibility that the minor's current condition is the
6 result of an adverse or untreated physical condition.

7 (2) Confirm that any adverse or untreated physical condition
8 detected by the physical examination has been treated.

9 (3) Fully explain to the minor's parent or legal guardian the
10 nature of any psychiatric medication that the licentiate intends to
11 prescribe for the minor, including all possible side effects caused
12 by the psychiatric medication.

13 (4) Obtain written, informed consent signed by the minor's
14 parent or legal guardian, acknowledging that the parent or legal
15 guardian has given consent for the prescription of the psychiatric
16 medication for the minor and that the requirements of paragraphs
17 (1) to (3), inclusive, have been satisfied.

18 (c) A licentiate who prescribes a psychiatric medication for a
19 minor shall provide the minor's parent or legal guardian a list of
20 all medications the minor is currently taking to submit when the
21 prescription is submitted for dispensing.

22 (d) The licentiate shall submit to the California State Board of
23 Pharmacy a list of all psychiatric medications he or she has
24 prescribed for each minor. The board shall track the number and
25 kind of psychiatric medications prescribed for minors in the state
26 to ensure that reliable figures are available on an ongoing basis for
27 use by the Legislature and other state entities.

28 (e) The failure of a licentiate to comply with any of the
29 requirements of subdivisions (b) and (c) constitutes
30 unprofessional conduct and grounds for disciplinary action against
31 the licentiate by his or her licensing board.

32 SEC. 2. No reimbursement is required by this act pursuant to
33 Section 6 of Article XIII B of the California Constitution because
34 the only costs that may be incurred by a local agency or school
35 district will be incurred because this act creates a new crime or
36 infraction, eliminates a crime or infraction, or changes the penalty
37 for a crime or infraction, within the meaning of Section 17556 of
38 the Government Code, or changes the definition of a crime within

SB 119

— 4 —

- 1 the meaning of Section 6 of Article XIII B of the California
- 2 Constitution.

Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

Texas



TEXAS EDUCATION AGENCY

1701 North Congress Ave. ★ Austin, Texas 78701-1494 ★ 512/463-9734 ★ FAX: 512/463-9838 ★ <http://www.tea.state.tx.us>

Jim Nelson
Commissioner of Education

August 2, 2001

John Breeding, Ph.D., Director
Texans for Safe Education
2503 Douglas Street
Austin, Texas 78741

Dear Dr. Breeding:

This purpose of this letter is to respond to your request for clarification regarding the legal position of the Texas Education Agency (TEA) on the issue of whether public school personnel can require a child to take a psychoactive medication as a condition of attending school. You also inquire about TEA's position on the related issue of whether a public school can threaten to expel a child who is not put or continued on a psychoactive medication.

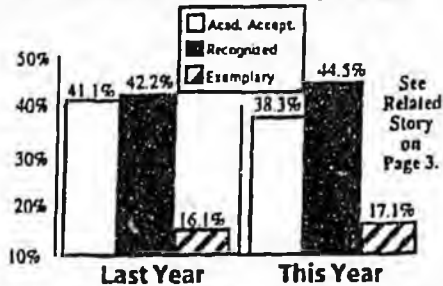
A public school's attempt to require a child to take a psychoactive medication as a condition of enrolling or attending school is unlawful. Threats to expel from public school a child who is not put or continued on a psychoactive medication are also unlawful. Such requirements violate rights guaranteed by both federal and state law, including a parent's rights to independently make decisions related to child rearing and education and to consent a child's medical treatment.

If you have additional concerns regarding these issues, please contact me at (512) 463-9720.

Sincerely,

David A. Anderson
General Counsel
Office of Legal Services

Texas School Quick Fact School District Accountability Ratings*



* Academically Unacceptable — 5 districts last year / 1 district this year.



Volume 18

Sept. 10, 2001

Issue 27

In This Week's Texas Education News:

- Ritalin-related warning. *Page 1.*
- Health insurance crisis. *Page 1.*
- School-finance news. *Page 2.*
- UIL panel to examine athletes' health issues. *Page 2.*
- Accountability ratings/dropouts. *Page 3.*

- *The courts:* Court denies Plano ISD's immunity claim in math lawsuit. *Page 3.*
- *News briefs:* Commissioner's master-appointment powers challenged, Houston ISD stops corporal punishment, San Antonio ISD sets minimum wages, "DROP." *Page 4.*
- *Attorney general:* County school land authority, school board elections. *Page 4.*

TEA Lawyer Issues Anti-Ritalin Warning

School district's can't legally require students to take "psychoactive" drugs as a condition of school enrollment, according to a letter by TEA legal counsel David Anderson.

Anderson's letter was written to the head of Texans for Safe Education (TFSE), a group opposed to the widespread prescribed use of Ritalin and other similar drugs by children who have been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) conditions.

The letter was released by the group during an Aug. 24 news conference at the Capitol.

The pertinent portion of Anderson's Aug. 2 letter to TFSE leader John Breeding says:

"A public school's attempt to require a child to take a psychoactive medication as a condition of enrolling or attending school is unlawful. Threats to expel from public school a child who is not put or continued on a psychoactive medication are also unlawful.

"Such requirements violate rights guaranteed by both federal and state law, including a parent's rights to independently make decisions related to child rearing and education and to consent a child's medical treatment."

Threatened With Expulsion

Breeding said he asked for Anderson's legal opinion because his group has heard from Texas parents whose children were threatened with expulsion from school if they refused to accept psychiatric evaluation and/or drugs.

Among those on hand to support the group's position were an Austin mother who spoke about her experience with her child's school trying to force her to put her son on drugs and SBOE member Judy Strickland of Plainview.

Strickland said that she was pleased that Anderson reinforced an SBOE resolution that passed in November 2000 that keeps teachers and administrators in the academic arena and leaves educational issues to parents and their preferred professionals.

The resolution, which was passed by an 8-6 SBOE vote, urges districts to respect the exclusive authority of physicians in determining the need for students to take Ritalin and similar

drugs. *The SBOE's resolution is available at:*

www.tea.state.tx.us/sboe/minutes/0011resolve.html#health

See also: *TEN*, Nov. 13, 2000, *Page 1*, and Dec. 4, 2000, for Texas-specific Ritalin-related articles.

School Health Insurance Problems Mushroom

The new state-backed school employee health insurance program won't begin actually offering coverage until 2002, but its effect is already being felt in a big way for districts and their employees.

The major controversies:

- **Draft plan** — Teacher groups in particular are complaining about the bottom line of a *draft health plan* under consideration by the TRS.

The major problem — according to a two-week media campaign being conducted by the Texas State Teachers Association — is that what the TRS is looking at could wind up costing many school employees more than they are paying for coverage right now.

But state Rep. Paul Sadler, who authored the state health plan bill, cautioned critics not to be too harsh on the TRS.

After all, Sadler reminded critics, insurance rates are going up, and it's unfair to compare this year's rates with what the TRS might be faced with charging for the new state plan next year.

- **Hit by Increases** — A large number of ISDs are being hit by moderate to large increases in the amounts they pay for health insurance coverage this year when compared to last year, and many are passing on some or all of the increases to their employees.

- **No Bids** — Small districts, in particular, are finding it difficult to get any health insurance bids this school year. And those that they do get, are high.

The *Austin American-Statesman* recently reported that insurance companies are saying that they are not handling schools any more because they aren't making any money on them.

Continued, Page 2

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Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

Utah

PRESCRIBING PSYCHIATRIC DRUGS OR MEDICATION

2001 GENERAL SESSION

STATE OF UTAH

Sponsor: Matt Throckmorton

This act modifies the Human Services Code. The act amends the definition of substantiated child abuse to exclude the failure to administer prescribed medication or course of treatment if the parent or legal guardian has not been notified of the opportunity to obtain a physical examination of the minor by a health care professional. The act authorizes the Division of Child and Family Services to report an individual to the appropriate licensing authority if the division has reason to believe the individual exceeded the individual's scope of practice by recommending medication for a minor.

This act affects sections of Utah Code Annotated 1953 as follows:

AMENDS:

62A-4a-116, as last amended by Chapters 304 and 321, Laws of Utah 2000

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **62A-4a-116** is amended to read:

62A-4a-116. Management information system -- Requirements.

(1) The division shall develop and implement a management information system that meets the requirements of this section and the requirements of federal law and regulation.

(2) With regard to all child welfare cases, the management information system shall:

(a) provide each caseworker with a complete history of each child in his caseload, including:

(i) all past action taken by the division with regard to that child and his siblings, the complete case history and all reports and information in the control or keeping of the division regarding that child and his siblings;

(ii) the number of times the child has been in foster care;

(iii) the cumulative period of time the child has been in foster care;

(iv) all reports of abuse or neglect received by the division with regard to that child's parent or parents, including documentation regarding whether each report was substantiated,

Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

Minnesota

K-12 Education Omnibus Bill

Minnesota Special Session

H.F. 2 / S.F. 6

Signed June 30, 2001 by Governor

ARTICLE 3

SPECIAL PROGRAMS

Section 1. Minnesota Statutes 2000, section 121A.41, subdivision 10, is amended to read:

Subd. 10. [SUSPENSION.] "Suspension" means an action by the school administration, under rules promulgated by the school board, prohibiting a pupil from attending school for a period of no more than ten school days. If a suspension is longer than five days, the suspending administrator must provide the superintendent with a reason for the longer suspension. This definition does not apply to dismissal from school for one school day or less, except as provided in federal law for a student with a disability. Each suspension action may include a readmission plan. The readmission plan shall include, where appropriate, a provision for implementing alternative educational services upon readmission and may not be used to extend the current suspension. **Consistent with section 125A.09, subdivision 3, the readmission plan must not obligate a parent to provide a sympathomimetic medication for the parent's child as a condition of readmission.** The school administration may not impose consecutive suspensions against the same pupil for the same course of conduct, or incident of misconduct, except where the pupil will create an immediate and substantial danger to self or to surrounding persons or property, or where the district is in the process of initiating an expulsion, in which case the school administration may extend the suspension to a total of 15 days. In the case of a student with a disability, the student's individual education plan team must meet immediately but not more than ten school days after the date on which the decision to remove the student from the student's current education placement is made. The individual education plan team shall at that meeting: conduct a review of the relationship between the child's disability and the behavior subject to disciplinary action; and determine the appropriateness of the child's education plan.

The requirements of the individual education plan team meeting apply when:

- (1) the parent requests a meeting;
- (2) the student is removed from the student's current placement for five or more consecutive days; or
- (3) the student's total days of removal from the student's placement during the school year

exceed ten cumulative days in a school year. The school administration shall implement alternative educational services when the suspension exceeds five days. A separate administrative conference is required for each period of suspension.

[EFFECTIVE DATE.] This section is effective the day following final enactment.

Sec. 8. Minnesota Statutes 2000, section 125A.09, subdivision 3, is amended to read:

Subd. 3. [INITIAL ACTION; PARENT CONSENT.] (a) The district must not proceed with the initial formal assessment of a child, the initial placement of a child in a special education program, or the initial provision of special education services for a child without the prior written consent of the child's parent or guardian. The refusal of a parent or guardian to consent may be overridden by the decision in a hearing held pursuant to subdivision 6 at the district's initiative.

(b) A parent, after consulting with health care, education, or other professional providers, may agree or disagree to provide the parent's child with sympathomimetic medications unless section 144.344 applies.

260A.01 [TRUANCY PROGRAMS AND SERVICES.]

(a) The programs in this chapter are designed to provide a continuum of intervention and services to support families and children in keeping children in school and combating truancy and educational neglect. School districts, county attorneys, and law enforcement may establish the programs and coordinate them with other community-based truancy services in order to provide the necessary and most effective intervention for children and their families. This continuum of intervention and services involves progressively intrusive intervention, beginning with strong service-oriented efforts at the school and community level and involving the court's authority only when necessary.

(b) Consistent with section 125A.09, subdivision 3, a parent's refusal to provide the parent's child with sympathomimetic medications does not constitute educational neglect.

[EFFECTIVE DATE.] This section is effective the day following final enactment.

Sec. 15. Minnesota Statutes 2000, section 260C.163, subdivision 11, is amended to read:

Subd. 11. [PRESUMPTIONS REGARDING TRUANCY OR EDUCATIONAL NEGLECT.] (a) A child's absence from school is presumed to be due to the parent's, guardian's, or custodian's failure to comply with compulsory instruction laws if the child is under 12 years old and the school has made appropriate efforts to resolve the child's

125A.08 [SCHOOL DISTRICT OBLIGATIONS.]

(a) As defined in this section, every district must ensure the following:

(1) All students with disabilities are provided the special instruction and services which are appropriate to their needs. Where the individual education plan team has determined appropriate goals and objectives based on the student's needs, including the extent to which the student can be included in the least restrictive environment, and where there are essentially equivalent and effective instruction, related services, or assistive technology devices available to meet the student's needs, cost to the district may be among the factors considered by the team in choosing how to provide the appropriate services, instruction, or devices that are to be made part of the student's individual education plan. The individual education plan team shall consider and may authorize services covered by medical assistance according to section 256B.0625, subdivision 26. The student's needs and the special education instruction and services to be provided must be agreed upon through the development of an individual education plan. The plan must address the student's need to develop skills to live and work as independently as possible within the community. **The individual education plan team must consider positive behavioral interventions, strategies, and supports that address behavior for children with attention deficit disorder or attention deficit hyperactivity disorder.** By grade 9 or age 14, the plan must address the student's needs for transition from secondary services to post-secondary education and training, employment, community participation, recreation, and leisure and home living. In developing the plan, districts must inform parents of the full range of transitional goals and related services that should be considered. The plan must include a statement of the needed transition services, including a statement of the interagency responsibilities or linkages or both before secondary services are concluded;

Senate Bill 230

Psychotropic Drugs For Children

Articles Against Use of Psychotropic Drugs

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WorldNetDaily

Thursday, October 11, 2001

ADHD: Another Doctor Handing-out Drugs

By Dr. Mary Ann Block

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The American Academy of Pediatrics is now on record for recommending drugs for Attention Deficit Hyperactivity Disorder (ADHD). This is nothing new. It has obviously been the common practice for years or else there would not be five million children in the United States taking psychiatric drugs. This rubber stamp of approval from the American Academy of Pediatrics may shoot those numbers even higher. While this should make the drug companies happy, I don't think it is a very safe or effective way to help our children. Here are some compelling facts which support my position on this controversial subject.

1. ADHD is a psychiatric diagnosis with no valid test to prove it exists.
2. ADHD was voted into existence by a show of hands.
3. Side-effects of the drugs used for ADHD include psychosis, paranoia, aggression, heart attack, cardiac arrhythmias and high blood pressure.
4. Ritalin has the same dependency profile as cocaine.
5. Ritalin treatment predisposes takers to cocaine's reinforcing effects.
6. The United States uses 90 percent of the world's Ritalin supply.
7. There are underlying health and learning issues which can cause attention and behavior problems.

ADHD is a subjective label

Attention Deficit Hyperactivity Disorder (ADHD) is officially a psychiatric label. In 1987, ADHD was literally voted into existence by the American Psychiatric Association and inserted into the Diagnostic and Statistical Manual of Mental Disorders (DSM). Psychiatrists write the book and decide what behaviors or groups of behaviors are psychiatric disorders.

Within one year of deciding to insert ADHD in the DSM, 500,000 children in the United States were diagnosed with the disorder. A common denominator of these psychiatric disorders is that

there is no objective way to define or to diagnose them. If you have high blood pressure, your doctor can objectively measure and diagnose the problem. If you have diabetes, your doctor can objectively measure your blood sugar and give you a diagnosis. There is no way to measure for a psychiatric diagnosis. It is this subjective standard that the American Academy of Pediatrics is recommending for pediatricians to use when deciding to give a child a mind-altering drug which carries many serious risks.

Drug risks

In addition to the most commonly prescribed drug, Ritalin, other drugs used for ADHD symptoms include Adderall, Dexedrine and Metadate (long-acting Ritalin), which are amphetamines or "speed" type drugs. Amphetamines are classified as controlled substances because they have a high likelihood of abuse. Ritalin is similar to cocaine, affects the same receptor sites in the brain and triggers the same effect on the body when taken in the same manner. In medical research, Ritalin and cocaine are used interchangeably. Ritalin is being sold and used by teenagers and college students as a street drug.

Adderall and Dexedrine are straight amphetamines. Another drug prescribed for children is Clonidine or Catapres, which is an adult high blood pressure medication. This "adult" drug has never been tested on children under the age of 18 and is not indicated for use for anyone under age 18.

The SSRI drugs, including Prozac, Paxil, Zoloft, Luvox and others are also used on children. These drugs list as possible side-effects heart problems, paranoia, suicide and aggressive behaviors. I have seen many patients who were prescribed these drugs by other doctors who have become extremely aggressive and suicidal while taking them.

There are many other side effects to the drugs prescribed for ADHD symptoms. I recommend to all my patients that they get a drug insert from the pharmacist or purchase a Physician's Desk Reference (PDR) for themselves. If the side effects sound worse than the problem, they might not choose to take the drug. The reason the PDR lists side effects is because they can and do occur. Everyone should decide individually if the benefit of taking the drug is worth the risk of the potential side effect.

Causes of attention and behavior problems

Every child deserves a complete medical work-up by a physician who understands that allergies, blood-sugar problems, learning problems, diet and nutrition can affect how a child feels, thinks and acts. When a child has attention and behavior problems, it is not ADHD. These children don't have psychiatric problems. They often have medical conditions or academic problems interfering with their attention and behavior.

In my practice, I see thousands of children from all over the world who have been damaged both physically and psychologically by the ADHD label and the drugs prescribed to them. Prior to seeing me, most of these children have never had a medical exam to rule out any health problems causing the symptoms. In fact, countless children have suffered frightening side-effects to the drugs before seeing me. After a comprehensive history and medical exam, I

have uncovered a variety of underlying health problems in my patients that are overlooked by other doctors. I have seen time and time again how the attention and behavior problems resolve after treating the identified health issues.

Drugs and behavior modification have no place in the treatment of these children, and doctors who use them are not taking the time to do the appropriate medical and educational work-ups. So if the American Academy of Pediatrics thinks we should be drugging these children, then ADHD might as well stand for Another Doctor Handing-out Drugs. Our children deserve better.

Dr. Mary Ann Block is an international expert and author on the treatment of ADHD without drugs. She has served as a peer reviewer for the Agency for Health-care Policy and Research and the American Academy of Pediatrics for the diagnosis and treatment of ear problems. Additionally, Dr. Block has been a guest on The Montel Williams Show and interviewed on CNN News, NBC's Home Page, Fox Network News, Extra, TBN, and The Today Show in New York as well as such magazines as Better Homes and Gardens and radio and newspapers across the country. She is scheduled to be a guest on this week's edition of CBS' "48 Hours" television program.

Baughman letter re ADHD and the drugs given to children.

In its ADHD treatment guideline, just released, the American Academy of Pediatrics (AAP) states (1) "The initiation of treatment requires the accurate establishment of a diagnosis of ADHD," and (2), that "the American Academy of Pediatrics' clinical practice guideline on diagnosis of children with ADHD [1] provides direction in appropriately diagnosing this disorder. Does their diagnosis guideline do any such thing?

In my letter to the editor of PEDIATRICS (journal of the AAP) regarding their previously published diagnosis guideline, I [2] wrote:

Clinical Practice Guideline opens: "Attention-deficit/hyperactivity disorder is the most common neurobehavioral disorder of childhood." "Neurobehavioral," implies an abnormality of the brain; a disease. And yet, no confirmatory, diagnostic, abnormality has been found. With six million children said to have it, most of them on addictive, dangerous, stimulants, ambiguity as to the scientific status of ADHD is not acceptable.

In medicine, physicians are responsible for determining whether a disease is present or not, i.e., whether or not an abnormality has been detected. If not, there is no medical/biological abnormality to treat; to make normal or more nearly normal. And yet many, throughout medicine, persist in referring to ADHD as a disease, hoping, it will justify medical/pharmacological interventions, and billing for them. In a recent article in—of all places--the Journal of the American Medical Association, Vastag [3]

proclaimed:

In 1999, Darin Dougherty, MD, and colleagues [4]...reported that people with ADHD have many more dopamine transporters than those without the condition.

Dougherty, et al, proved no such thing. They provided so little information about the drugs their subjects were on that their research could not be replicated, even if someone wished to try to do so. This was just another in a long line of false research claims and press releases, asserting that ADHD was an actual disease, when it is not—when, given it's wholly subjective nature—it never can be. The never-replicated claims of Zametkin et al [5], in 1990, sustained the epidemic-without-a-disease, through the nineties.

Nor does the lack of scientific proof stop those at the AAP from referring to ADHD as a disease, and urging that it be treated, as if it were, with methylphenidate (Ritalin) and other, addictive, dangerous, sometimes deadly, Schedule II, amphetamines.

In April [6] Stein, a co-chairperson on the APA Subcommittee on ADHD, wrote:

Factors that impact compliance (with prescription medication) include their belief that the treatment will be effective, the parents' understanding of the disease and how treatment will alter or ameliorate symptoms, and the quality of the therapeutic alliance between the clinician, child, and parent.

Here, without a doubt, and, without a shred of scientific proof, Stein, of the AAP, conveys that ADHD is a disease. Can there be any doubt the parent of a normal child, led to believe that

their child is "diseased"/ "abnormal," will have a different view of their child and of their child's corrective needs, than of the parent told honestly that ADHD is nothing but a set of normal behaviors in a wholly normal child.

If the AAP has proof that ADHD is a disease; that the children are abnormal, diseased, why don't they say so. Instead, they too, seem intent on conveying to the to patients and the public, albeit with no proof, that ADHD, a propaganda construct, is a disease, that children with it are "diseased"/ "abnormal."

At the November 16-18, 1998, National Institutes of Health Consensus Conference on ADHD, Carey [7], an invited speaker, made the following statements:

What is now most often described as ADHD in the United States appears to be a set of normal behavioral variations... This discrepancy leaves the validity of the construct in doubt.

ADHD behaviors are assumed to be largely or entirely due to abnormal brain function. The DSM-IV [the Diagnostic and Statistical Manual of Mental Disorders, which lists the diagnostic criteria of mental disorders] does not say so, but textbooks and journals do.

We see...that the causes of these behaviors called ADHD are entirely speculative. And yet... parents and children are being told that these behaviors are due to a brain malfunction. Can you not please strengthen the statement to discourage practitioners from making this statement when there is not adequate proof to support that at this time?"

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Nor is there the least bit of proof today, that ADHD is a bona fide disease, that the millions of children said to have it are diseased/abnormal and in need of such medical/biological/pharmacological treatment as is invariably urged upon them.

As I urged previously [3]:

It is apparent that virtually all professionals of the extended ADHD 'industry' convey to parents, and to the public-at-large, that ADHD is a 'disease' and that children said to have it are 'diseased'-'abnormal.' This is a perversion of the scientific record and a violation of the informed consent rights of all patients and of the public-at-large.

The wording of the AAP Guideline should be changed, forthwith, to reflect the scientific and medical facts of the matter.

In publishing this letter to the editor in the May issue of their journal, PEDIATRICS, no one from the APA or their Subcommittee on ADHD responded in the least to the questions I raised, nor did they stop referring to ADHD as a "neurobehavioral disorder" implying something neurologically (brain) abnormal/diseased within children thus labeled.

Their intentions seems clear: to continue to call normal children "abnormal"/"diseased," and to continue to "treat" them with methylphenidate (Ritalin) and other amphetamines of the Schedule II, controlled, designation, as if they were.

The first, abnormality/disease/chemical imbalance such children have, is that due to the drugs they are given.

This is not the legitimate, ethical, practice of medicine.

Sincerely,

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Q: Should schools use behavioral screening to find 'at risk' children?

Yes: Kids with serious emotional problems need to be identified early on and helped.

By James M. Kauffman
[\(click here to go to Bev's rebuttable\)](#)

"Behavioral screening" means selecting students who are at highest risk for behaving in a socially unacceptable manner. Such behavior degrades schools and short-circuits students' future.

Unlike psychological testing, behavioral screening does not delve into the student's mental life or psychological processes. It is merely a process of identifying students who are most likely to cause trouble to others and themselves. Public schools should use behavioral screening, but only if they follow it with actions shown to reduce the likelihood of problem behavior. By "problem behavior" I mean behavior that is very likely to be judged unacceptable or maladaptive -- fighting, intimidating others, mean-spirited teasing, disobedience to adults, disrespectful conduct, extreme social withdrawal and other ways of demonstrating a lack of social awareness or congeniality.

Some public schools have become places where obstreperous, mean, disrespectful, intimidating behavior is treated as "okay" and "normal." Properly implemented behavioral screening identifies students whose behavior is unacceptable, even if they are just starting to exhibit such bad conduct. And, if it is followed by best behavior-management practices,

behavioral screening allows teachers to nip these problems in the bud -- to prevent them from escalating into something worse.

Most teachers know which students probably are headed for trouble. However, most problem students aren't formally identified until they are about 15 years old and their problems are longstanding and severe -- way too late for prevention. Teachers do better in identifying high-risk youngsters of any age when they have a systematic way of describing kids' behavior and know just what to look for. The most accurate and reliable behavioral screening methods rely on teacher judgments guided by rating and observation instruments that have been field-tested. The best such instruments are the SSBD (Systematic Screening for Behavior Disorders) and the ESP (Early Screening Project), created and field-tested by educational researcher Hill M. Walker and his associates at the University of Oregon. Some school districts have purchased these instruments or adopted behavioral-screening policies. However, I do not know -- and I doubt anyone does -- which districts or states have attempted to implement behavioral screening and related preventive practices as field-tested and recommended by Walker and his colleagues or other prominent scientists.

Here's the essential question you have to ask when you weigh the pros and cons of behavioral screening: Would I rather let problems become intolerable before doing something about them or, alternatively, identify problems when they're not so bad and prevent them from getting worse? The simple fact is that you can't prevent something after it happens. Either you prevent it or you let it happen and then bemoan it.

The only reason to use behavioral screening in schools is prevention. School personnel and the general public increasingly call for the prevention of school shootings and other outrageous acts of violence. Preventing such incidents would save a lot of money, not to mention lives and misery. But ignorance and politics stand in the way. So we wait for catastrophe, then ask why it happened. Here are some arguments people trot out to defeat prevention, even while saying they want it. I discuss these in detail in "How We Prevent the Prevention of Emotional and Behavioral Disorders" in the journal *Exceptional Children* (Summer 1999).

We don't want to label and stigmatize kids. You can't prevent what you can't talk about, and you can't talk about something without a label for it. Furthermore, there is no credible evidence that labels and stigma are the problem. Kids behave badly, then get labeled -- not the other way around. And those who feel no guilt, those who experience no stigma attached to unacceptable behavior, are more likely headed for bigger trouble than those who do.

We don't want to "medicalize" or "psychologize" the problem. We haven't. We have made it a legal problem. False accusation, privacy, due process and other legal matters are the objections people tend to raise.

False positives are unacceptable. Every screening device produces some errors: false positives and false negatives. A false positive means the screening identifies someone it shouldn't have; a false negative means someone who should have been identified was overlooked. Which kind of error is more dangerous? It depends on the consequences. False positives -- for example, false convictions -- are what judges and juries try hardest to avoid. False negatives, which involve overlooking illnesses, are the dangers

doctors worry about most. Legally, we worry most about personal rights; medically, we worry most about health and safety. Educators, like physicians, should choose to be safe rather than sorry. In *Consilience: The Unity of Knowledge*, Edward O. Wilson puts it this way: "In ecology, as in medicine, a false positive diagnosis is an inconvenience, but a false negative diagnosis can be catastrophic. That is why ecologists and doctors don't like to gamble at all, and if they must, it is always on the side of caution. It is a mistake to dismiss a worried ecologist or a worried doctor as an alarmist." It is also a mistake to dismiss a worried teacher as an alarmist. Too often, educators' worries are dismissed until the problem is severe. Then, of course, it is too late for prevention, and the action demanded by the public and the law is suspension, expulsion or imprisonment.

Special education and related interventions don't work. Screening may result in special education or related services, such as counseling. Special education can and often does work well in preventing the catastrophic consequences of academic failure and unchecked misbehavior. Of course anything can be poorly implemented, producing bad results. But when special education and related programs are conducted well, identifying the students who need them and providing the services do more good than harm. False positives aren't as dangerous as false negatives.

We don't want to place any student in a restrictive environment. Every place is restrictive of some things and not of others. Schools should restrict bad behavior in an effective and humane way. Students should be placed in classes and schools where their unacceptable behavior and academic failure are restricted and their desirable conduct and academic learning effectively are encouraged.

We don't want to identify more students for special services; we already serve too many. If you want to prevent problems, then you have to identify more kids -- address problems earlier, which inevitably means identifying more students than we do now, when we wait for the problems to get out of hand.

Special education and related services cost too much. You have to spend more now on screening and prevention to save money in the long run. Prevention isn't free any way you cut it, but it's cheaper than the alternative. Most Americans, including elected representatives, don't take the long view. They'd rather have low taxes now or even tax cuts and ostensible legal protections than spend money on prevention that would save dollars down the road and make schools safer. Whose fault? We elect our representatives.

Don't worry, this kid will grow out of it. Such "developmental optimism" isn't often warranted in the case of aggressive, disruptive, disobedient, intimidating, can't-pay-attention behavior. All the evidence indicates this kind of behavior is poison for a child's future -- likely to get worse without appropriate management.

Too many minority kids get identified. Too few kids of every ethnic group are identified. The evidence is overwhelming that any observed disproportion in identification is not a result of overidentification of minority students but underidentification of others.

Diversity is to be welcomed, and deviance is in the eye of the beholder. Difference is not necessarily deviance. But some kinds of diversity are not okay, especially the disruption, aggression, academic failure, inattention,

disobedience and disrespect that are the primary targets of behavioral screening. Deviance is behavior that leads to unacceptable later outcomes, and we can define it away or deal with it as a reality.

But, let's suppose that a school, district or state decides to do behavioral screening, using a field-tested instrument such as the SSBD or ESP to guide the selection of kids at risk for worsening problems. Let's suppose they stay faithfully with the user's manual so that false positives and false negatives are minimized and the vast majority of the students identified by the screening really are headed for bigger trouble if we don't do something now. What should we do?

The popular view is that punishment is the key. Hammer them early with humiliation if not corporal punishment. Wrong. This is not smart for the long term. The real key is a highly structured program, instruction that lets kids know what's okay and what is not, that provides consistent positive and negative consequences for behavior. But, like anything else, if it's done poorly, it'll turn out badly.

If you want behavioral screening and prevention to work, then you have to follow screening with two ideas and implement them well. First, you need a good schoolwide discipline plan, one in which behavioral expectations are clear and consistent for all students. All teachers must carefully monitor students' behavior and follow through consistently and calmly with consequences for what they see. The emphasis must be on praise and recognition for desired behavior, not on punishment for transgression (although nonphysical, consistent, reasonable punishment for misbehavior is important). Second, you need good alternatives for the 5 or 6 percent who still misbehave. The plan must involve teaching appropriate conduct, much as one teaches anything else -- through direct instruction, guided practice, feedback and praise for making progress. Sometimes, but not always, this can be administered in the context of a regular school and classroom. Sometimes, such instruction needs to be done in a special class or school where the teaching can be more intensive and sustained.

Behavioral screening? Absolutely -- but only if we do it right and practice prevention. We can't prevent all problems, but we can improve the odds a lot.

No: Don't give educational experts another tool to 'psychologize' the school curriculum.

By B.K. Eakman

Now that much of America is resigned to high-schoolers blowing away their classmates, kindergartners kicking and biting their teachers and 8-year-olds playing sex instead of jump rope, the mental-health industry believes it finally has our attention. Psychologists are calling loudly for

mandatory, universal behavioral screening. Give them a license to inspect every 5-year-old, and they claim they can identify those at risk of becoming mentally unstable, antisocial and even violent. And if they can just intervene soon enough, without parental interference, they say they can turn these youngsters around.

Education experts Hill Walker and Herbert Severson of the Institute on Violence and Destructive Behavior at the University of Oregon's College of Education are but two among a large cottage industry of child experts pitching universal screening instruments to local school districts and state and federal agencies. The concept goes like this: Teachers are taught to match the classroom and playground conduct of pupils against a list of behavioral patterns. Certain markers (or "red flags") signal a child's need for professional help. These youngsters are referred to a school psychologist, counselor or other behavioral specialist, who determines what triggers troubled children's outbursts and teaches alternative ("adaptive") behaviors. Parents are enlisted to reinforce these alternatives while experts continue to monitor (track) each child's progress through observation and additional psychological testing.

The technical difference between "screening" and "psychological testing" is that the former concentrates on behavior patterns and the latter focuses on personality traits. In other words, a person can demonstrate abnormal behavior and still possess a "normal" personality. People often do extraordinary things, for example, in high-stress situations, but this isn't necessarily indicative of a subject's underlying personality traits.

If you find that distinction difficult to follow, imagine the dilemma of an average teacher faced with referring students for psychological counseling based on a list of red-flag signals for abnormality. An inexperienced teacher may check off the red-flag term "loner" for a child who is merely "reserved." If the youth is referred for counseling, the ensuing psychological tests and counseling may reveal that his parents practice modesty and private, as opposed to public, displays of emotion. Psychology tends to interpret this as "withholding affection," "rigidity," "intolerance," even "inhibition," in which case the counselor may teach the child adaptive behaviors designed to promulgate perverse ideas about tolerance. Moreover, psychological referral will have long-term ramifications for the child.

In a 1996 case, Allegheny County Parents Coalition vs. Western Psychiatric Institute and Clinic, a clinical screening instrument was developed under the auspices of the National Institute of Mental Health, apparently recast for school consumption under the name School-Wide Intervention Model, or SWIM. The program utilized, among other things, a diagnostic tool called the Disruptive Behaviors Disorders, or DBD, Rating Scale. The DBD was given to teachers to rate their students -- without the informed consent of parents. SWIM's ostensible purpose was to locate children with Attention-Deficit and/or Hyperactivity Disorder, or ADD/ADHD. The shocker came when parents in Pittsburgh's Gateway School District learned that ADD and ADHD were being used as markers (red flags) for schizophrenia -- and that, furthermore, responses would not be shared with parents but, rather, would go into a computer database. Despite legal intervention, parents still haven't seen their own youngsters' answers and, worse, parents cannot verify that school officials have erased the data as

promised.

The fact is, children have been exposed to screening mechanisms for years, surreptitiously and overtly. Inevitably, the line between personality testing and behavioral screening becomes blurred. Even standardized tests, which supposedly measure only academic knowledge, are rife with psycho-behavioral fishing expeditions. These run the gamut of self-reports, open-ended "prompts" and what-would-you-do-if queries. The testers assert that the primary goal is to screen for "maladjustment." The fact is that this involves probing the child's belief system as well as the attitudes of family members. Take, for example, Pennsylvania's infamous (and now renamed) Educational Quality Assessment, or EQA, in the 1980s. Sixty-one percent of the questions were similar to this: "There is a secret club at school called the Midnight Artists. They go out late at night and paint funny sayings and pictures on buildings. I would JOIN THE CLUB when I knew ... [a] my best friend had asked me to join; [b] Most of the popular students in school were in the club; [c] my parents would ground me if they found out I joined. The question above is typical of the "fishing probe: It is assumed that the child will join the club under some circumstance, including the desire to provoke parents.

The interpretive literature to such assessments contain the details laypeople don't see. The EQA's creators were looking for: "the child's locus of control," "willingness to receive stimuli," "amenability to change" and propensity for "conform[ing] to group goals." In English this means: Where is the child coming from? Is he easily influenced and gullible? Are his views firm or easy to change? Will he submit to group-think and go along to get along?

At the time of the uproar over EQA, both the test's developers and the government agencies that paid for its dissemination lied about its nature and purpose. It took alert parents four years and the intervention of congressional representatives to get an admission that the test's chief purpose was psychological screening.

Obviously, universal mandatory tests would eliminate the necessity for such obfuscation. With the recent spate of school shootings, today's dominating behavioral-psychology wing of the education establishment feels confident it can convince legislators to do away with pesky parental-consent forms and mandate its larger agenda: mass psychological testing, treatment and tracking.

Which brings us to the things behavioral experts aren't mentioning: the extent to which intimate and personal data already are collected and shared via computer; the technological inability to prove when or if computerized data are purged (destroyed); the long-term nature of psychological tracking; the planned level of family intervention; the poor track record of existing assessments and therapies; and the ulterior purposes to which collected personal data can be applied, such as modifying politically incorrect beliefs and worldviews. In other words, "psychologized education" can serve as a stealth version of politically correct propaganda.

Five-year-olds are easy to entrap. The way they respond to any given question (the so-called "prompt" will depend a lot on what happened that morning. If Johnny got into trouble for missing the school bus, he may insist his parents hate him. If he got a birthday cake, his parents love him.

Youngsters also misinterpret events. Yet, psychologists use such questionable data to make predictions about how students will react to future "stimuli".

The at-risk label, accurate or not, triggers intervention by psychologists and social-service agencies. When a child is referred for counseling, that fact becomes part of his permanent record. This is not a paper document in a manila folder, but an electronic portfolio.

The rapidly accelerating capability of computers coupled with the demand by government for state-federal compatibility ("cross-referenceability") means this information is slowly making its way into the child's future financial, employment and medical records. Loopholes in privacy laws make it difficult to stop a child's file from eventually landing on the desktops of executives, security officers or anybody with an ax to grind.

Counseling also triggers what is called an IEP (individual education plan), implying a "tailored" (or individualized) curriculum. Few parents realize that by giving schools permission to run an IEP for their child, they are giving officials permission to supersede the parent in a range of educational decisions. An educational Website, teachersfirst.com, describes the IEP as a working document that goes with the student from year to year and beyond, as he leaves high school and goes on to postsecondary training or the work environment. In other words, IEP involves tracking.

So, what do we do about wacko kids and prisonlike schools? First of all, we should reject 35 years of bad parenting advice. Psychologized education and parenting have resulted in adults transferring guidance and leadership to the child's peer group under the assumption that the children are being "socialized." Every parent used to know it wasn't in the best interests of young children to spend too much time with each other. The emphasis on socialization and group think has turned the old school cliques into Lord-of-the-Flies subcultures that indulge in brutal territorial exercises.

Second, reinstate concepts about right and wrong and shame and guilt. They are not the emotional cripples mainstream psychologists claim. Dissenting experts point out that guilt, for example, is a civilizing influence, implying personal responsibility. Guilt is harmful only if one takes responsibility for that which one can't control. But psychologists have convinced parents and policymakers that all behavior is outside one's control.

This is why psychotropic drugs are increasingly prescribed for bored, daydreaming and ants-in-the-pants conduct. But sleep centers around the country are discovering a horrifying side-effect: Kids on antidepressants frequently don't enter deep, Stage 4 sleep. Severe sleep deprivation results in heightened irritability, impaired judgment and uncontrollable rage.

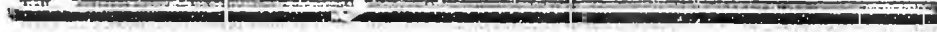
Given the pervasiveness of psychology in policymaking, parenting and teacher training, it is imperative that dissenting organizations and individuals of means launch massive numbers of private schools, franchise them, flood the nation with them, and refuse to accept one dime of federal or state money. The approach to education -- open or structured -- doesn't matter. Parents and market forces will decide which work and which don't.

Finally, fed-up teachers must redirect the focus of their unions. Instead of lobbying for gay rights, they should push for expulsion of students who

continually disrupt their classes, for training in diagnosing real learning problems and for backup by administrators.

The time for Band-Aid remedies is over. Education needs a transfusion.

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Senate Bill 230

Psychotropic Drugs For Children

Articles For Use of Psychotropic Drugs

AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY

PSYCHIATRIC MEDICATION FOR CHILDREN AND ADOLESCENTS PART I: HOW MEDICATIONS ARE USED

No. 21

(11/99)

Medication can be an effective part of the treatment for several psychiatric disorders of childhood and adolescence. A doctor's recommendation to use medication often raises many concerns and questions in both the parents and the youngster. The physician who recommends medication should be experienced in treating psychiatric illnesses in children and adolescents. He or she should fully explain the reasons for medication use, what benefits the medication should provide, as well as unwanted side-effects or dangers and other treatment alternatives.

Psychiatric medication should not be used alone. As undertaking a medication trial may mean adjusting doses of medicine over time and/or the use of additional medications to meet an individual youngster's needs, the use of medication should be part of a comprehensive treatment plan, usually including psychotherapy, as well as parent guidance sessions.

Before recommending any medication, the child and adolescent psychiatrist interviews the youngster and makes a thorough diagnostic evaluation. In some cases, the evaluation may include a physical exam, psychological testing, laboratory tests, other medical tests such as an electrocardiogram (EKG) or electroencephalogram (EEG), and consultation with other medical specialists.

Child and adolescent psychiatrists stress that medications which have beneficial effects also have unwanted side effects, ranging from just annoying to very serious. As each youngster is different and may have individual reactions to medication, close contact with the treating physician is recommended. Do not stop or change a medication without speaking to the doctor. Psychiatric medication should be used as part of a comprehensive plan of treatment, with ongoing *medical assessment* and, in most cases, *individual and/or family psychotherapy*. **When prescribed appropriately by a psychiatrist (preferably a child and adolescent psychiatrist), and taken as prescribed, medication may reduce or eliminate troubling symptoms and improve the daily functioning of children and adolescents with psychiatric disorders.**

Medication may be prescribed for psychiatric symptoms and disorders, including, but not limited to:

1. **Bedwetting**-if it persists regularly after age 5 and causes serious problems in low self-esteem and social interaction.
2. **Anxiety** (school refusal, phobias, separation or social fears, generalized anxiety, or posttraumatic stress disorders)-if it keeps the youngster from normal daily activities.

3. **Attention deficit hyperactivity disorder**-marked by a short attention span, trouble concentrating and restlessness. The child is easily upset and frustrated, often has problems getting along with family and friends, and usually has trouble in school.
4. **Obsessive-compulsive disorder**-recurring obsessions (troublesome and intrusive thoughts) and/or compulsions (repetitive behaviors or rituals such as handwashing, counting, checking to see if doors are locked) which are often seen as senseless but which interfere with a youngster's daily functioning.
5. **Depressive disorder**-lasting feelings of sadness, helplessness, hopelessness, unworthiness and guilt, inability to feel pleasure, a decline in school work and changes in sleeping and eating habits.
6. **Eating disorder**-either self-starvation (anorexia nervosa) or binge eating and vomiting (bulimia), or a combination of the two.
7. **Bipolar (manic-depressive) disorder**-periods of depression alternating with manic periods, which may include irritability, "high" or happy mood, excessive energy, behavior problems, staying up late at night, and grand plans.
8. **Psychosis**-symptoms include irrational beliefs, paranoia, hallucinations (seeing things or hearing sounds that don't exist) social withdrawal, clinging, strange behavior, extreme stubbornness, persistent rituals, and deterioration of personal habits. May be seen in developmental disorders, severe depression, schizoaffective disorder, schizophrenia, and some forms of substance abuse.
9. **Autism**-(or other pervasive developmental disorder such as Asperger's Syndrome)-characterized by severe deficits in social interactions, language, and/or thinking or ability to learn, and usually diagnosed in early childhood.
10. **Severe aggression**-which may include assaultiveness, excessive property damage, or prolonged self-abuse, such as head-banging or cutting.
11. **Sleep problems**-symptoms can include insomnia, night terrors, sleep walking, fear of separation, anxiety.

For additional information about psychiatric medications see Facts for Families:

#29 Psychiatric Medication for Children and Adolescents: Part II-Types of Medications, and

#51 Psychiatric Medications for Children and Adolescents: Part III-Questions to Ask.

For additional information see Facts for Families:

#00 Definition of a Child and Adolescent Psychiatrist,

#25 Know Where to Seek Help for Your Child, and

#52 Comprehensive Psychiatric Evaluation.

See also: *Your Child* (1998 Harper Collins)/*Your Adolescent* (1999 Harper Collins).

The American Academy of Child and Adolescent Psychiatry (AACAP) represents over 6,900 child and adolescent psychiatrists who are physicians with at least five years of additional training beyond medical school in general (adult) and child and adolescent psychiatry.

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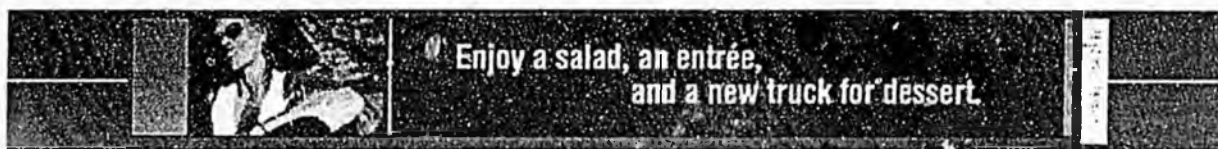
**For more information
about "Your Child"**

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Treatment of Attention Deficit Disorders

Attention Deficit Disorder

ADHD can take quite a toll. It is tough for the individual who must cope with daily frustrations. It is rough on family members whose lives are regularly disrupted by outbursts, temper tantrums or other misbehavior.

It's normal for parents to feel helpless and confused about the best ways to handle their child in these situations. Because kids with ADHD do not purposely decide to act up or not pay attention, traditional discipline -- like spanking, yelling at, or calmly trying to reason with your son or daughter -- usually does not work. Fortunately there are treatment options that can help alleviate the symptoms of ADHD and arm families with the tools needed to better handle problem behaviors when they arise.

These interventions include:
psychosocial interventions
medication
a combination of these two approaches

Psychosocial interventions

Research has shown that medication alone is not always sufficient. For more than two decades, psychosocial interventions such as parent training and behavioral modifications have been used for children with ADHD. A key goal is to teach parents and educators methods that equip them to better handle problems when they arise. In this approach they learn how to reward a child for positive behaviors and how to discourage negative behaviors. This therapy also seeks to teach a child techniques that can be used to control inattention and impulsive behaviors.

Preliminary research has shown that behavior modification is also effective for children with severe oppositional problems. Such an approach may lower the number or severity of oppositional behaviors, although the underlying condition -- ADHD -- remains.

Medications

Used properly, medicines such as methylphenidate hydrochloride (Ritalin) and other stimulants help suppress and regulate impulsive behavior. They squelch hyperactivity, improve social interactions and help people with ADHD concentrate, enabling them to perform better in school and at work.

These medications also may help children with co-existing disorders control

destructive behaviors. When used with proper medical supervision, they are considered generally safe and free of major unwanted side effects. (Some children may experience insomnia, stomachache or headache.) They rarely make children feel high or, on the flip side, overly sleepy or out of it. Although not known to be a significant problem, height and weight should be monitored with long-term use of these medications. These medications are not considered addictive in children. However, they should be carefully monitored in teen-agers and adults because they can be misused.

It is important to understand that these medications are not a cure-all, but they can be highly effective when used appropriately in the right dosage for each individual. In fact, as many as nine out of 10 children do better when they are taking one of the most commonly used stimulants. However, in combination with other techniques such as behavior modification or counseling, symptoms may improve even more. Researchers are currently evaluating the effectiveness of medications in combination with these other approaches to determine the best route to take.

Individuals taking any of the medications listed below should see their doctor regularly for a check-up to review the types and timing of ADHD symptoms. The benefits and potential risks of using these medications also should be discussed before the first prescription is filled.

The most commonly used stimulants are:

- methylphenidate hydrochloride (Ritalin)
- dextroamphetamine sulfate (Dexedrine or Dextrostat)
- a dextroamphetamine/amphetamine formulation (Adderall)

When these front-line medications are not effective, physicians sometimes opt to use one of the following:

- bupropion hydrochloride (Wellbutrin) -- an antidepressant that has been shown to decrease hyperactivity, aggression and conduct problems.
- imipramine (Tofranil) or nortriptyline (Pamelor) -- these antidepressants can improve hyperactivity and inattentiveness. They can be especially helpful in children experiencing depression or anxiety.
- clonidine hydrochloride, (Catapres) -- used to treat high blood pressure, clonidine also can help manage ADHD and treat conduct disorder, sleep disturbances or a tic disorder. Research has shown it decreases hyperactivity, impulsivity and distractibility, and improves interactions with peers and adults.
- guanfacine, (Tenex) -- this antihypertensive decreases fidgeting and restlessness and increases attention and a child's ability to tolerate frustration. A study of children who also have Tourette syndrome showed the medication improved vocal and motor tics as well.
- Pemoline (Cylert) -- is no longer considered a first- or second-line treatment due to concerns about the risk of liver dysfunction.

Other treatments

Some people with ADHD benefit from emotional counseling or psychotherapy. In this approach, counselors help patients deal with their emotions and learn ways to cope with their thoughts and feelings in a more general sense.

Group therapy and parenting education can help many children and their

families master valuable skills or new behaviors. The goal is to help parents learn about the particular problems their children with ADHD have, and give them ways to handle those problems when they arise. Likewise, children can be taught social skills and gain exposure to the same techniques the parents are learning, easing the way for those methods to be incorporated at home.

Support groups link families or adults who share similar concerns.

Therapies that have not been scientifically proved to be helpful in the treatment of ADHD include:

- herbal products
- restrictive or supplemental diets
- allergy treatments
- megavitamins
- chiropractic adjustment
- biofeedback
- perceptual motor training
- medications for inner ear problems
- yeast infection treatments
- pet therapy
- play therapy
- eye training
- colored glasses

Dartmouth Medical School
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MAKING HISTORY

The New York Times
ON THE WEB

January 4, 2001

Report Seeks Mental Help for Children

By REUTERS

WASHINGTON, Jan. 3 — One in 10 American children suffers from some sort of mental health problem, but only 20 percent are being treated for it, Surgeon General David Satcher said in a report today.

"We are talking about depression, which is probably the most common, but also attention deficit hyperactivity disorder and obsessive-compulsive disorder," Dr. Satcher said in a telephone interview.

The report called for an overhaul of children's mental health programs, including training teachers and doctors to recognize problems and doing more research.

"We need a system in place that helps us recognize problems early," Dr. Satcher said.

An overhaul would cost money, Dr. Satcher acknowledged, but he said society was already paying a high price for the lack of treatment.

"When we don't respond, children are dumped into the juvenile justice system in many cases," he said, adding that others ended up in special education classes or on welfare.

"The burden of suffering experienced by children with mental health needs and their families has created a health crisis in this country," Dr. Satcher wrote in the report.

The report called for promoting public awareness of children's mental health issues, reducing the stigma associated with mental illness and improving the assessment and recognition of mental health needs in children.

Dr. Satcher said the issue of treating mental illness in children had been muddled by such debates as whether too many or too few children were being treated with drugs for attention deficit hyperactivity disorder. "We believe there are children being inappropriately treated," he said. "But we also believe there are a lot of children who have not been diagnosed and who could benefit from treatment."

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For Immediate Release
February 13, 2002

Contact: Peg Nichols
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**CHADD CONCERNED ABOUT LEGISLATIVE EFFORTS DESIGNED TO RESTRICT
PHYSICIAN & TEACHER ROLE IN TREATMENT OF AD/HD**

California Hearing Latest in Series of Hearings Throughout Country

Landover, MD—CHADD, the nation's leading advocacy organization serving those with Attention-Deficit/Hyperactivity Disorder (AD/HD), is deeply concerned about growing legislative efforts designed to restrict the role that physicians and teachers can play in advising families about the use of medication for the treatment of AD/HD. California is the latest of several state legislatures to consider such a proposal.

California SB 119, addressed today in a California State Senate public hearing, would criminalize physicians if statutory procedures were not followed when a physician prescribes a psychiatric medication to a legal minor. The legislation makes it a crime for a physician to prescribe a psychiatric medication to a legal minor until the physician has received a physical exam report from a pediatrician and had all physical conditions treated prior to prescribing the medication; the physician has fully explained all possible side effects to the parents; and has obtained written informed consent from the parents.

"CHADD believes that all families should have access to the best, evidence-based science in the diagnosis and treatment of AD/HD. We are therefore concerned when legislation is proposed which undermines this critical access," said E. Clarke Ross, Chief Executive Officer of CHADD. "While many of these proposals are designed to ensure more appropriate prescribing and dispensing of psychiatric medications, others are designed to discourage the administration of psychotropic medications in schools. Consequently, while some of the proposals are resulting in improved medical-practitioner-educator-family communication, others are replacing the science underlying the diagnosis and treatment of AD/HD with unproven theories and concepts."

The Surgeon General of the United States and the National Institute of Mental Health¹, as well as leading medical societies such as the American Academy of Pediatrics (AAP), American Psychiatric Association (APA), and the American Academy of Child and Adolescent Psychiatry (AACAP), recognize that medication, under the prescription of a treating medical professional and when taken as prescribed—along with other non-medication interventions—provides an effective foundation for the treatment of AD/HD. This is called multi-modal treatment.

Multi-modal treatment is a long-term management plan that combines medication with a variety of other treatment interventions designed to produce the best results. Such interventions include individualized education plans, special education resources when needed, behavioral therapy, family training and counseling. CHADD endorses a multi-modal approach to the treatment of AD/HD.

-more-

¹ United States Surgeon General of the United States. Report on Mental Health. Washington, DC: Department of Health and Human Services, December 1999.

CHADD's Position on Legislative Efforts Designed to Restrict Physicians' Roles

CHADD believes that legislation must not limit or undermine the ability of a medical professional, within their scope of practice, from treating AD/HD based on the most widely accepted evidence-based medicine. CHADD encourages all families and physicians to follow best practice assessment and treatment guidelines being uniformly implemented throughout the nation. Using the force of law and agencies of government—particularly criminal penalties—to monitor and enforce best practice treatment guidelines is an ineffective approach at best and disastrous approach at worst. Instead, ongoing training and education in the diagnosis and treatment of AD/HD should be encouraged among all physicians.

CHADD's Position on Teacher Involvement in Recognizing AD/HD

The above principles also apply to teachers, given the critical role they play in assisting children and their families when AD/HD is suspected. Teachers are frequently the first to recognize learning, functioning, and behavioral problems in the school setting and therefore should be able to advise parents of such observations. CHADD believes that professionals should act within their professional scope of practice; thus, school personnel should not recommend the use of medication. Medication assessment and prescription is the role of physician. However, teachers should be able to recommend a comprehensive and complete medical assessment by persons licensed to perform such evaluations. Because students spend a significant portion of their day in the classroom, the vital role teachers play in providing observations to the diagnosing professionals cannot be underestimated. Effective communication between teachers, professionals and parents is essential and strongly encouraged.

With over 22,000 members and 200 affiliates nationwide, CHADD works to improve the lives of people affected by AD/HD through collaborative leadership, advocacy, research, education and support: CHADD CARES. For additional information about AD/HD or CHADD, please contact the CHADD National Call Center at 1-800-233-4050, or visit the CHADD website at www.chadd.org

For Further Information on this Issue: Members of the media should contact Peg Nichols, Director of Communications and Media Relations, at 301-306-7070, extension 102. Legislative staff should contact Stephen Spector, Director of Public Policy, at 301-306-7070, extension 109.

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International Consensus Statement on ADHD

January 2002

We, the undersigned consortium of international scientists, are deeply concerned about the periodic inaccurate portrayal of attention deficit hyperactivity disorder (ADHD) in media reports. This is a disorder with which we are all very familiar and toward which many of us have dedicated scientific studies if not entire careers. We fear that inaccurate stories rendering ADHD as myth, fraud, or benign condition may cause thousands of sufferers not to seek treatment for their disorder. It also leaves the public with a general sense that this disorder is not valid or real or consists of a rather trivial affliction.

We have created this consensus statement on ADHD as a reference on the status of the scientific findings concerning this disorder, its validity, and its adverse impact on the lives of those diagnosed with the disorder as of this writing (January 2002).

Occasional coverage of the disorder casts the story in the form of a sporting event with evenly matched competitors. The views of a handful of non-expert doctors that ADHD does not exist are contrasted against mainstream scientific views that it does, as if both views had equal merit. Such attempts at balance give the public the impression that there is substantial scientific disagreement over whether ADHD is a real medical condition. In fact, there is no such disagreement --at least no more so than there is over whether smoking causes cancer, for example, or whether a virus causes HIV/AIDS.

The U.S. Surgeon General, the American Medical Association (AMA), the American Psychiatric Association, the American Academy of Child and Adolescent Psychiatry (AACAP), the American Psychological Association, and the American Academy of Pediatrics (AAP), among others, all recognize ADHD as a valid disorder. While some of these organizations have issued guidelines for evaluation and management of the disorder for their membership, this is the first consensus statement issued by an independent consortium of leading scientists concerning the status of the disorder. Among scientists who have devoted years, if not entire careers, to the study of this disorder there is no controversy regarding its existence.

ADHD and Science

We cannot over emphasize the point that, as a matter of science, the notion that ADHD does not exist is simply wrong. All of the major medical associations and government health agencies recognize ADHD as a genuine disorder because the scientific evidence indicating it is so is overwhelming.

Various approaches have been used to establish whether a condition rises to the level of a valid medical or psychiatric disorder. A very useful one stipulates that there must be scientifically established evidence that those suffering the condition have a serious deficiency in or failure of a physical or psychological mechanism that is universal to humans. That is, all humans normally would be expected, regardless of culture, to have developed that mental ability.

And there must be equally incontrovertible scientific evidence that this serious deficiency leads to harm to the individual. Harm is established through evidence of increased mortality, morbidity, or impairment in the major life activities required of one's developmental stage in life. Major life activities are those domains of functioning such as education, social relationships, family functioning, independence and self-sufficiency, and occupational functioning that all humans of that developmental level are expected to perform.

As attested to by the numerous scientists signing this document, there is no question among the world's leading clinical researchers that ADHD involves a serious deficiency in a set of psychological abilities and that these deficiencies pose serious harm to most individuals possessing the disorder. Current evidence indicates that deficits in behavioral inhibition and sustained attention are central to this disorder -- facts demonstrated through hundreds of scientific studies. And there is no doubt that ADHD leads to impairments in major life activities, including social relations, education, family functioning, occupational functioning, self-sufficiency, and adherence to social rules, norms, and laws. Evidence also indicates that those with ADHD are more prone to physical injury and accidental poisonings. This is why no professional medical, psychological, or scientific organization doubts the existence of ADHD as a legitimate disorder.

The central psychological deficits in those with ADHD have now been linked through numerous studies using various scientific methods to several specific brain regions (the frontal lobe, its connections to the basal ganglia, and their relationship to the central aspects of the cerebellum). Most neurological studies find that as a group those with ADHD have less brain electrical activity and show less reactivity to stimulation in one or more of these regions. And neuro-imaging studies of groups of those with ADHD also demonstrate relatively smaller areas of brain matter and less metabolic activity of this brain matter than is the case in control groups used in these studies.

These same psychological deficits in inhibition and attention have been found in numerous studies of identical and fraternal twins conducted across various countries (US, Great Britain, Norway, Australia, etc.) to be primarily inherited. The genetic contribution to these traits is routinely found to be among the highest for any psychiatric disorder (70-95% of trait variation in the population), nearly approaching the genetic contribution to human height. One gene has recently been reliably demonstrated to be associated with this disorder and the search for more is underway by more than 12 different scientific teams worldwide at this time.

Numerous studies of twins demonstrate that family environment makes no significant separate contribution to these traits. This is not to say that the home environment, parental management abilities, stressful life events, or deviant peer relationships are unimportant or have no influence on individuals having this disorder, as they certainly do. Genetic tendencies are expressed in interaction with the environment. Also, those having ADHD often have other associated disorders and problems, some of

which are clearly related to their social environments. But it is to say that the underlying psychological deficits that comprise ADHD itself are not solely or primarily the result of these environmental factors.

This is why leading international scientists, such as the signers below, recognize the mounting evidence of neurological and genetic contributions to this disorder. This evidence, coupled with countless studies on the harm posed by the disorder and hundreds of studies on the effectiveness of medication, buttresses the need in many, though by no means all, cases for management of the disorder with multiple therapies. These include medication combined with educational, family, and other social accommodations. This is in striking contrast to the wholly unscientific views of some social critics in periodic media accounts that ADHD constitutes a fraud, that medicating those afflicted is questionable if not reprehensible, and that any behavior problems associated with ADHD are merely the result of problems in the home, excessive viewing of TV or playing of video games, diet, lack of love and attention, or teacher/school intolerance.

ADHD is not a benign disorder. For those it afflicts, ADHD can cause devastating problems. Follow-up studies of clinical samples suggest that sufferers are far more likely than normal people to drop out of school (32-40%), to rarely complete college (5-10%), to have few or no friends (50-70%), to under perform at work (70-80%), to engage in antisocial activities (40-50%), and to use tobacco or illicit drugs more than normal. Moreover, children growing up with ADHD are more likely to experience teen pregnancy (40%) and sexually transmitted diseases (16%), to speed excessively and have multiple car accidents, to experience depression (20-30%) and personality disorders (18-25%) as adults, and in hundreds of other ways mismanage and endanger their lives.

Yet despite these serious consequences, studies indicate that less than half of those with the disorder are receiving treatment. The media can help substantially to improve these circumstances. It can do so by portraying ADHD and the science about it as accurately and responsibly as possible while not purveying the propaganda of some social critics and fringe doctors whose political agenda would have you and the public believe there is no real disorder here. To publish stories that ADHD is a fictitious disorder or merely a conflict between today's Huckleberry Finns and their caregivers is tantamount to declaring the earth flat, the laws of gravity debatable, and the periodic table in chemistry a fraud. ADHD should be depicted in the media as realistically and accurately as it is depicted in science -- as a valid disorder having varied and substantial adverse impact on those who may suffer from it through no fault of their own or their parents and teachers.

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Senate Bill 230

Psychotropic Drugs For Children

Informational Articles On Use of Psychotropic Drugs

Original article:
<http://my.webmd.com/content/article/1728.84235>

Do Laws Limiting School Involvement in ADHD Do More Harm Than Good?

Experts Say Schools Have Role to Play in Management of Mental Disorder

By *Steve Mitchell*

WebMD Medical News

July 18, 2001 (Washington) -- In response to reports of parents being pressured by school officials to place their children on Ritalin or similar drugs to treat attention deficit hyperactivity disorder, or ADHD, several state legislatures are enacting or considering legislation that may discourage schools from playing doctor.

But these laws may do more harm than good, because schools can play vital roles in diagnosing ADHD as well as treating the condition, experts say.

According to the National Institute of Mental Health, approximately 4.1% of children between the ages of 9 and 17 have ADHD, which includes the symptoms of an inability to stay focused or finish tasks. Children with this condition may also have depressive and anxiety disorders or engage in drug abuse.

Connecticut recently became the first state to enact legislation that specifically prohibits school officials from recommending psychotropic drugs -- the class of drug that Ritalin belongs to -- to parents for their children. Under the Connecticut law, school personnel can, however, recommend that children be evaluated by a doctor.

Colorado's Board of Education enacted a resolution in 1999 to encourage the use of classroom management modifications to deal with behavioral problems rather than prescription medications.

Other states, including Washington, North Carolina, Hawaii, and Georgia, have passed legislation that calls for a closer look at the use of Ritalin and other ADHD drugs in children and their effect on learning.

"It's not the role of school psychologists or personnel to recommend medication," says Clarke Ross, DPA, CEO of the patient advocacy group Children and Adults with Attention-Deficit/Hyperactivity Disorder, or CHADD, which is supportive of the type of legislation that Connecticut enacted. School officials' role is "to identify learning problems of children and to encourage medical evaluation," he tells WebMD.

But Daniel Lieberman, MD, a psychiatrist and director of outpatient psychiatry at George Washington University in Washington, takes a different view. He agrees that "it's totally inappropriate for school officials to press a parent to place a child on medication." However, he doesn't believe that legislation is an appropriate response to this situation.

He fears that legislation may discourage teachers from taking action when they know there's a problem for fear of being punished under the law. Then "parents would never hear about what's happening in school [with their children]."

In some cases, a child with ADHD could go undiagnosed, Lieberman says. This is because the condition can sometimes only become apparent "in highly structured situations," such as school, and the parents may not pick up on the symptoms at home.

And when it comes to diagnosing the condition, even doctors can have difficulty. Some doctors are not familiar with proper guidelines for diagnosing ADHD and hence some underdiagnose the condition and others overdiagnose it, according to the National Institute of Mental Health.

Citing a 1999 report from the U.S. Surgeon General, Ross says that a proper diagnosis of ADHD requires a comprehensive and complete examination by a trained professional. "This is not something you do in one session," he says, noting that the doctor needs to be able to identify a pattern of behaviors that are repeated over time to accurately diagnose ADHD.

The American Academy of Pediatrics shares Lieberman's views that teachers may have a role to play in the management of ADHD. The AAP plans to release guidelines in October helping doctors determine the best way to treat ADHD, and one component of the guidelines will point out the importance of "teachers working with parents not only to diagnose the condition but to help treat it," a source at AAP tells WebMD.

This is because appropriate treatment of this condition should involve not only medication, such as the commonly prescribed Ritalin or Adderall, but behavioral and educational therapy. So schools can play a role in ensuring that ADHD children receive appropriate educational intervention, the AAP source says.

Another issue is whether schools pushing Ritalin is a widespread problem or a matter of a few isolated cases. Despite reports in the media of parents being pressed by school officials to place their children on ADHD medication, no formal surveys have ever been done to assess the extent of the problem. So "whether we have a few cases or a lot remains to be seen," Lieberman says.

But Lieberman says he has not had any of his patients complain about it, and Ross says no incidence like this has been reported by CHADD members. Ross, whose son has ADHD, adds that he doesn't really believe it's a problem across the country.

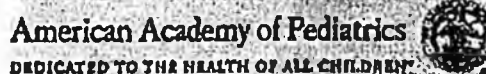
Even the Connecticut law was based on anecdotal evidence of parents complaining that schools were pressuring them, says David Wilkins, spokesman for Rep. Lenny Wilkins, who authored the legislation. No formal, scientific evaluations of the problem were ever done, Wilkins tells WebMD.

Ross notes that similar legislation has not been proposed at the federal level, and he doubts that it ever will be. This is because the federal government funds less than 10% of elementary and secondary schools, so the issue of ADHD drugs in these schools remains largely the purview of state and local governments, he says.

Medically Reviewed

By Dr. Charlotte Grayson

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Press Release

AAP RELEASES NEW GUIDELINES FOR TREATMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

Below is a news release on a treatment guideline published in the October issue of Pediatrics, the peer-reviewed scientific journal of the American Academy of Pediatrics (AAP).

For Release: October 1, 2001, 12:01 a.m. (ET)

CHICAGO - The American Academy of Pediatrics (AAP) released new recommendations today for treating school-age children with attention-deficit/hyperactivity disorder (ADHD). This guideline is intended for primary care physicians who have already accurately established an ADHD diagnosis. Last year the AAP released guidelines for diagnosing ADHD.

ADHD is a condition of the brain that makes it difficult for children to control their behavior in school and social settings. It is one of the most common chronic conditions of childhood and affects between 4 and 12 percent of all school-age children. About 3 times more boys than girls are diagnosed with ADHD.

Children with ADHD may experience significant functional problems such as school difficulties, academic underachievement, troublesome relationships with family members and peers, and behavioral problems. Different children have different symptoms or problems with ADHD.

The new standardized AAP guidelines were developed by a panel of medical, mental health and educational experts. The AAP partnered with The Agency for Healthcare Research and Quality, and the Evidence-based Practice Center at McMaster University in Canada to develop the evidence base of literature on the topic. The recommendations were based on scientific studies that carefully evaluated treatments of school-age children with ADHD.

The new guidelines include the following recommendations:

- Primary care clinicians should establish a treatment program that recognizes ADHD as a chronic condition. This implies the need for education about the condition, and a sustained monitoring system to track the effects of treatment and developmental changes in behavior.
- The treating clinician, parents, and child, in collaboration with school personnel, should specify appropriate goals to guide management. Goals should relate to the specific problems of the individual child, e.g., school performance, difficulty finishing tasks, problems with interactions with schoolmates.
- If appropriate, the clinician should recommend behavior therapy and/or stimulant medication to improve specific symptoms in children with ADHD. The guideline provides a review of the scientific evidence for recommending medication and behavior therapy.
- When the treatment for a child with ADHD has not met its goals, clinicians should re-evaluate the original diagnosis, all appropriate treatments, adherence to the treatment

plan, and coexisting conditions, including learning disabilities and mental health conditions.

- The clinician should provide a periodic and systematic follow-up for the child with ADHD. Monitoring should be directed to the child's individual goals, and any adverse effects of treatment, with information gathered from parents, teachers and the child. The guidelines recommend areas for future research in treatment options, long-term outcomes and other areas in the management of children with ADHD.

Already one of the most common and most studied conditions of childhood, ADHD treatment has increased in recent years. Treatments, both medications and behavior therapy, improve the functioning of most children with ADHD. Long-term management of ADHD requires active teamwork among clinicians, parents and teachers to help assure the best outcomes. While there is no proven cure for ADHD at this time, and the cause is unclear, research is ongoing to learn more about the role of the brain in ADHD and the best ways to treat the disorder.

The American Academy of Pediatrics is an organization of 55,000 primary care pediatricians, pediatric medical subspecialists and pediatric surgical specialists dedicated to the health, safety and well-being of infants, children, adolescents and young adults.

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This information is based on the American Academy of Pediatrics' policy statements *Diagnosis and Evaluation of the Child with Attention-Deficit/Hyperactivity Disorder*, published in the May 2000 issue of *Pediatrics*, and *Treatment of the School-Aged Child with Attention-Deficit/Hyperactivity Disorder*, published in the October 2001 issue of *Pediatrics*. *Parent Pages* offer parents relevant facts that explain current policies about children's health.

ADHD and Your School-Aged Child

Attention-deficit/hyperactivity disorder (ADHD) is a condition of the brain that makes it hard for children to control their behavior. It is one of the most common chronic conditions of childhood. All children have behavior problems at times. Children with ADHD have frequent, severe problems that interfere with their ability to live normal lives.

A child with ADHD may have one or more of the following behavior symptoms:

- **Inattention** - Has a hard time paying attention, day-dreams, is easily distracted, is disorganized, loses a lot of things.
- **Hyperactivity** - Seems to be in constant motion, has difficulty staying seated, squirms, talks too much.
- **Impulsivity** - Acts and speaks without thinking, unable to wait, interrupts others.

How can I tell if my child has ADHD?

Your pediatrician will assess whether your child has ADHD using standard guidelines developed by the American Academy of Pediatrics. Keep in mind the following:

- These guidelines are for children 6 to 12 years of age. It is difficult to diagnose ADHD in children who are younger than this age group.
- The diagnosis is a process that involves several steps. It requires information about your child's behavior from you, your child's school, and/or other caregivers.
- Your pediatrician also will look for other conditions that have the same types of symptoms as ADHD. Some children have ADHD and another (coexisting) condition, e.g., conduct disorder, depression, anxiety, or a learning disability.
- There is no proven test for ADHD at this time.

If your child has ADHD, the symptoms will

- Occur in more than one setting, such as home, school, and social settings.
- Be more severe than in other children the same age.
- Start before your child reaches 7 years of age.
- Continue for more than six months.
- Make it difficult to function at school, at home, and/or in social settings.

What does treatment for ADHD involve?

As with other chronic conditions, families must manage the treatment of ADHD on an ongoing basis. In most cases, treatment for ADHD includes the following:

1. **A long-term management plan.** This will have:
 - **Target outcomes** (behavior goals, e.g., better school work)
 - **Follow-up activities** (e.g., medication, making changes that affect behavior at school and at home)
 - **Monitoring** (checking the child's progress with the target outcomes)
2. **Medication.** For most children, stimulant medications are a safe and effective way to relieve ADHD symptoms.
3. **Behavior Therapy.** This focuses on changing the child's environment to help improve behavior.
4. **Parent Training.** Training can give parents specific skills to deal with ADHD behaviors in a positive way.
5. **Education.** All involved need to understand what ADHD is.
6. **Teamwork.** Treatment works best when doctors, parents, teachers, caregivers, other health care professionals, and the child work together.

It may take some time to tailor your child's treatment plan to meet his needs. Treatment may not fully eliminate the ADHD-type behaviors. However, most school-aged children with ADHD respond well when their treatment plan includes both stimulant medications and behavior therapy.

Is there a cure for ADHD?

There is no proven cure for ADHD at this time. The cause of ADHD is unclear. Research is ongoing to learn more about the role of the brain in ADHD and the best ways to treat the disorder. Many good treatment options are available. The outlook for children who receive treatment for ADHD is encouraging.

As a parent, you play a very important part in providing effective treatment for your child.

For further information ask your pediatrician about "Understanding ADHD: Information for Parents About Attention-Deficit/Hyperactivity Disorder," a new booklet from the American Academy of Pediatrics.

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

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FOR LOCAL LEADERSHIP OF PUBLIC EDUCATION



SCHOOL BOARD NEWS

FRONT PAGE ABOUT ARCHIVE NATIONAL AFFILIATE NSBA

Schools caught in the middle of Ritalin controversies

By Craig Colgan

12/5/00 – Controversy over the prescription drug Ritalin has heated up recently, and school officials find themselves, once again, caught in the middle.

The Texas State Board of Education approved a resolution in November urging local school boards to seek non-drug solutions to student behavior problems. The resolution quoted a federal panel that concluded the use of Ritalin results in "little improvement in academic or social skills."

The resolution, which carries no legal authority, is supported by anti-Ritalin activists who pushed for a similar resolution passed by the state board in Colorado. The activists claim Ritalin and other drugs associated with attention deficit hyperactivity disorder (ADHD) and attention deficit disorder (ADD) are routinely overprescribed and are increasingly abused.

There have been a growing number of confrontations nationwide pitting parents of children with attention deficits against school officials.

Albany, N.Y., school officials "turned in" two families to local child protective services after parents decided to take their children off medication prescribed for ADHD. Parents of one student pulled him out of school, while another decided to put their child back on medication.

And some accuse drug companies of marketing the drugs too aggressively.

Class action lawsuits were filed in September in California and in New Jersey alleging Novartis Pharmaceuticals, the manufacturer of Ritalin, and the American Psychiatric Association had illegally conspired to expand the market for the drug. Another suit against Novartis was filed in Texas.

Ritalin use soaring

Since 1990, Ritalin production is up 700 percent, and nearly 15 percent of America's school-age children are using psychiatric prescription drugs.

In February, researchers reported in *The Journal of the American Medical Association* on what they view as an acute increase in the number of preschoolers taking psychotropic drugs, particularly stimulants such as Ritalin and antidepressants such as Prozac.

Response from the federal government was swift. The Drug Enforcement Agency will

produce brochures this year discussing abuse of prescription drugs by parents and students. The National Institute of Mental Health said it would spend \$6 million over the next five years to study whether Ritalin is safe and effective for children under 6.

ADHD was recognized as a condition entitling children to special education services in 1997 when the Individuals with Disabilities Education Act was reauthorized.

The American Academy of Pediatrics, for the first time earlier this year, issued guidelines for diagnosing ADHD. The academy said it is unclear whether the disorder was being overdiagnosed, because of such wide variations in how doctors defined and treated it.

Under the new guidelines, to be diagnosed with ADHD, a child must exhibit symptoms in at least two settings, such as at home and at school, and the symptoms must persist for at least six months.

Mixed results

Meanwhile, research results on the long-term effectiveness of Ritalin have been mixed.

In a study published in August in the journal *Pediatrics*, researchers reported on evidence that showed children diagnosed with ADHD who are treated with Ritalin are significantly less likely to abuse drugs and alcohol as teenagers. And there are even some who say ADHD is underdiagnosed, such as James J. Crist, author of *ADHD—A Teenager's Guide*.

Dr. Lawrence Diller, a behavioral pediatrician, says, "The discussion gets polarized and there is plenty of hyperbole, because it is cheaper and faster to medicate than to address core interactional problems here."

Diller, the author of *Running on Ritalin: A Physician Reflects on Children, Society, and Performance in a Pill*, is a frequent public critic of what he sees as America's increasing dependence on Ritalin, though he does not oppose the drug if used properly.

"I have no doubt Ritalin works in the short term, but I don't see it as a moral equivalent or substitute for better parenting and schools," he says.

And that's just what some of the drug's critics are charging.

The Texas state board's resolution is filled with dire pronouncements about "documented incidences of highly negative consequences in which psychiatric prescription drugs have been utilized for what are essentially problems of discipline which may be related to lack of academic success."

The resolution then urges school districts to implement policies dealing with storage of drugs, require that all medications be dispensed by a "medical practitioner," and calls for greater communication and education on the issue.

The resolution came about at the urging of Texans for Safe Education, a group that opposes "the ever-increasing role of psychiatry and psychiatric drugs in schools," says John Breeding, a psychologist and the group's president.

Charges of abuse

Breeding, as do many of Ritalin's harsher critics, challenges the medical definition of ADHD, calling it, among other things, a construct of a profit-hungry pharmaceutical industry. He claims a million children are using Ritalin and other psychiatric drugs in Texas.

"This is about medicalizing behavior problems in children," Breeding says. "It is also a fact that some people die using these drugs. That is not radical. Reliance on Ritalin is a distraction of attention and resources away from doing the things that need to be done for children in need."

Breeding says he is in touch with allies in other states, and he hopes to convince the U.S. Attorney General to weigh in on preventing schools from requiring use of Ritalin and other medications for children with attention problems.

Shellie Hoffman, director of legal services for the Texas Association of School Boards, says the Texas state board's resolution accomplishes little.

"First, most school districts already have policies dealing with prescription medications that fully comply with state law," Hoffman says. "And while school districts certainly appreciate the encouragement to be cautious about the effects of these drugs, this is not an area that the state board has rule-making authority in. And, in fact, whether a child uses these types of drugs is very often not a decision school districts have any authority over."

Hoffman says the Texas State Board of Education was stripped of much of its authority in 1995, but continues to offer opinions on an array of controversial issues. (It recently approved a resolution encouraging districts to create policies for neutral "forums" before school events at which students may speak on issues of their choosing. Hoffman calls such forums a not-so-subtle invitation to prayer, a topic that has produced much rancor in Texas since the Supreme Court last spring outlawed student-led prayers before football games.)

Schools unfairly blamed

"I think there is a lot of confusion out there and misinformation in the perception that schools are pressing families and physicians to medicate children," says Ted Feinberg, assistant executive director of the National Association of School Psychologists. "I am sure there are some schools that are quick to judgment at times for some children having difficulty, but schools are not the perpetrators of Ritalin as a major answer to so many issues for children today."

What might be happening with various anti-Ritalin movements today may just be part of a cycle, he suggests. At the start of the ADD and Ritalin boom a decade ago, many parents and physicians were pushing for more children to be identified as having ADD, Feinberg points out.

"I think today the pendulum has just swung in the opposite direction," he says. "We need more research on this."

Feinberg believes it is unfair for schools "to be whipping posts for this issue. Parents need help and support, and need to be informed about alternative strategies before medication."

But the bottom line on Ritalin is that, "for many children, it often works."

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<p>Vol. 283 No. 8, February 23, 2000</p>	<p>JAMA</p> <p>Editorial</p> <p>CURRENT ISSUE</p> <p>INDEXES</p> <p>PAST ISSUES</p>
<p>PDF OF THIS ARTICLE</p> <p>See Related: Articles Authors' Articles</p>	<p>Psychotropic Drug Use in Very Young Children</p> <p><i>Joseph T. Coyle, MD</i></p>
<p>Return to Table of Contents</p>	<p>The study by Zito and colleagues¹ in this issue of THE JOURNAL on the use of psychotropic medications in very young children in 2 Medicaid programs and a managed care organization suggests that 1% to 1.5% of all children 2 to 4 years old enrolled in these programs currently are receiving stimulants, antidepressants, or antipsychotic medications. The authors also report that the prevalence of neuropsychopharmacologic interventions in this age group increased substantially during the last decade.</p>
<p>INTRODUCTION</p>	<p>This reported increased use of psychotropic drugs in very young children raises important questions. Are the findings aberrant? Are they consistent with evidence-based medicine? Is there a reason to be concerned about this new prescribing pattern?</p>
<p>AUTHOR/ARTICLE INFORMATION</p>	<p>Several recent studies provide additional evidence that the prescription of psychotropic drugs to very young children has increased during the last decade. In a review of information from the Intercontinental Medical Statistics Study, Minde² described a 3-fold increase in methylphenidate prescriptions in Canada and a 10-fold increase in the prescription of selective serotonin reuptake inhibitors in the United States for children 5 years old and younger between 1993 and 1997. This article also summarized findings from Strasbourg, France, showing that 12% of children beginning school were receiving psychotropic medications, primarily phenothiazines, and that 76% of these commenced treatment by their fourth year of life.</p>
<p>REFERENCES</p>	<p>In an analysis of Michigan Medicaid claims, Rappley et al³ identified 223 children aged 3 years or younger who received the diagnosis of attention-deficit/hyperactivity disorder, the majority of whom had significant comorbid conditions. While only a quarter of these children received psychological services, nearly 60% received psychotropic medications, and almost half of these were prescribed 2 or more psychotropic medications. Thus, the findings of Zito et al¹ and Rappley et al³ appear to identify an important change in psychotropic drug prescribing practices for very young children. As 3 of the 4 data sets are derived from Medicaid populations, the findings suggest that poor children are experiencing these changes in drug prescribing practices, but additional investigation in other populations is required.</p>
<p>▼</p>	<p>It should be emphasized that most of the drugs prescribed involve off-label use because efficacy of psychotropic drugs has not been demonstrated in very young children. As noted by Greenhill,⁴ methylphenidate, the most commonly prescribed drug in these studies, carries a warning against its use in children younger than 6 years. Furthermore, the validity and reliability of the diagnosis of</p>
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years. Furthermore, the validity and reliability of the diagnoses of attention-deficit/hyperactivity disorder, mood disorders, and schizophrenia in very young children have not been demonstrated.

To ascertain whether the prescribing practices documented by these recent reports represent informed practice, I surveyed the editorial board (48 physicians) of the *Journal of Child and Adolescent Psychopharmacology* by facsimile about their prescribing of stimulants, clonidine, antidepressants, and antipsychotics for 2- to 4-year-old children (unpublished data, November 24, 1999). The board consists of expert clinicians and clinical researchers who are likely to treat the most difficult cases. Seventy-two percent of the physician board members responded. Most (28 of 35) reported either no use or very rare prescribing of these medications in this age group, and only 3 reported prescribing clonidine on rare occasions. The few positive responses generally were associated with the description of use of these drugs for severe, intractable cases such as the management of children with severe self-injurious behavior. The rarity of the use of psychotropic medications in very young children reported by experts in pediatric psychopharmacology suggests that they are much more reticent than the physicians treating the children in these studies.

Since there is virtually no clinical research on the consequences of pharmacologic treatment of behavioral disturbances of very young children, is there a basis for concern about these prescribing practices? Early childhood is a time of tremendous change for the human brain. Visual processing, language, and motor skills are acquired during this sensitive period.⁵ The cortical synaptic density reaches its maximum at the age of 3 years and is substantially modified by pruning during the next 7 years.⁶ At the same time, the cerebral metabolic rate peaks between 3 and 4 years of age.⁷

Studies in experimental animals indicate that the aminergic systems that are the target of action of these psychotropic medications play an important role in neurogenesis, neuron migration, axonal outgrowth, and synaptogenesis.⁸ In this regard, it has been shown that depletion of serotonin in the preweanling rat results in a persistent decrease in cortical synaptic density and in memory deficits in adulthood.⁹ Perinatal treatment of rats with an antipsychotic drug results in a long-standing abnormality in dopamine receptor function and altered levels of dopamine and norepinephrine in adulthood.¹⁰ Thus, it would seem prudent to carry out much more extensive studies to determine the long-term consequences of the use of psychotropic drugs at this early stage of childhood.

Given that there is no empirical evidence to support psychotropic drug treatment in very young children and that there are valid concerns that such treatment could have deleterious effects on the developing brain, the reasons for these troubling changes in practice need to be identified. Unfortunately, the study by Zito et al¹ does not provide the diagnoses of the children or the professional identities or specialties of the prescribers, which could shed some light on the reason for these prescribing patterns. One possible contributing factor is the way mental health services are provided to children. For example, many state Medicaid programs now provide quite limited reimbursement for the evaluation of behavioral disorders in children and preclude more than 1 type of clinical evaluator per day. Thus, the multidisciplinary clinics of the past that brought together pediatric, psychiatric, behavioral, and family dynamic expertise for difficult cases have largely ceased to exist. As a consequence, it

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appears that behaviorally disturbed children are now increasingly subjected to quick and inexpensive pharmacologic fixes as opposed to informed, multimodal therapy associated with optimal outcomes.¹¹ These disturbing prescription practices suggest a growing crisis in mental health services to children and demand more thorough investigation.

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Article of Interest - Medication

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"Ritalin Bill is response to pressure on parents"
 Some say it'll inhibit teachers from discussing child concerns
by Julie Ross, Detroit Free Press, December 24, 2001

It wasn't the mention of her son's fidgeting that surprised Jody Daniels so much.

She expected the teacher at his kindergarten screening test last year to note his squirming and repetitive kicking. Daniels already suspected her son might have attention deficit disorder, and because his birthday was so near the kindergarten registration cutoff date, she had held him back a year so he could mature.

During that year, Daniels researched the disorder and its most commonly prescribed medication -- Ritalin -- and decided not to have her son tested or medicated.

What shocked the Wyandotte resident was the teacher's reaction to her decision.

"She asked, 'What do you mean you're not going to do it?' " Daniels said recently. "I felt this pressure. I left there in tears."

According to several Michigan legislators, it's a common occurrence.

That's why state Rep. Susan Tabor, R-Lansing, introduced legislation last summer that's become known as the Ritalin Bill. It would ban teachers from recommending psychotropic drugs -- essentially Ritalin -- to parents. Connecticut and Minnesota passed similar laws this year.

"There have been situations where teachers have said, 'We think your daughter has ADD and should be on Ritalin,' " Tabor said. "They shouldn't be making that call."

Tabor's measure is part of a four-bill package that passed the House last month and awaits consideration by the Senate's Education Committee, possibly in January.

Originally, the bill went so far as to restrict teachers from discussing a child's behavior with the parent.

"That would have made parent-teacher conferences real interesting," said Louise Somalski, a Lansing-based legislative coordinator with the Michigan Federation of Teachers.

As the bill stands now, teachers would be allowed to discuss behavior and to recommend that a child visit a physician. Teachers would not, however, be able to specifically say a child has ADD or that the child should be on Ritalin.

The teachers federation is neutral about the bill, Somalski said.

But some legislators say it may prevent teachers from having open discussions with parents.

"I just think that the bill will tie the hands of teachers," said Rep. Irma Clark, D-Detroit, a former president of the Detroit Board of Education who voted against the House bill. "It says teachers cannot even discuss with parents the fact that the child might need Ritalin. I don't want our teachers being so strapped to where they'd be afraid to even talk to parents."

Another portion of the Ritalin package would create a 15-member advisory council to investigate psychotropic drugs and recommend policies regarding their use by children.

The council would include members of the Department of Community Health, the Department of Consumer and Industry Services and the Department of Education. It also would include a physician, a psychologist, a psychiatrist, a special education teacher, a general education teacher, a school principal, a school counselor, a school psychologist, a school nurse, a social worker and two parents.

The council would hold public hearings and compile a report.

Another portion of the legislative package would require the Department of Community Health to distribute information about psychotropic drugs.

Somalski said the teachers group supports both of those bills.

"We're always looking for professional development opportunities," she said. Because Ritalin "is so prevalent, it's always good to have our members aware of what behaviors to look for and what to do."

Sherry Feldman, who teaches fourth grade at Brooklands Elementary School in Rochester Hills, has heard stories of teachers recommending Ritalin to parents, but said the key for teachers is knowing what to say.

"My policy is there is very special language you can use without mentioning drugs," she

said. "I don't believe we should be recommending that. But there are ways to say to a parent, 'I would suggest you see a doctor.' "

Daniels said it wasn't the words her son's would-be teacher used that upset her as much as the pressure to put him on medication. She was so distraught after the initial kindergarten assessment that she didn't enroll him in their neighborhood Wyandotte school. Instead, she drives 40 minutes daily to shuttle him to a charter school in Flat Rock.

Daniels said she fears teachers who would prefer to have a quiet, orderly class would have labeled him with attention deficit disorder from the onset and been more strict about his behavior.

"He may be ADD or ADHD, but I think he's MCTTSWA -- more creative than the system will allow," she said.

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ATTENTION DEFICIT DISORDER: A DUBIOUS DIAGNOSIS?

- [Purchase this program](#) | [Transcript](#)
- [CHADD \(Children and Adults with Attention Deficit Disorder\)](#)
- [An interview with: Stanley Greenspan, M.D.](#)
- ["Ritalin Ain't the Answer" by Matt Scherbel](#)
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Strong evidence indicates that the epidemic of Attention Deficit Disorder affecting mostly white, middle class boys is to a large extent man-made, one result of a long-term, unpublicized financial relationship between the company that makes the most widely known A.D.D. medication and the nation's largest "A.D.D. Support Group." That case is made in our documentary, "A.D.D.-A Dubious Diagnosis?"

No question that A.D.D. is spreading, along with the use of powerful psychostimulants. The number of children being medicated-now an estimated 2,000,000-seems to be doubling every two years.

In preparing our documentary, we heard time and again that Ritalin is "all over the schools." Recovering drug addicts told us that Ritalin was becoming what's called a "gateway drug," the first drug a child tries. And addicts told us that some teenagers snort Ritalin for a quick, cheap (but dangerous) high.

**Quick? Yes, because Ritalin is a stimulant.
Cheap? Yes, because parents pay the bill.**

Dangerous? Yes, powerful enough to kill. The federal Drug Enforcement Administration reports that a Virginia teenager died from snorting Ritalin. We hope our documentary and this guide will help parents and educators find alternatives to unnecessary labels and powerful drugs-like smaller classes, more interesting curricula, and more personal attention at home and in school.

-John Merrow

CHADD (Children and Adults with Attention Deficit Disorder)

Thousands of parents turn to A.D.D. "support groups" for information and help. They expect that the information will be accurate, unbiased and complete. The largest of these support groups is CHADD, Children and Adults with Attention Deficit Disorder.

As we report in "Attention Deficit Disorder: A Dubious Diagnosis?", many parents do not know that CHADD has for years been receiving large sums of money from the maker of Ritalin, Ciba-Geigy.

Here is some of what CHADD's literature tells parents, along with information it doesn't present.

CHADD SAYS:

"Psychostimulant medications are not addictive."

WHAT'S NOT SAID:

Methylphenidate and Ritalin are nearly identical to amphetamine- otherwise known as "speed". The federal Drug Enforcement Administration puts methylphenidate in the same class of drugs as morphine and codeine- drugs with legitimate medical application, but a high potential for abuse. Withdrawal effects (agitation, marked anxiety, and tension) from psychostimulants are common, and many doctors recommend tapering the dosage before discontinuing medication.

CHADD SAYS:

"The most likely cause of A.D.D. is a chemical imbalance or deficiency in certain chemicals in the brain that are located in the area responsible for attention and activity."

WHAT'S NOT SAID:

CHADD bases this claim on a 1990 study by Dr. Alan Zametkin of the National Institutes of Health (NIH), which found slightly lower levels of glucose metabolism in the brains of adults diagnosed with hyperactivity. Not mentioned by CHADD are the succeeding attempts* to replicate those results in children. Dr. Zametkin's later studies found "no

statistically significant differences" between the brains of normal children and children diagnosed with A.D.H.D. The root cause of the disorder remains unknown.

*Brain Metabolism in Teenagers With ADHD" (Arch. Gen. Psychiatry, Vol. 50, May 1993) and "Reduced Brain Metabolism is Hyperactive Girls" (J. Am. Acad. Child Adolesc. Psychiatry, 33: 6, July/August 1994)

CHADD SAYS:

"Emotional difficulties, including substance abuse, are more likely to occur when a child with A.D.D. is not treated."

WHAT'S NOT SAID:

There are no conclusive studies showing that treatment of A.D.D. reduces the risk of drug abuse. Even Child-Geigy's chief physician declined to support CHADD's assertion.

CHADD SAYS:

"Medication is not used to control behavior-medication is used to improve the symptoms of A.D.D."

WHAT'S NOT SAID:

The symptoms of A.D.D. outlined by the American Psychiatric Association (fidgets with hands or feet or squirms in seat, has difficulty remaining seated when required to do so, is easily distracted by extraneous stimuli, etc.) are all behavioral. Medication is used to help control these symptoms. Controlling behavior and improving the symptoms of A.D.D. are one and the same.

CHADD SAYS:

"Between 70-80% of children respond positively to these (psycho-stimulant) medications."

WHAT'S NOT SAID:

Research suggests that medication may not be so effective a treatment. Dr. James Swanson, Director of the Child Development Center at the University of California, has written: "...the short term effects of stimulants on academic performance are minimal compared to the effects on

behavior, and there is no evidence of beneficial effects on learning or academic achievement."*

*"Treatment of A.D.D.: Beyond Medication" (Beyond Behavior, Fall 1992/Vol. 4 No,1)

CHADD SAYS:

"Hundreds of studies on thousands of children have been conducted regarding the effects of psycho-stimulant medications. Relatively few long term side effects have been identified."

WHAT'S NOT SAID:

Hundreds of studies on stimulant medications have been conducted, but few have looked at long term side effects. Measuring the long term effects of pediatric medications is prohibitive because of legal and ethical dilemmas surrounding the use of children as test subjects. The federal Food and Drug Administration labeling for Ritalin includes the specific warning "Sufficient data on the safety and efficacy of long term use of Ritalin in children are not yet available."

The Experts

An interview with: **Stanley Greenspan, M.D.**

In the process of putting together "Attention Deficit Disorder: A Dubious Diagnosis?," we spoke with Dr. Stanley Greenspan, the child psychiatrist and author of *The Challenging Child*. Greenspan writes that many attention problems result from the way children process visual, auditory, motor, and spatial information, but these are often misdiagnosed as A.D.D.

DR. GREENSPAN: Many children who come in with attention problems in a general sense are actually having attention difficulties in one area but not another area. One little boy came in with mommy and daddy saying he never pays attention in school, but it turned out it was mostly during writing assignments. Talking to him one on one, he was very attentive. When he was examining things visually he was very attentive. It was only when he had to write things that he became inattentive. There were a lot of writing assignments in school, so he looked inattentive during a good deal of the day. Once we found out the primary challenge, we worked on

his being able to write more effectively...and that helped him out

Q- Is medication the only approach to treatment?

DR. GREENSPAN: There are many ways to help a child with attention problems. One is to shore up the area that's vulnerable; like writing skills or looking skills or listening skills, or the way the child reacts to sensations by getting overloaded. Another approach is using medication along with therapy to help the child cope better and deal with the challenges they face, but if you don't diagnose the particular problem you're not going to know which approach is the most effective for the child.

Q- How can parents tell if they're getting a proper diagnosis?

DR. GREENSPAN: Ideally, the parents come in first and talk to the clinician about what their concerns are, what they worry about, what's going on at school, what's going on at home, and what their main worries about the child are. Then the clinician should do a careful review of the child's functioning in all areas. There should be a careful developmental history, tracing that child's development from infancy, including the pregnancy and delivery up through the current age.

Q-Is that what usually happens?

DR. GREENSPAN: Sometimes children aren't seen for long enough periods of time on their own. Instead of being seen for a whole 45 minute session they are seen for 10 or 15 minutes. Instead of being observed interacting with their parents, sometimes young children are just provided with a standardized battery of tests. Sometimes family function isn't gone into in as much depth as it should. So it doesn't always occur the way it ought to occur.

Q- What's the cost of misdiagnosis and mistreatment?

DR. GREENSPAN: If you don't formulate the proper intervention, then the child's psychological coping capacity won't develop as optimally as it could. As the child gets along in life, he won't function- either as a parent rearing children, as a worker out on the job, or as a citizen. We are robbing our country of the kind of wisdom it's going to need in the future.

"Ritalin Ain't the Answer"

by Matt Scherbel

Matt Scherbel was 14 and in the eighth grade at Thomas Pyle Middle School in Bethesda, MD, when he wrote this for his school newspaper, "The Pyle Print."

The system wasn't and still isn't made for the extremists. The perfect student isn't a genius; he only takes extra care and concern. A stupid kid obviously doesn't fit; he needs more time to learn to learn and special attention that the system doesn't like. No, the perfect student is a schmo. He only hands in what is asked of him, therefore no special praise. He's quiet and speaks not a word of his own mind.

Schools don't like extremists who like to think and question. They are the dreamers. That doesn't mean that they are wrong. They just don't fit the norm, so they are labeled and damned, labeled as A.D.D. (Attention Deficit Disorder).

So the doctors dope us up with Ritalin and control our minds with low doses of speed. The teachers pay us no mind until our minds are under control. It screws up our train of thought and makes us one-dimensional. We get headaches and almost depressed getting on and off it. It takes away extra imagination and flow of the mind, hence destroying the true, purest ideas of my mind. I can't think right, and for six hours of the day, I'm not me. I'm what the system would like me to be.

The schools should shape our education around our idiosyncratic minds, our quaint minds, our quirky minds, our crackpot minds, our curious minds. Where would we be without eccentric people? We need them. The system should not shape our minds with dope and low doses of speed; the system should be shaped around us.

Ritalin does not help me learn; it simply lowers my mind down between the selected lines in which we are taught. Who's going to get further in life, the schmo with the same textbook answers and ideas, or the "A.D.D. kid" who can offer ideas that have never been thought of or a new perspective on something?

I truly look forward to the day when Ritalin isn't an answer. To the day when every student is labeled "learner."

BOOKS:

The U.S. Department of Education publishes a list of books about A.D.D. Copies of "Where do I turn?: A resource directory of materials about Attention Deficit Disorder" can be ordered through Eric Document Reproduction service (1.800.443.ERIC) Document #ED-370333.

In *The Challenging Child*, (New York, Addison Wesley, 1995) Psychiatrist Stanley Greenspan outlines numerous kinds of attention problems that stem from the way children process information. Greenspan believes a proper diagnosis is the first step to finding the correct treatment.

The War Against Children (New York, St. Martin's Press, 1994) by Dr. Peter Breggin and Ginger Ross Breggin takes a critical look at Ritalin and A.D.D. Other books by Dr. Breggin include *Toxic Psychiatry* and *Talking Back to Prozac.*, also published by St. Martin's Press.

In *The Myth of the ADD Child*, (New York, Dutton Press, 1995) Dr. Thomas Armstrong outlines 50 ways to improve a child's attention span without drugs or labels.

The Physician's Desk Reference, published by Medical Economic Data in Montevale, NJ. contains FDA- approved labeling information for Ritalin and other prescription drugs. The PDR can be found in most public libraries.

Dr. James Swanson Ph.D has published many scientific studies on stimulant medication for children. To learn what to expect from medication, read "Effect of Stimulant Medication on Children with Attention Deficit Disorder: A Review of Reviews", *Exceptional Children*, Vol. 60, no. 2, pp 154-162.

ORGANIZATIONS:**Children and Adults with Attention Deficit Disorder
(CHADD)**

CHADD
499 Northwest 70th Avenue, Suite 109
Plantation, FL. 33317

The nation's largest A.D.D. support group, CHADD publishes newsletters, fact sheets and educators' manuals. CHADD

presents itself as an impartial source of information for parents; only after we began our investigation did CHADD tell its members-in very general terms-about its financial support from Ciba-Geigy, Abbott Labs and Burroughs Wellcome, the makers of Ritalin, Cylert, and Dexedrine respectively.

The Center for The Study of Psychiatry

4628 Chestnut Street
Bethesda, MD 20814

Founded by Dr. Peter Breggin, the center describes itself as a research and educational network devoted to reform in psychiatry and to offering independent analyses of current psychiatric theories and practice. The center publishes newsletters and holds annual meetings for members.

The Feingold Association of the United States

PO Box 6550
Alexandria, VA 22306

Founded by Dr. Benjamin Feingold, this organization is committed to the belief that ADHD symptoms arise from artificial food additives and preservatives. It endorses a diet designed to lessen reactions that may create ADHD symptoms.

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Senate Bill 230

Psychotropic Drugs For Children

Sectional Analysis

Alaska State Legislature

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Senator Bettye Davis@legis.state.ak.us
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Senator Bettye Davis

Sectional Analysis Senate Bill 230

Section 1. Requires school boards to adopt policies restricting school personnel from recommending that a student be given psychotropic drugs.

Section 2. Technical amendment to accommodate the addition of AS 47.10.019(b) in sec. 3 of this bill.

Section 2. Prohibits a child from being considered to be a child in need of aid simply based on the refusal of the child's custodian to give psychotropic drugs to the child.

Senate Bill 230

Psychotropic Drugs For Children

Similar Legislation

Subject: Tomorrow's testimony on SB 230

Date: Mon, 4 Mar 2002 00:39:15 EST

From: WindWarner@aol.com

To: Senator_Lyda_Green@legis.state.ak.us

March 4, 2002

Testimony before the Alaska Health, Education, and Social Services Committee in support of Senate Bill 230, "An Act relating to recommending or refusing psychotropic drugs as a treatment for children and to the evaluation and treatment of children with behavioral or psychological problems."

From: Richard Warner, President
Citizens Commission on Human Rights of Seattle

This legislation represents a first step toward establishing clear limitations on the ability of state agencies to force parents to give normal children mind-altering drugs. The decision to give or not give a child such drugs must come only from the parent or guardian.

The drugging of children with psychotropic drugs is skyrocketing. Keep in mind, these psychiatric drugs have never been approved for use on children. The only exceptions are Ritalin and Paxil and they are not approved for children under six years old. And yet what do we find?

In November 1999, the U.S. Drug Enforcement Administration (DEA) warned about a record six-fold increase in Ritalin production between 1990 and 1995. The United States uses approximately 90% of the world's Ritalin.

A February 23, 2000 study in the Journal of the American Medical Association (JAMA) warned about the rapidly escalating psychiatric drugging of children. According to the study, "Stimulant treatment in preschoolers [2 - 4 years old] increased approximately 3-fold during the early 1990's." A survey by IMS Health, a company that measures drug usage for the pharmaceutical industry, found that the use of newer antidepressants like Prozac, Zoloft, Paxil, and Luvox on children less than 6 increased 580% between 1995 and 1999.

According to the Alaska Dept. of Education figures, the number of children in the disability category which includes ADD and ADHD (Other Health Impaired) increased by nearly 200% between December 1995 and December 2000. During that period total school enrollment increased approximately 7%.

According to the Drug Enforcement Agency, in the year 2000, methylphenidate (Ritalin) prescriptions in Alaska totaled 2,645 grams per 100,000 people. That's 529,000, 5 mg Ritalin tablets. And that is just one of many drugs being given to children.

Many states are responding to the escalating drugging of children by passing laws and regulations designed to control the labeling and drugging of children and to prevent state agencies from intimidating parents into putting their children on psychotropic drugs.

Last year both Connecticut and Minnesota passed laws barring schools from telling parents they must put their children on drugs and Minnesota and Utah passed laws preventing Child Protective Services from finding a parent guilty of neglect for refusing to drug their child. Arizona, California, Colorado, Iowa, Kentucky, Missouri, Michigan, New York, New Jersey, Utah, Washington, Wisconsin and Vermont have also introduced similar legislation.

A Utah bill which we support passed out of the House last week (66-4) and has been sent directly to the floor of the Senate for a vote. It will very

likely be passed this week. This bill prohibits teachers from recommending or requiring psychotropic drugs for a child or recommending psychiatric treatment or evaluation for a child.

The Utah bill also provides that the Division of Child and Family Services may not remove a child from his or her parents because the parents refuse to drug their child.

It is reasonable to suggest, and courts have ruled, that the state should not intervene in parents' decisions regarding medical treatment for their children when there is no clear consensus regarding the effectiveness and risks of a proposed treatment.

When the risks have been proven to be serious, as is the case with psychotropic drugs, and the diagnosis itself is in question, there is even more reason to clearly state the limits of state intervention.

Adverse reactions to these drugs listed in the Physician's Desk Reference include anorexia, nausea, dizziness, rapid heartbeat, cardiac arrhythmia, abdominal pain, and weight loss. Adverse reactions reported to the Food and Drug Administration include physiological problems such as liver disorders, blood disorders, and convulsions, including grand mal seizures, and mental and emotional reactions such as agitation, hostility, abnormal thinking, hallucinations, psychosis and personality disorders. There have been brain changes reported in various studies, including a 20-30% decrease in blood flow to all parts of the brain and cerebral atrophy - brain shrinkage.

The very diagnosis itself is apparently baseless. In 1998 the National Institutes of Health held the "NIH Consensus Development Conference on Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder [ADHD]" to decide if there was a legitimate scientific basis for the diagnosis. The Conference's Consensus Statement stated, "we don't have an independent, valid test for ADHD; there are no data to indicate that ADHD is due to a brain malfunction; and finally after years of clinical research and experience with ADHD, our knowledge about the cause or causes of ADHD remains speculative."

In June 2000, the United States Supreme Court upheld a decision by the Washington State Supreme Court that hinged on parental rights. In the case, *Troxel v. Granville*, the court ruled,

Accordingly, so long as a parent adequately cares for his or her children (i.e., is fit), there will normally be no reason for the State to inject itself into the private realm of the family to further question the ability of that parent to make the best decisions concerning the rearing of that parent's children.

the Due Process Clause does not permit a State to infringe on the fundamental right of parents to make childrearing decisions simply because a state judge believes a "better" decision could be made.

This bill is an important step toward protecting parents and children. We do feel that this bill can be made much stronger and would suggest the Utah bill (House Bill 123) as a model.

Sincerely,

Richard Warner, President
Citizens Commission on Human Rights of Seattle
300 Lenora St., #B252
Seattle, WA 98121
(206) 283-1099 (office)
(206) 527-3501 (home)
email: windwarner@aol.com

Subject: SB 230 re psychotropic drugging of children

Date: Mon, 4 Mar 2002 00:07:36 EST

From: WindWarner@aol.com

To: Senator_Lyda_Green@legis.state.ak.us

Dear Senator Green,

I will be testifying tomorrow (Mar. 4) on a bill sponsored by Senator Bettye Davis, SB 230. This legislation relates to the drugging of children with psychotropic drugs for alleged behavioral disorders. I thought you should know that such legislation has been offered in many states and it is usually sponsored and pushed forward by Republicans. I am attaching a copy of a bill which just passed the House (66-4) in Utah (HB 123) and will go directly to the Senate floor to be voted on. It will most likely be passed by the Senate this week. It is a Republican bill and represents the efforts of a number of stakeholders including the schools, psychiatrists, medical board, representatives of the disability community, the National Alliance for the Mentally Ill, and the Utah Protection and Advocacy System. My testimony for tomorrow will follow in a separate email.

Sincerely,

Richard Warner, President
Citizens Commission on Human Rights of Seattle
300 Lenora St., # B252
Seattle, WA 98115
(206) 283-1099 (office)
(206) 527-3501 (home)
email: windwarner@aol.com

- 26 (ii) 20 U.S.C. Sec. 7101 et seq.;
 27 (iii) 29 U.S.C. Sec. 794; and
 28 (iv) 42 U.S.C. Sec. 12101 et seq.
 29 (2) Except as provided in Subsection (4) or (5), school personnel may not:
 30 (a) recommend to a parent or guardian that a child ~~h~~ [must] ~~h~~ take or ~~h~~ [must] ~~h~~ continue
 to
 30a take a
 31 psychotropic drug as a condition for attending school;
 32 (b) require that a child take or continue to take a psychotropic drug as a condition for
 33 attending school;
 34 (c) recommend that a parent or guardian seek or use any of the following:
 35 (i) the administration of any psychotropic medication to a child;
 36 (ii) a psychiatric ~~h~~ [] OR ~~h~~ psychological ~~h~~ [] or behavioral ~~h~~ treatment for a child; or
 37 (iii) a psychiatric ~~h~~ [] or behavioral health ~~h~~ evaluation of a child;
 38 (d) conduct a psychiatric or behavioral health evaluation of a child;
 39 (e) recommend a ~~h~~ [private] SPECIFIC ~~h~~ licensed physician, psychologist, or any other
 39a health specialist
 40 to a parent or guardian for a child; or
 41 (f) make a child abuse or neglect report to authorities, including the Division of Child and
 42 Family Services, solely on the basis that a parent or guardian refuses to consent to:
 43 (a) the administration of a psychotropic drug to a child;
 44 (b) a psychiatric, psychological, or behavioral treatment for a child; or
 45 (c) a psychiatric or behavioral health evaluation of a child.
 46 (3) Nothing in this section may be construed to restrict school personnel from:
 47 (a) communicating information between school personnel regarding a child; ~~h~~ [or] ~~h~~
 48 (b) informing a child's parent or guardian of a perceived behavioral problem of the child,
 49 provided that:
 50 (i) an assertion or recommendation is not made in violation of Subsection (2); and
 51 (ii) an attempt is not made to denigrate, criticize, or punish a parent, guardian, or child for
 52 a decision made by the parent or guardian for the child to take, not take, or discontinue to take a
 53 psychotropic drug ~~h~~ [] ; OR ~~h~~
 53a ~~h~~ [] (c) EXERCISING THEIR AUTHORITY RELATING TO THE READMISSION OF A CHILD
 53b WHO HAS BEEN SUSPENDED OR EXPELLED FOR A VIOLATION OF SECTION 53A-11-964, ~~h~~]
 53c (c) EXERCISING THEIR AUTHORITY RELATING TO THE PLACEMENT WITHIN THE SCHOOL
 53d OR READMISSION OF A CHILD WHO MAY BE OR HAS BEEN SUSPENDED OR EXPELLED FOR A

02-26-02 11:48 AM

4th Sub. (Green) H.B. 123

53e VIOLATION OF SECTION 53A-11-904. h

54 (4) Notwithstanding Subsections (2)(c) and (d), a ~~licensed mental health professional~~
55 ~~employed by a school~~ MENTAL HEALTH PROFESSIONAL ACTING IN ACCORDANCE WITH TITLE 58,
55a CHAPTER 60. MENTAL HEALTH PROFESSIONAL PRACTICE ACT. WORKING WITHIN THE SCHOOL
55b SYSTEM ~~h~~ may, for the sole purpose of complying with federal education law:
56 (a) recommend, but not require, a psychiatric or behavioral health evaluation of a child;

57 (b) recommend, but not require, psychiatric, psychological, or behavioral treatment for a
58 child; and

59 (c) conduct a psychiatric or behavioral health evaluation of a child with the consent of the
60 child's parent or guardian.

61 (5) Notwithstanding Subsection (2)(e), a school district may make available to an
62 interested parent or guardian a list of community resources, which may include mental health
63 services, provided that the list conspicuously states the following:

64 "This list is provided as a resource to you. The school neither recommends nor requires
65 that you use this list or any of the services provided in it. It is for you to decide what services, if
66 any, to access and from whom you wish to obtain them."

67 (6) A local school board shall adopt a policy that indicates that a violation of this section
68 is cause for disciplinary action under Section 53A-8-104.

69 Section 2. Section 78-3a-301 (Subsection (1)(m) is repealed 07/01/02) is amended to
70 read:

71 **78-3a-301 (Subsection (1)(m) is repealed 07/01/02). Removing a child from his home**
72 **-- Grounds for removal -- Exigent circumstances.**

73 (1) The Division of Child and Family Services may not remove a child from the custody
74 of his natural parent unless the division complies with the provisions of Title 62A, Chapter 4a,
75 Child and Family Services, including Subsections 62A-4a-103(2)(b) and 62A-4a-201(3), and
76 unless there is substantial cause to believe that any one of the following exist:

77 (a) there is a substantial danger to the physical health or safety of the minor and the minor's
78 physical health or safety may not be protected without removing him from his parent's custody.
79 If a minor has previously been adjudicated as abused, neglected, or dependent, and a subsequent
80 incident of abuse, neglect, or dependency has occurred involving the same alleged abuser or under
81 similar circumstance as the previous abuse, that fact constitutes prima facie evidence that the child
82 cannot safely remain in the custody of his parent;

83 (b) a parent engages in or threatens the child with unreasonable conduct that causes the
84 minor to suffer emotional damage and there are no reasonable means available by which the
85 minor's emotional health may be protected without removing the minor from the custody of his
86 parent;

87 (c) (i) the minor or another minor residing in the same household has been physically or

88 sexually abused, or is deemed to be at substantial risk of being physically or sexually abused, by
89 a parent, a member of the parent's household, or other person known to the parent.

90 (ii) For purposes of this Subsection (1)(c), another minor residing in the same household
91 may not be removed from the home unless that minor is deemed to be at substantial risk of being
92 physically or sexually abused as described in Subsection (1)(c)(i) or (iii).

93 (iii) If a parent has received actual notice that physical or sexual abuse by a person known
94 to the parent has occurred, and there is evidence that the parent failed to protect the child by
95 allowing the child to be in the physical presence of the alleged abuser, that fact constitutes prima
96 facie evidence that the child is at substantial risk of being physically or sexually abused;

97 (d) the parent is unwilling to have physical custody of the child;

98 (e) the minor has been left without any provision for his support;

99 (f) a parent who has been incarcerated or institutionalized has not or cannot arrange for
100 safe and appropriate care for the minor;

101 (g) a relative or other adult custodian with whom the minor has been left by the parent is
102 unwilling or unable to provide care or support for the minor, the whereabouts of the parent are
103 unknown, and reasonable efforts to locate him have been unsuccessful;

104 (h) the minor is in immediate need of urgent medical care;

105 (i) (i) a parent's actions, omissions, or habitual action create an environment that poses
106 a threat to the child's health or safety; or

107 (ii) a parent's action in leaving a child unattended would reasonably pose a threat to the
108 child's health or safety;

109 (j) (i) the minor or another minor residing in the same household has been neglected; and

110 (ii) for purposes of Subsection (j)(i), another minor residing in the same household may
111 not be removed unless that minor is deemed to be at substantial risk of being neglected;

112 (k) an infant has been abandoned, as defined in Section 78-3a-313.5;

113 (l) the parent, or an adult residing in the same household as the parent, has been charged
114 or arrested pursuant to Title 58, Chapter 37d, Clandestine Drug Lab Act, and any clandestine
115 laboratory operation, as defined in Section 58-37d-3, was located in the residence or on the
116 property where the child resided; or

117 (m) the child's welfare is otherwise endangered, as documented by the caseworker. This
118 Subsection (1)(m) is repealed on July 1, 2002 unless further authorized by the Legislature.

119 (2) The Division of Child and Family Services may not remove a minor from the custody
120 of his parent solely on the basis of educational neglect.

121 (3) The Division of Child and Family Services may not remove a minor from the custody
122 of his parent solely on the basis of mental illness of the parent in the absence of one of the factors
123 described in Subsection (1).

124 (4) The Division of Child and Family Services may not initiate an investigation or remove
125 a minor from the custody of his parent on the basis of the refusal of the parent to **SOLELY** to
125a consent to:

126 (a) the administration of a psychotropic drug to a child;

127 (b) a psychiatric, psychological, or behavioral treatment for a child; or

128 (c) a psychiatric or behavioral health evaluation of a child.

129 [~~(4)~~] (5) The Division of Child and Family Services shall comply with the provisions of
130 Section 62A-4a-202.1 in effecting removal of a child pursuant to this section.

131 [~~(5)~~] (6) (a) A minor removed from the custody of his natural parent under this section may
132 not be placed or kept in a secure detention facility pending court proceedings unless the minor is
133 detainable based on guidelines promulgated by the Division of Youth Corrections.

134 (b) A minor removed from the custody of his natural parent but who does not require
135 physical restriction shall be given temporary care in:

136 (i) a shelter facility; or

137 (ii) an emergency kinship placement in accordance with Section 62A-4a-209.

FISCAL NOTE

STATE OF ALASKA
2002 LEGISLATIVE SESSION

Fiscal Note Number: _____
 Bill Version: SB 230
 () Publish Date: _____

Revision Date/Time (Note if correction): _____ Dept. Affected: EED
 Title Psychotropic Drugs for Children BRU Teaching and Learning Support
 Component Special & Supplemental Services
 Sponsor Davis
 Requester S HES Component No. 166

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
-----------------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()						
-------------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2002) cost: 0.0
 Check this box (X) if funding for this bill is included in the Governor's FY 2003 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

This bill would prevent school personnel from recommending the use of psychotropic drugs for students demonstrating emotional or behavioral concerns. It also requires that if school personnel perceive that a student may have a behavioral or psychological problem, a letter be sent to the parent recommending an appropriate medical or behavioral evaluation. The bill's sponsor has indicated that the bill will not prevent appropriately trained school personnel, such as school psychologists or school nurses, from discussing factors related to medication with parents as part of their normal duties. While no expense is expected for the department since no additional duties are required for departmental staff, the requirement of a letter will have some fiscal impact on local school districts.

Prepared by: Greg Maloney, Special Education Administrator Phone 465-2972
 Division Teaching and Learning Support Date/Time 3/1/02 4:56 PM
 Approved by: Ed McLain, Deputy Commissioner of Education Date 3/1/2002
 Agency Department of Education & Early Development

ALASKA STATE LEGISLATURE

Senate
Health, Education &
Social Services
Committee

Senate
Labor & Commerce
Committee

Senate
State Affairs
Committee



SENATOR BETTYE DAVIS

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Senate Bill SB 230

"An Act relating to recommending or refusing psychotropic drugs as a treatment for children and to the evaluation and treatment of children with behavioral or psychological problems."

Sponsor Statement

The use of psychiatric drugs in our nation's schools has more than doubled in the first half of the last decade and continues to escalate. There are documented incidences of highly negative consequences in which psychiatric prescription drugs have been utilized for what are essentially problems of discipline, which may be related to a variety of causation. There is also parental concern regarding the issue of diagnosis and medication and their impact on student achievement.

In recognition of the importance that only physicians should make psychiatric diagnoses of behavioral problems, recommend psychiatric screening for specific behavioral problems, and suggest the use of psychiatric medication for a student, this bill would require school boards to adopt policies on recommendations that a student be given psychotropic drugs. It would also prohibit a child from being considered a child in need of aid or taken into state custody based on the refusal of the child's custodian to give psychotropic drugs to the child.

SPONSOR STATEMENT

