

Deborah - Full - Barber

FactSHEET

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American Psychiatric Association, 1400 K St. NW, Washington, DC 20005

CHILDREN AND PSYCHOPHARMACOLOGY

It is unfortunate that childhood offers no protection against mental illness. In the US, one in five children and adolescents suffer from mental health problems at any given time. The key to ideally handling these childhood disorders is for parents to recognize the problem and seek appropriate treatment. The causes of mental illness in children are complex and never due to a single factor. As with other types of illnesses, mental disorders have specific diagnostic criteria and treatments, and a complete evaluation by a child psychiatrist is imperative to determine whether a child needs help.

Diagnosis

Diagnosis is based on a collaborative process that should involve psychiatric and other physicians, the child, and the child's family. They are involved in an interview set up for the purpose of reaching a comprehensive diagnosis and creation of a treatment plan. When deciding what treatment will best benefit the child, it is essential to apply a careful diagnostic assessment after a thorough evaluation of psychiatric, social, cognitive, educational, and medical/neurological factors.

Treatment

Psychotropic medications can play a significant role in the treatment of mental illness in children. However, it is only a part of a broader treatment plan that encompasses all aspects of a child's life. After a comprehensive diagnostic evaluation, an individual treatment approach based on any coexisting mental and physical conditions should be selected according to the child's needs and preferences. Medications should not be used alone due to the need to deal with ongoing developmental processes. The benefits of psychotropic medications along with various forms of therapy (e.g. cognitive-behavior therapy, psychotherapy, parental and family therapy, social skills training, group therapy) should be carefully examined and accounted for when determining the next steps.

Medications

Stimulants

Stimulants including methylphenidate, amphetamine and pemoline, are by far the most widely researched and commonly prescribed treatments for children with attention deficit hyperactivity disorder (ADHD). They diminish motor overactivity and impulsive behaviors seen in ADHD and allow the child to sustain attention and improve physical coordination (e.g. handwriting, sports).

Methylphenidate helps a child focus by stimulating the production of dopamine and norepinephrine within the brain and nervous system. It should not be prescribed to patients who have anxiety, motor tics, a family history or diagnosis of Tourette's syndrome, or a known hypersensitivity to the drug. When methylphenidate cannot be used, dextroamphetamine and pemoline may be prescribed for ADHD. All stimulants can have mild side effects including insomnia, weight loss, decreased appetite, abdominal pain and headaches. Most short-term side effects of stimulants are dose-related and subject to individual differences.

Use of stimulants can result in an immediate and often dramatic improvement in behavior both at school and at home. The benefits and the risks associated with stimulant treatment must be weighed carefully, evaluated and monitored continually for every child. In general, stimulants are still regarded as an effective ADHD therapy with high safety and relatively few side effects.

There has been some clinical and social concern about whether exposure to stimulant medication in children with ADHD increases the risk for substance abuse in later life. A recent study by Biederman et. al. (1999) suggests that rather than inducing substance use in youth with ADHD, such medications may protect children with ADHD from future abusive behaviors.

Antidepressants

Depression tends to run in families. While a predisposition does not automatically mean that a child will get the disease at least one study shows that more than one in four depressed children have a close relative with the disease. Evidence shows that early onset may predict more severe illness in adult life, unless otherwise recognized and treated early in life. Depression in children often comes hand in hand with school performance and other problems. It is an underlying factor in eating disorders, headaches, sleep problems and other physical problems affecting children and teens.

Open and controlled studies have reported beneficial effects of antidepressant medications as part of a comprehensive treatment plan in children and adolescents. There are three major classes of antidepressants:

Selective serotonin reuptake inhibitors (SSRIs) – fluoxetine, sertraline, paroxetine, and fluvoxamine - are the second most prescribed psychotropic medications, after stimulants, for children. They appear safe and effective for the treatment of severe and persistent depression and anxiety disorders such as obsessive-compulsive disorders (OCD) and panic attacks in children and adolescents.

Heterocyclic antidepressants – imipramine, desipramine, amitriptyline, nortriptyline, clomipramine. This type of antidepressant also may be prescribed to treat depression in children. However, despite the fact that HCAs are the third most frequently prescribed psychotropic medications for children, available studies do not support the efficacy of HCAs for depression in this age group.

Imipramine is also used to treat enuresis (bed-wetting) in children after the age at which urinary control should have been achieved. Clomipramine is used to treat obsessive-compulsive disorder (OCD). Nortriptyline and imipramine are also prescribed for ADHD, particularly if a child is prone to tics.

Monoamine oxidase inhibitors (MAOIs) - MAOIs are known to be helpful in the treatment of depressive disorders with prominent anxiety features but have not been recommended for use in children. The major limitations associated with the use of MAOIs are the dietary restrictions, including most cheeses, tomato sauces, and other foods popular with children, and interactions with over-the-counter medications such as cold treatments and diet pills.

Antianxiety Medications

Anxiety is the most common mental health problem that occurs in children and adolescents. Studies report that children can also experience panic disorder and agoraphobia (Biederman, 1987). Children with anxiety disorders are often treated with a group of antianxiety medications called benzodiazepines: clonazepam, diazepam and alprazolam and beta blockers. These medications work quickly to even out a child's anxiety.

Antipsychotics

Antipsychotic medications have been used to treat childhood psychotic disorders but also to control symptoms of agitation, aggression, and self-injurious behaviors in children with severe developmental disorders (including mental retardation) and pervasive developmental disorder (autistic and autistic-like disorders).

The principal form of psychotic illness is schizophrenia, the most chronic and disabling mental disease. Typically, the illness emerges in late adolescence or early adulthood. However, research studies are revealing that cognitive and social impairments may be evident earlier in children who later develop schizophrenia.

There are a number of antipsychotic medications available. They generally yield comparable results: the main differences are in the potency, the dosage (amount) prescribed to produce beneficial effects, and the side effects.

Other Medications

Clonidine, a medication used primarily in the treatment of adult hypertension, has become more prominent in pediatric psychopharmacology because of its wide range of indications. In addition to being used to treat ADHD and sleep disturbances, clonidine is now considered the first line of treatment in Tourette's syndrome and other tic disorders (Leckman et al 1991). It is the fourth widely used psychotropic medication in children and has been increasingly accepted because of its perceived relative safety.

Guanfancine, as with clonidine, appears to have beneficial effects on hyperactive behaviors, attention abilities, and tic disorders (Chappell et al. 1995). Compared to clonidine, guanfancine appears to have a longer half-life and less sedation.

Off Label Use

Physicians are allowed by law to prescribe medications in ways not specifically approved by the Food & Drug Administration, such as prescribing psychotropic medications for children younger than five years old. New research findings, clinical experience, and the child's and parent's personal preferences are factors considered by physicians when deciding the appropriate medications to prescribe. Prescription for "off-label" purposes of any medication should be made only after a comprehensive evaluation has been made, other forms of therapy (or combination of) have been considered and must be monitored closely.

SUMMARY

In a study published by The Journal of the American Medical Association (February 2000), researchers reported the use of certain psychotropic medications in two-to-four-year-olds rose up to three-fold between 1991 and 1995. One of the reasons of this increase may be attributed to a growing acceptance of psychotropic medications. The mounting pressure for children to conform to social standards of good behavior may also contribute to this increase. School administrators play a critical role in determining which kids may need help as they are often the first to notice the symptoms of behavioral disorders. However, it is not their responsibility to recommend or mandate the use of medications as a solution to behavior problems.

Another reason for this increase may be that more physicians are diagnosing behavior disorders at an early age. However, in a consensus conference by the NIH on ADHD in 1999, it was found that family doctors, the ones with the least expertise in ADHD, diagnose more quickly and prescribe medications more frequently. Experts worry that some doctors are making diagnoses based on symptom checklists rather than on thorough evaluation of a child's life both in and out of the home. The current HMO situation has

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compounded this problem because it makes it impossible for multidisciplinary clinics of the past that brought together pediatric, psychiatric, behavioral and family dynamic expertise to exist. As a result, children with mental illnesses are now increasingly subjected to quick and inexpensive pharmacological fixes. For optimal outcomes, an informed, multi-modal therapy specifically designed by a pediatric psychiatrist for a specific child's condition is highly necessary.

According to Dr. David Fassler, chairman of the American Psychiatric Association's council on children, adolescents and their families, "The real tragedy is that most children and adolescents with psychiatric disorders still do not get the help they need. It is easy to overlook the seriousness of childhood mental disorders. If left untreated, the physical, emotional, social and intellectual development of children with mental disorders will be severely stunted, if not crippled. These children are at a heightened risk for school failure and dropout, drug abuse, and many other difficulties – all of which can be prevented by timely evaluation and appropriate treatment."

For parents who have recognized symptoms of childhood mental disorders in their children, sought medical help, and have embarked upon a treatment plan that includes medications, Dr. Fassler and other child and adolescent psychiatrists recommend:

- Medications should be closely monitored for efficacy, adverse effects and ongoing needs. Careful observation will ensure that the child is getting the appropriate dosage. Talk to your physician about other medications the child is taking, including non-prescription products, to learn of possible contraindications.
- Talk regularly with the child's teachers, caregivers and physician(s) about how the child is doing, especially when medication is first started, re-started or when the dose is changed.
- Applaud the child for improvements in behavior (better grades, developed social skills, more friends, etc.). The medications or the therapy are not responsible for these improvements - they simply make it possible for the child's own strength and natural skills to shine through.
- Find a school or classroom setting that can provide structure and organization beneficial to the child. A child with mental health problems does not need unnecessary pressure and inappropriate expectations.
- Help children feel comfortable with the medication they are taking regularly and the therapy session they frequent. They need to know the value of the treatment program they are in and that being a part of it does not make them different from the rest of their peers.

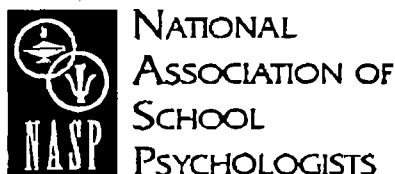
Bibliography to be added.

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The National Association of School Psychologists has initiated a national survey of its over 21,000 members to determine the numbers of preschool and school children and their families who are receiving treatment in school for mental and behavioral problems. This information will be provided to Surgeon General Satcher within the year. It is hoped that funding will allow this "phase one" service count of kinds and amounts of service to be followed by a more in depth analysis of treatment effects.

The second study is proposed to survey evaluation measures of these services including combination of treatments, and community coordinated services. Unmet mental health treatment needs of children and youth in school communities will also be examined.

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Position Statement on Early Childhood Assessment

The National Association of School Psychologists believes that early identification of developmental and learning problems in preschool and primary grade children is essential because of children's broad and rapid development. Intervention services for these children's psychological and developmental difficulties are essential, beneficial, and cost-effective. Because the accurate and fair identification of the developmental needs of young children is critical to the design, implementation, and success of appropriate interventions school psychologists must play a key role.

Evidence from research and practice in early childhood assessment indicates that issues of technical adequacy are more difficult to address with young children who have short attention spans and go through periods of variable, rapid development. Therefore, standardized assessment procedures should be used with great caution in educational decision-making because such tools are inherently less accurate and less predictive when used with young children.

Multidisciplinary team assessments must include multiple sources of information, multiple approaches to assessment, and multiple settings in order to yield a comprehensive understanding of children's skills and needs. Therefore, assessments should center on the child in the family system and home environment, both substantial influences on the development of young children. Similarly, families' self-identified needs should drive the decision-making process concerning the identification of child and family services.

Because categorical identification of infants, toddlers, and young children is ineffective in meeting the special needs of young children, assessment of infants and young children requires specialized training and skills beyond those required for the assessment of older children. Longitudinal and functional assessment of behavior and development of infants, young children, and families in a variety of settings is needed to evaluate and document progress and response to intervention over time, and **must** guide early intervention strategies in meaningful ways.

Therefore, the National Association of School Psychologists will promote early childhood assessment practices that are:

- developmentally appropriate, ecological, comprehensive, skills-based, and family-focused;
- conducted by a multi-disciplinary team;
- linked to intervention strategies designed for young children, rather than to categorical classification;
- based upon comprehensive, educational and/or behavioral concerns, rather than isolated deficits identified by individual assessments;
- nondiscriminatory in terms of gender, ethnicity, native language, family composition, and/or socio-economic status; and
- technically adequate and validated for the purpose(s) for which they are used, including the provision of norms for minority children and children with physical disabilities.

Role of the School Psychologist

NASP encourages the adoption of the philosophy of "parents as partners" and families as the focus to promote assessments and interventions for young children that include full integration of parents and families into the assessment and intervention components of early childhood services. This mandates methods of naturalistic and systematic observation and information gathering, including work sampling procedures and the involvement of the family, home environment, daycare/preschool, and the commu-

nity ecology as part of the comprehensive assessment to gather information and input from parents and caregivers. School psychologists should provide leadership to the multidisciplinary team in ensuring that all information gathered through the assessment is clearly understood by parents so that they can make fully-informed decisions about interventions for their children.

NASP also advocates for pre-service and in-service education for school psychologists and other professionals to address the following issues: 1) normal as well as atypical developmental patterns of infants and young children; 2) practices, procedures, and instrumentation appropriate for screening and assessment of young children, their families, and their environments; 3) the selection of assessment techniques and utilization of findings from such assessments for the design, implementation, and efficacy evaluation of interventions; 4) and standards for early childhood psychological and educational assessment, including legal, ethical, and professional issues — all in the context of noncategorical service delivery for young children and their families.

Summary

NASP supports early childhood assessment practices that allow for accurate and fair identification of the developmental needs of infants, preschoolers, and young children and facilitate interventions that involve parents and other caregivers. Sound early childhood assessment should involve a multi-disciplinary team, including school psychologists with specialized training in the assessment of the young child, and who view behavior and development from a longitudinal perspective.

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MEDICATION ADMINISTRATION IN THE SCHOOL SETTING POSITION STATEMENT

HISTORY:

The safe and effective use of medications for the treatment of illness and disability has enabled many children to attend school. The school nurse has administered medications as necessary during the school day. The use of medications by students at school has increased dramatically over the last few years.

DESCRIPTION OF ISSUE:

Major issues confronting the school nurse regarding the administration of medications include:

- 1) safe administration of the medications
- 2) adherence to safe nursing practice, state nurse practice acts, and state laws and regulations
- 3) ongoing monitoring of therapeutic benefits and side effects
- 4) appropriate communication with the student, family, school staff, and health care providers
- 5) proper documentation
- 6) wide-spread emergence of "natural" and homeopathic remedies for self-limiting conditions

RATIONALE:

School nurses provide direct nursing care to many students with illnesses or disabilities that can be cured or controlled with medication. The administration of medication should be delegated to assistive personnel only in those states where it is in compliance with the law. It is assumed that medication be administered during the school day only when the interval between doses requires administration in school or the medication is a "when necessary" order. The school nurse, because of educational background and knowledge, is uniquely qualified to monitor and administer medication. While it is recognized that many families have chosen natural and homeopathic remedies over traditional treatment, it is recommended that the school nurse require that the use of these remedies follow all school policies for medication administration.

CONCLUSION:

It is the position of the National Association of School Nurses that school nurses administer medication safely and effectively under the following guidelines:

- 1) Adherence to school policies, school nurse standards of practice, state nurse practice acts and state laws.
- 2) The medication is in the original container if over-the-counter (OTC) or in a properly labeled prescription container, subject to Board of Pharmacy regulations. In some states, a licensed healthcare provider may package and label the medication.
- 3) Information on the container must include the name of the drug, dosage, route of administration, and the time interval of dose. Prescriptions must include the student's name, and the name of the prescribing licensed healthcare provider.
- 4) The parent/guardian must request in writing that the medication be given at school.
- 5) The school nurse, based on nursing assessment, determines medication should be given at school.
- 6) The administration of medication in no way violates nursing or standing orders.
- 7) The school nurse is aware of and has access to current reliable information regarding the safe use of the medication including effects and toxicity, possible drug interactions, and expected outcomes.
- 8) Medications are stored in a locked cabinet.
- 9) Procedures should be in place for receiving, administration, and accountability for all medications that are regulated by the Federal Narcotics Act.

School nurses may monitor the self-administration of certain medications (i.e. insulin, epinephrine, inhalers) using an Individual Health Care Plan. Written direction for student self administration of medications must be obtained from the licensed health care provider and written permission from the parent/guardian. Guidelines must be developed for evaluation and monitoring by the school nurse. Self-administration must be permissible under state laws and school policy.

What Difference Does a School Nurse Make?

- ◆ School nursing interventions improve student health to impact achievement and success.
- ◆ School Nurses collaborate with administrators to promote a healthy, safe, and nurturing environment.
- ◆ Parents are confident their student's health needs and injuries are appropriately handled during the school day.
- ◆ Teachers are freed up to devote their time to educating students because the School Nurse coordinates the health care needed by students.

School Nursing is a specialized practice of professional nursing that advances the well being, academic success, and life-long achievement of students. To that end, school nurses facilitate positive student responses to normal development; promote health and safety; intervene with actual and potential health problems; provide case management services; and actively collaborate with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning.

According to a recent survey of School Nurses:

98%

HAVE SAVED A CHILD'S LIFE

82%

HAVE IDENTIFIED AN ABUSED CHILD

67%

HAVE COUNSELED A DEPRESSED/SUICIDAL STUDENT

SCHOOL NURSES

- DECREASE ABSENTEEISM
- DECREASE DISCIPLINE REFERRALS



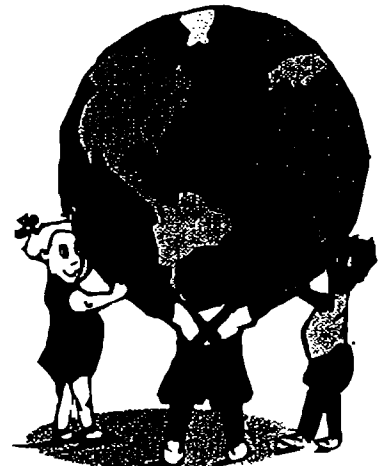
THE ROLE OF THE SCHOOL NURSE

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Drugs aren't the only answer for attention-deficit disorder

A new study shows a sharp increase in children using Ritalin and Prozac for Attention Deficit Disorder. But not everyone needs drugs to cope.

Attention-Deficit Hyperactivity Disorder or ADHD is now believed to affect six percent of the US population. Most children and adults take medication to help them stay focused, but it's not a cure. Simple coping strategies combined with medication can make a difference.

18 year old Daniel Fulton knows what it's like to be different.

"Sometimes I didn't feel like I fit in with the class because I couldn't concentrate like everyone else."

He likes to play computer games because he doesn't have to concentrate on real life. It helps him ignore his daily struggles. Doctor Clare Jones says that impulsiveness and hyperactivity are the classic signs of attention deficit hyperactivity disorder. "They appear to be daydreamers and sometimes you look at them and a veiled curtain comes across the eyes and you know they're not paying attention to you. What's going on here."

Doctor Jones says forty percent of patients never outgrow their symptoms. That's why she recommends more than just medication to help keep it under control.

"I believe that it's not just pills, its pills plus skills."

Doctor Jones suggests getting involved in individual sports like tennis or golf, team sports may allow time for daydreaming. Also try textbooks on tape. It's often easier to listen than read. A tutor can also help children with study habits.

Daniel uses a color coding system for his school subjects. Chemistry might always be green. Researcher

subjects. Chemistry might always be green. Researcher has shown this trick helps people with ADHD improve their memory skills.

Students with ADHD are eligible for special accommodations under the Americans with Disabilities Act.

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Thursday, February 24, 2000

(This is an unedited, uncorrected transcript.)

Prepared by Burrelle's Information Services, which takes sole responsibility for accuracy of transcription

ANNOUNCER February 24, 2000.

TED KOPPEL, ABCNEWS (VO) They fidget, they play, often loudly. They're impatient, they interrupt. Sound like your average kid or a kid in need of medication?

VANITA WARREN And I'm thinking to myself, 'Hello. You want to take a straight-A student and put him on drugs?' It just didn't match.

DR GLEN PEARSON Ritalin makes everybody's life easier in the short run but it contributes very little to the long term positive outcome that we're all hoping for when we treat kids.

DR PETER BREGGIN It's actually a giant social experiment in which millions of children are being suppressed by psychiatric drugs.

TED KOPPEL (VO) Tonight, Love 'Em and Drug 'Em: Are we overmedicating our kids?

ANNOUNCER From ABCNEWS, this is Nightline. Reporting from Washington, Ted Koppel.

TED KOPPEL Once again, the Journal of the American Medical Association has published the results of a long term study, and on the face of it, the results are disturbing. Published this week, the journal found a huge increase in the numbers of two- to four-year-old children taking psychiatric drugs. The number taking some form of Ritalin has tripled between 1991 and 1995. The number of children in the same teenage group taking anti-depressants like Prozac has doubled over the same time period. The problem with that particular age group is that it's far from clear what kind of long term impact on the children these drugs will have. But if that's of particular concern with very young children, there remains the larger issue of whether we are

overprescribing Ritalin, in particular with older children, simply as a convenience.

Ritalin has been found to be extremely helpful in treating hyperactive children, and some of them could not be as effectively treated any other way. But some of them is not all of them. Indeed, there is growing concern within the medical community that Ritalin is frequently used because it is faster and cheaper than alternative treatments might be. And in some cases, as you will hear, it is being used, even mandated, at the insistence of school administrators. Not the parents, not the children's doctors, but schools where teachers may be having a difficult time with hyperactive students. And the question is whether the schools should have more of a say in this matter than parents and doctors, whether Ritalin is sometimes simply used as a convenient shortcut to safer, more conventional methods. Tom Foreman has our report.

MOTHER No, no, no, no, no. You don't want to hurt the dog, Mark.

TOM FOREMAN, ABCNEWS (VO) If there is one thing that defines hyperactive children, it is motion. Constant, relentless...

SAMUEL WARREN Skateboard, Mom.

TOM FOREMAN (VO) Vanita Warren says her son Samuel has been on the move since birth. By first grade, teachers often complained that he was not listening, disrupting class.

VANITA WARREN Go, go, go, go, go, can't sit still, just interested in his surroundings.

TOM FOREMAN (VO) But Vanita was stunned when school officials told her their patience was up. She had to pull Samuel out of school or put him on drugs.

VANITA WARREN And I was thinking to myself, 'Hello. You want to take a straight-A student and put him on drugs?' It just didn't match. It just basically sounded to me like, you don't know how to handle him.

TOM FOREMAN (VO) Back in the 1970s, only about

100,000 kids nationwide were on behavior-altering drugs like Ritalin. Today, by some estimates, as many as seven million children may be on psychotropic medications.

PETER BREGGIN This is a worse epidemic than we've ever had from street drugs.

TOM FOREMAN (VO) Dr. Peter Breggin, a psychiatrist and critic of the wide use of Ritalin, says the reason for the sharp increase is simple—in our society, where parents are working too many hours...

TEACHER When do we round off...

TOM FOREMAN (VO) ...where teachers have too many students, where kids are involved in too many activities, there is simply no time for the child who will not do what he is told when he is told. So the drugs have become a way of calming those children down.

PETER BREGGIN It's become expedient to use drugs rather than to reform the schools, rather than to improve our family life. In other words, instead of adult society taking responsibility for a more child-friendly and more child-caring society, we're drugging the kids instead.

TOM FOREMAN (VO) In Colorado, the board of education became so concerned about teachers adding to that trend by suggesting kids be on Ritalin, that the board passed a resolution. Patty Johnson led the charge.

PATTY JOHNSON It tells teachers that they cannot recommend medication as a solution, that it has to be left up to the parent and the doctor.

TOM FOREMAN (VO) But not everyone finds fault with Ritalin. Consider the Peters family.

DAVID PETERS It doesn't, you know, totally turn you into a zombie or anything like that, but it just helps you focus.

TOM FOREMAN (VO) Both David and Linda Peters are teachers and their own daughter Alison has been on Ritalin for six years. Before the drug came into their lives, there were constant family conflicts. Just getting

through homework each night was an ordeal.

LINDA PETERS And it was supposed to be about an hour a night. And it would take three to four hours for her to complete the homework.

TOM FOREMAN (VO) Today, Alison gets her homework done, gets along with her family, and where once she couldn't even read a book without being sidetracked every few sentences, with Ritalin...

ALISON PETERS Once I was on it, I could sit down and I could read the book, read the chapter, and if I heard a noise in the other room, I could just continue reading. I wouldn't be so distracted.

TOM FOREMAN (VO) The simple truth is many families and doctors say, properly used, Ritalin and other mood-altering drugs can be a godsend.

DR JENNIFER HAGMAN There are some kids who truly can't make it without the medication, without the stimulant, who without the medicine, even in a specialized classroom, would have a really difficult time. Hey, that was pretty good.

TOM FOREMAN Dr. Jennifer Hagman, head of Adolescent Psychiatry at Denver's Children's Hospital, says what's more, teachers can play a critical role in determining which kids may need help.

JENNIFER HAGMAN I find that experienced teachers are pretty good at knowing when a child is having difficulties that are outside the realm of the average kid. Parents, I think, have a harder time sorting that out because they don't have the benefit of having seen, you know, 30 kids a year come through their classes.

TOM FOREMAN (VO) So where is the balance? The National Institutes of Health, in a conference on Attention Deficit Hyperactivity Disorder, the clinical name for the problem these kids suffer, concluded there is no consensus among doctors regarding which ADHD patients should be treated with psychostimulants. "Follow-up to see how the drugs are affecting the kids

may be inadequate and fragmented.” And “...family doctors,” the ones with the least expertise in ADHD, “diagnose more quickly and prescribe medication more frequently.” Put that doctor in an HMO, which won’t pay for a psychiatric evaluation and...

JENNIFER HAGMAN He’s more likely to go ahead and treat to try—you know, give a stimulant a try.

TOM FOREMAN Give him some Ritalin. Give him some...

JENNIFER HAGMAN Exactly. Exactly. And the kid goes away without having had testing or assessments back from the teacher or contact with the school or some of the other academic difficulties screened for.

TOM FOREMAN (VO) For Peter Breggin, it all supports his theory—that the spread of these drugs represents a social, not a scientific, movement.

PETER BREGGIN I think it’s simply a wrong approach and, as long as we leave open the door to we drug some kids, we won’t drug other kids, we’ll have exactly the situation we have today, which is a lot of doctors using their own personal preferences on who they’ll drug and who they won’t drug.

DAVID PETERS These guys need to be fed if you want to go ahead and feed them.

ALISON PETERS OK.

TOM FOREMAN (VO) Families who use the drugs...

ALISON PETERS I get along better with my family because everyone’s not always yelling at me or everyone else in my family to do stuff, to get this done.

TOM FOREMAN (VO) ...and families who don’t...

SAMUEL WARREN Hold on. Hold on. Yeah. Yep. I got it.

TOM FOREMAN (VO) ...can both tell you their way works. Vanita Warren is home schooling Samuel now.

VANITA WARREN He's not having any problems.
He's fine.

TOM FOREMAN (VO) But the decision on how any hyperactive child is treated appears to depend much more on sheer chance than educated choice, on which doctor, which teacher, the child runs into. And that, some psychiatrists suggest, could have dire consequences for the future health of millions of kids.

TED KOPPEL Trying to take sheer chance out of the equation, we'll take a look at an innovative school program when we come back.

ANNOUNCER This is ABCNEWS: Nightline brought to you by...

(Commercial Break)

TED KOPPEL Schools all over the country seem to be facing a common problem—more students, fewer teachers. Too often when a student is having difficulties, the quick fix is to recommend prescription drugs. Tom Foreman looks at a school in Dallas that may have a better idea.

TOM FOREMAN (VO) It is estimated that since 1990, the number of school kids nationwide diagnosed with ADHD and subsequently put on to drugs such as Ritalin, has increased three to six times. A notable exception to that trend, the Dallas public school system.

GLEN PEARSON Gary, is that going to be OK with you? No medication?

TOM FOREMAN (VO) Here, Dr. Glen Pearson, the psychiatrist in charge of a district-wide mental health program, suggests what is going on in many other schools is unconscionable.

GLEN PEARSON I'm very discouraged and angry. Ritalin makes everybody's life easier in the short run, but it contributes very little to the long-term positive outcome that we're all hoping for when we treat kids.

TOM FOREMAN (VO) The mental health program here was started seven years ago with a simple premise—that children's emotional and mental needs are complex, require thorough evaluation and treatment, and usually the child alone is not the trouble. Jenni Jennings helped start the program.

JENNI JENNINGS I can't imagine any case where it's just the child has the problem. And that's why in our program, we really do a family history, might visit the child at home, do observations at home and in the classroom.

Hello, Miss Jackson. How are you?

TOM FOREMAN (VO) In clinics like this one, every day parents come in with their children to talk about their problems. Not with their counselors, but with psychiatrists.

DR VALERIE MESHACK So you got a report card.

TOM FOREMAN (VO) And in this school district, just as in any other, many parents and teachers initially think their children are suffering from an attention problem.

VALERIE MESHACK Many of them come in, and it's fairly obvious that that's not what's going on. There may be a component or there may be some symptoms that are similar to what we see in ADHD, but they end up being a mood disorder, for instance.

GLEN PEARSON Most of them have significant problems with social skills, with mood, with managing impulses, and with aggression.

TOM FOREMAN (VO) All of which can be caused by many things other than ADHD. That is why the doctors here check out the child's physical development to make sure a nutritional deficiency is not to blame.

WOMAN How much do you think you weigh?

TOM FOREMAN (VO) They screen for learning disorders to see if that is causing tension.

GIRL At the end of the day...

TOM FOREMAN (VO) And they work with parents to see if something at home might be causing depression or frustration.

VALERIE MESHACK Everything else has been going OK?

BOY Yes, ma'am.

TOM FOREMAN (VO) Only after all of that do they even consider medication.

GLEN PEARSON I like to have a kid in therapy and working and showing some understanding of his responsibility for his behavior before I give him the medication.

TOM FOREMAN (VO) And just as the role of drugs is sharply constrained here, so is the role of teachers.

JENNI JENNINGS I don't believe a teacher is a mental health worker or a social worker. I think a teacher is there to teach.

KENNETH WASHINGTON OK. Let's go back here.

TOM FOREMAN (VO) Teacher Kenneth Washington handles some of the kids with the worst behavior problems, and every day he sends home reports on their progress. He is consulted by their doctors, but when it comes to prescribing drugs...

KENNETH WASHINGTON I don't think as a teacher we have the right to tell a parent to put his son or daughter on Ritalin.

TOM FOREMAN Well, some teachers think they not only have a right but a responsibility to do that.

KENNETH WASHINGTON No, no. We're not doctors.

TOM FOREMAN (VO) Almost everyone here admits some kids do suffer from ADHD and may benefit from

medication. But they say, look at the signs commonly used to diagnose hyperactive behavior: almost constant fidgeting and restlessness, not sitting in the same seat very long, running or climbing at the wrong time or place, talking too much, always playing too loudly, always on the go, blurting out answers to questions in school, cutting in line or unable to wait for a turn in activities, interrupting others.

JENNI JENNINGS Sounds pretty normal—looks pretty normal, doesn't it?

TOM FOREMAN How do you make the difference? How do you figure out the difference between a kid who really is ADHD and one who is just an active child?

JENNI JENNINGS Well, there's not a test for ADHD. It's a clinical judgment.

TOM FOREMAN (VO) A clinical judgment that if it is improperly made and leads to medication, can keep much more serious learning problems masked for years.

JENNIFER HAGMAN And if you only treat the attention problem and don't address the learning disability, then you've still got a kid at eighth grade who doesn't read well and can't add.

TOM FOREMAN But behaves.

JENNIFER HAGMAN But behaves.

KENNETH WASHINGTON Sometimes teachers just don't want to go that extra mile. Sometimes parents don't want to go that extra mile to find out what's the real problem?

TOM FOREMAN You see the use of Ritalin and these other drugs as really a quick fix for these behavior problems.

KENNETH WASHINGTON A quick fix, yes. That's my personal feeling.

TOM FOREMAN The success of the program here in Dallas is undeniable. Since it began seven years ago,

troubled kids have had better attendance, better grades and a much better chance that by the end of each year, they will have fewer problems.

CYNTHIA GAINES I was, like, at my wit's end when I came here, and they really helped my daughter, as well as me.

TOM FOREMAN (VO) Plenty of children here use medication, but not as many as in other schools, and it is always only a small part of their treatment.

GLEN PEARSON There are other things that these kids need. If they get those other things, they will do well in the long run, even if they don't get Ritalin.

TOM FOREMAN (VO) In short, they believe when any child suffers from attention deficit, the first thing that child needs is attention. This is Tom Foreman for Nightline in Dallas.

TED KOPPEL When we come back, some practical advice from a family therapist who's been treating children for 20 years.

(Commercial Break)

TED KOPPEL And joining us from our San Francisco bureau, Dr. Larry Diller.

DR LAWRENCE DILLER Hello.

TED KOPPEL He is a behavioral pediatrician and the author of a book on Ritalin. I was watching you throughout Tom Foreman's reports while you were listening.

LAWRENCE DILLER Uh-huh.

TED KOPPEL You were twitching a little. Your eyebrows were moving up and down. I—I interpret that more as a little bit of disapproval of some of what you heard. Give—give vent.

LAWRENCE DILLER It seems like this discussion on

Ritalin and ADD tends toward hyperbole. It's either, you know, psychiatrists as noble knights rescuing children from the tyranny of their mental illness or psychiatrists as evil doers, you know, at the behest of lazy parents and teachers. And I'm afraid I don't think it's not as simple as that and, you know, and yet it tends toward this hyperbole and gets people on both sides very upset.

TED KOPPEL All right. Let's—let's start with some simple questions and you will determine...

LAWRENCE DILLER OK.

TED KOPPEL ...whether there are simple answers. Ritalin clearly helpful in many cases? Yes, no?

LAWRENCE DILLER Ritalin is a stimulant and low-dose stimulants will allow anyone, child or adult, ADD or not, to focus on things they find boring and difficult. The fact that it works on children who struggle more in school shouldn't be a big surprise. But it causes a lot of confusion because they hear stimulant, and they immediately think, well, it operates somehow differently on children.

TED KOPPEL Totally benign?

LAWRENCE DILLER We've had 60 years experience using stimulants in children and it seems so far that there are no terrible bad things. On the other hand, there's not a lot of evidence that in the long term it makes a big difference in a positive way, too.

TED KOPPEL But when you hear one of the people on the Tom Foreman interview say it does have a tendency to mask other things, would you agree with that?

LAWRENCE DILLER I would say that relatively it allows that person to stick with things that are more difficult. And so if you have a learning problem, it will allow to you stick with it, but it will not remediate your learning problem or teach you coping techniques.

TED KOPPEL If in your—if in your neighborhood...

LAWRENCE DILLER Yes.

TED KOPPEL ...your children were in a school district where it was up to the school administrators to say, 'Dr. Diller, we've been watching your kids. We think they ought to be on Ritalin, and if you don't agree, you're going to have to take them to another school,' how would you feel about that?

LAWRENCE DILLER Well, I don't think the schools in—in California or at least in my neighborhood do that. They may offer the parents some very difficult choices in terms of staying in a regular class vs. a very special class with much more—fewer students and such like that, and these are the kinds of pressures that the parents and even I face in trying to make a decision between should we place, let's say, a Tom Sawyer or a Pippie Longstocking on medication. The child does not look that disturbed, and yet the choice may be here staying in a regular class or going into a special class.

TED KOPPEL Well, it may not be happening in the schools in your neighborhood in California, but clearly it's happening in one school. And it was heard from this...

LAWRENCE DILLER Yeah.

TED KOPPEL ...one mother who said, 'Hey...

LAWRENCE DILLER Yeah.

TED KOPPEL ...they—they said either take your son out of school or put him on Ritalin.'

LAWRENCE DILLER But the pressures are unmistakable, and while teachers don't say put your child on medication—and I'm not blaming teachers here because they have a hard job—the—the code is 'get your son a medical evaluation.' The message is very clear there that the school had kind of thrown up—thrown up its hands and is thinking in terms of medicating the child.

TED KOPPEL HMOs looking for the cheapest, the most expedient way out? Problem?

LAWRENCE DILLER Problems on a big, big level.

I'm sorry to say that the 15-minute evaluation for ADD continues to thrive out there in America. I have a Web site, and I get messages from anguished parents all the time, the doctor's reaching for the pad after the first five minutes. I think the HMO situation only exacerbates the problems of primary care medicine, and it also makes it very difficult for a specialist like me to do anything but medicate the child when I see them.

TED KOPPEL So what's a parent to do? A parent who has no medical expertise of his own, who is hearing one thing from the doctor, one thing from a teacher, but who feels, 'Hey, I don't think I really want my kids on drugs'?

LAWRENCE DILLER I think if you're lucky enough to live in a suburban or urban area, there's a wide range of people who you can go to. And my advice is to talk to the doctor or evaluator and get their opinions on what this ADD thing is and how they approach it. And if they talk mostly about medication and you're comfortable with that, that's up to you. But most parents, I find, are reluctant to put their children on medication initially and really want somebody to meet the child, meet the family. Many of them are open to parenting strategies and very much want the doctor, the evaluator, to work with the school. So I'd say, you know, don't accept that 15-minute evaluation.

TED KOPPEL Dr. Diller, we're down to our last few seconds.

LAWRENCE DILLER Yeah.

TED KOPPEL Just deal, for a moment, of the reality of the—the pyramiding, the escalating number of children now on the psychiatric drugs.

LAWRENCE DILLER I think it's a message to our society here, really, in some ways, in that sense, I agree with Dr. Breggin, that we expect more from our children and offering them, their families and schools less. The ADD kid is merely the top of that pyramid and I think there's a message to all—all the families and politicians out there that we ought to give more than lip service in terms of children, families and schools.

TED KOPPEL Dr. Diller, thank you very much indeed.

LAWRENCE DILLER Thank you very much for having me.

TED KOPPEL I'll be back in a moment.

(Commercial Break)

TED KOPPEL And that's our report for tonight. I'm Ted Koppel in Washington. For all of us here at ABCNEWS, good night.

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Brain scan may help diagnose ADHD

Study finds biochemical differences in people with condition

ADHD is the most commonly diagnosed disorder in youngsters, affecting an estimated 3 percent to 5 percent of school-age children.



MSNBC STAFF AND WIRE REPORTS

Dec. 16 — For the first time, brain scans have revealed measurable biochemical differences in people with attention deficit hyperactivity disorder, a discovery that could reduce the number of children mistakenly diagnosed and put on drug treatment, researchers say.

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The method 'is the most promising development I've seen in a long time in terms of our coming up with an actual physical test that could help us pin down the diagnosis of ADHD.'

— **DR. EDWARD HALLOWELL**
psychiatrist

THE DIAGNOSIS of ADHD, usually made in school-age children, is commonly based on observed behavior and some experts believe it is highly subjective — essentially just an educated judgment.

Some say the condition is being over-diagnosed in the United States, exposing children unnecessarily to medication, while others argue it is not treated often enough.

Earlier studies have shown scans can detect structural differences in ADHD sufferers' brains, as well as abnormalities in brain activity, and scientists suspect that defects in genes relating to the brain chemical dopamine probably are involved.

The latest study, conducted at Massachusetts General Hospital in Boston and published in this week's issue of The Lancet medical journal, is the first to show a measurable biochemical abnormality in people with the disorder.

'PROMISING DEVELOPMENT'

The method "is the most promising development I've seen in a long time in terms of our coming up with an actual physical test that could help us pin down the diagnosis of ADHD," said Dr. Edward Hallowell, a Boston psychiatrist and expert in ADHD who was not connected with the research.

The Boston scientists have come up with the most direct indicator to date, measuring the biochemical balance in the brain by counting the number of dopamine transporters.

Dopamine is associated with movement, thought, motivation and pleasure. One brain cell signals another by squirting dopamine. Then the first cell mops up the released chemical with a structure called a dopamine transporter.

The researchers scanned the brains of six adults diagnosed with ADHD and 30 healthy people of the same age after injecting both groups with a chemical agent that attaches to the dopamine transporter.



- Children and Adults with Attention Deficit/Hyperactivity Disorder
- National Attention Deficit Disorder Association
- Child Development Institute

The ADHD sufferers had 70 percent more dopamine transporters than their healthy counterparts.

The scientists could not tell, however, whether that was a cause or an effect of the disorder.

The increased number could either mean not enough dopamine is floating around the system or that too much is being produced, said one of the researchers, Dr. Bertha Madras, a professor of psychobiology at Harvard Medical School.

"It's very early days, but if all hyperactive adults

and children show a 70 percent increase above normal in this test, I think it would de facto be considered a diagnostic," Madras said.

STORY Overlooked ADHD patients: girls

The researchers used Single Photon Emission Computed Tomography, or SPECT, scans, which use radioisotopes to pinpoint the brain's neurotransmitter receptors and track brain activity.

Last year, Stanford University researchers reported that magnetic resonance imaging (MRI) showed abnormal nerve activity in boys with ADHD. Specifically, boys with the condition showed greater activity in the frontal lobe when doing a difficult task than children without ADHD, suggesting, according to the researchers, that ADHD children must work harder than other children to control their impulses.

DIAGNOSTIC TOOL

Dr. Sam Tucker, a London-based pediatrician who specializes in ADHD, said that while the new test could be useful, its potential as a definitive diagnostic test is uncertain.

"Scanning is the way to go, but this alone is not going to be the whole answer," he said. "I wouldn't use this as a diagnostic because the neurochemistry is extremely complicated and we don't know how many chemicals are important. It may be two, it may be several."

The researchers agreed doctors still will have to evaluate a child's behavior to help them diagnose the disease, but said the new test could be an important tool.

ADHD is the most commonly diagnosed disorder in children, affecting an estimated 3 percent to 5 percent of school-age children in the United States, and about 1 percent of children in Europe.

STORY Medicine best for attention deficit

The disorder is characterized by impulsive behavior and difficulty paying attention and keeping still to read, study or even watch television. Some mild forms of the symptoms are common in many children, leading to the concerns that it is diagnosed too often.

Earlier this week, researchers at the National Institute of Mental Health reported that medication is more effective than behavioral treatment for children with ADHD. However, the study concluded that the

best course may be a combination of a carefully monitored medication program and behavioral therapy.

The Associated Press contributed to this report.

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HEALTHY ADAM/HEALTHY EVE

Overlooked ADHD patients: girls

Healthy Eve:
More often
daydreamers
than disrupters



Experts say ADHD is diagnosed three to five times more often in boys than girls.

Jose Azel / PNI file

By Linda Carroll
MSNBC

June 1 — She may have sat next to you in school. A nice kid, you thought, but what an airhead. Always forgetting her books, never turning in her assignments on time, she seemed to be daydreaming 24 hours a day. It may have been the case, though, that her problems stemmed from a medical condition more commonly associated with boys — attention deficit hyperactivity disorder, or ADHD.

● [COMPLETE STORY](#) ↘

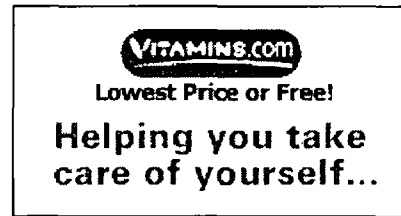
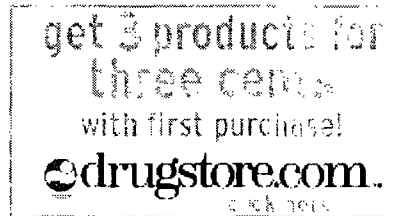
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'The girls just aren't disrupting class like the boys are.'

— **DR. DEBRA SELTZER**
New York Presbyterian
Hospital

ADHD IS DIAGNOSED about three to five times more often in boys than in girls. Yet experts say it may be one of the few psychiatric disorders that is overlooked most in females.

Girls with ADHD are more likely to slip through the cracks than boys, says Dr. Debra Seltzer, an assistant clinical professor of developmental behavioral pediatrics at New York Presbyterian Hospital in New York City.

That's because girls with the condition tend to exhibit fewer behavioral problems in school than boys, Seltzer explained. "The girls are daydreaming," she says. "The boys are blurting out jokes in the middle of class, jumping out of their seats and running around pulling books off of shelves. The girls just aren't disrupting class like the boys are."

Seltzer and others believe the criteria used to diagnose ADHD need to be changed a bit to take these gender differences into account. Perhaps the ADHD gender gap would close if this happened, she says. Right now, no one knows for sure what percentage of girls actually have ADHD — that study still needs to be done, Seltzer says.

It's easy for girls with ADHD to be missed, particularly if they're bright, agrees Dr. Anthony Rostain, an associate professor of psychiatry and pediatrics at the University of Pennsylvania School of Medicine in Philadelphia.

Rostain points to the example of a senior high school girl who recently came to see him for evaluation. "She's got an IQ over 140," he says. "But lately she's been getting Cs, Ds and even Fs in her classes. Because she's so bright, she fooled people for years into thinking she didn't have ADHD. She caught enough of what was going on to get by. But when she entered a very high academic environment where she was asked to sit down and write papers and take advanced placement courses she started having real problems."

RITALIN'S ROLE

This all adds up to girls with the disorder not getting a very effective treatment — Ritalin. Although the popular press has occasionally demonized the drug, experts agree that it is well studied and safe for children

and teens with disabling ADHD.

STORY Healthy Adam: Ritalin being overprescribed, some experts say

By imaging the heads of children with ADHD, scientists have confirmed that these children's brains do not work the same as those of normal youngsters. Certain parts of the frontal lobe are underactive in these children, Rostain says. These are the parts of the brain that are involved in inhibiting movement, in selecting what to pay attention to and in planning ahead, he adds.

Ritalin tunes up the brain so that ADHD sufferers can focus better and ignore inappropriate impulses. "Ritalin increases the signal to noise ratio, so you get better transmission of signals in the brain," Rostain says. "It allows those centers that are relatively inefficient to work better."

Still, with all the bad press given to Ritalin, many parents are afraid to give the drug to their children.

But, says Seltzer, "It's better studied than aspirin and Tylenol and we use those medications without giving it a thought. For children with authentic, organic ADHD, withholding Ritalin is the same as refusing to give insulin to a kid with diabetes."

THE CONSEQUENCES OF NOT TREATING

The consequences of undiagnosed, untreated ADHD can be devastating to a girl. Rostain's patient, for example, has had to completely change her academic plans. "Now she's very depressed because she's not finishing high school in time to go on to college," he says.

I have a good understanding of how difficult it can be to live with what I suspect is probably an attention deficit problem.

That daydreaming little girl you sat next to could have been me. ADHD wasn't being diagnosed much when I was growing up, so teachers just thought I was a bright, but inattentive — and annoying — child.

Over the years I've learned to cope. I don't buy expensive sunglasses — I eventually lose every pair I get anyway. I try to do things when I think of them, rather than putting them off until later, when I know won't remember.

I don't know whether my parents and I would have chosen for me to take Ritalin if it had been available. I was able to do well in school despite my daydreaming and attention problems.

I do know that if I had a child who was depressed and unhappy because ADHD was making school a torture, the drug would be an option I would seriously consider.

Linda Carroll, a Philadelphia-based freelancer,


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Health

HEALTHY ADAM/HEALTHY EVE



Some experts say that behavior modification is better than pharmaceuticals for treating youngsters with ADHD.

Are too many taking Ritalin?

**Healthy Adam:
Focus on hyperactivity**

By Michael Segell
MSNBC

Jose Azel / PNT file

June 1 — Last year, as I was about to begin the final stages of a project I'd been working on for two years, I asked my doctor for some Ritalin, the stimulant used to treat attention-deficit-hyperactivity disorder. For years, I wondered whether my fidgeting, high energy and inability to concentrate for long periods were symptoms of this condition, which affects as much as 5 percent of the population.

 COMPLETE STORY 

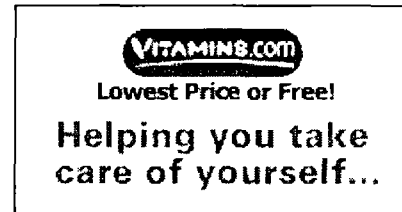
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'Kids with ADHD are normal kids who simply do not think or pay attention to what they are doing.'

— **DAVID STEIN**
Longwood College

NOT SURPRISINGLY, my doctor, an internist, refused to prescribe the medication, but referred me to a psychiatrist who, after a lengthy consultation, did. Starting off with minuscule doses, I gradually worked up to taking an amount that would normally be prescribed for an adult.

I have to confess that I liked the drug a lot. But who wouldn't? Ritalin is a derivative of amphetamine, known in non-medical circles as "speed," which confers a sense of invincibility and boundless energy upon the user. I found myself attacking my work with increased vigor and focus, often skipping lunch so I could continue to write.

I had more energy than before, but now I was able to channel it toward my computer. And that was a signal, to both me and my doctor, that I didn't have ADHD.

Paradoxically, Ritalin, though a stimulant, has a calming effect upon kids and adults affected by the disorder. I was simply getting jazzed up by medical speed which, to the chagrin of my wife and kids, made me very irritable when it wore off.

All of this is a roundabout way of underlining a report from Michigan State University researchers a couple of weeks ago that found that children as young as a year old were being diagnosed with ADHD and treated with drugs. I was able to convey to my doctor that I wasn't experiencing the classic ADHD response to Ritalin and so clearly didn't suffer from the disorder. But can a one-year-old? Or his parents?

"We have very little information about what the disorder is like in very young children," says Marsha Rappley, an associate professor in MSU's Department of Pediatrics and Human Development and author of the study. "I don't think you can give a simple diagnosis of ADHD in a child of this age."

By reviewing medical claims, Rappley and her colleagues found that over a 15-month period, 223 Michigan children between the ages of one and three were diagnosed with ADHD. Of those, more than half were treated with psychotropic medications, including Ritalin, Prozac and Zoloft. She also found that as many as 22 different medications are being used in a large number of combinations.

The symptoms exhibited by the children included highly aggressive behavior, engaging in physically dangerous activities and sleeping very little. "My hypothesis is that the problems of these children are so severe that the physician and parents feel compelled to do something," she says.

Rappley's findings jibe with other evidence that Prozac-like drugs, known as serotonin selective reuptake inhibitors (SSRIs), are being increasingly prescribed for children under 18, although the drugs have been approved only for use in adults.

According to Dr. Jerry L. Rushton, a pediatrician and researcher at the University of North Carolina at Chapel Hill, over a half million prescriptions for SSRIs are written for children and adolescents each year.

Two-thirds of the respondents in Rushton's survey of 600 family physicians and pediatricians said they had written SSRI prescriptions for children and young adolescents with mild to moderate depression. Yet only 8 percent reported having received adequate training in the management of childhood depression, and only 16 percent said they felt comfortable treating depressed children.

QUESTIONABLE INDICATIONS

More than half of the respondents said they'd prescribed the drugs for conditions other than depression, such as ADHD, obsessive-compulsive disorder, aggression/conduct disorder, and bed wetting. "We hear of widespread use of SSRIs for possibly questionable indications," says Rushton.

Despite the "paucity of safety and effectiveness data," Rushton is not opposed to use of the drugs in children. "I think these medications are starting to show promise," he says. "We don't have all the data and guidelines, but it stands to reason they should be used for childhood depression. They shouldn't be used haphazardly — for school problems or nebulous behavioral problems."

Not all researchers agree with Rushton's endorsement of drugs for kids, particularly those with ADHD. At the recent annual convention of the American Psychological Association, debates raged over whether ADHD was a viable diagnosis for a common behavioral problem and whether Ritalin was an appropriate treatment for it.

STORY Healthy Eve. Overlooked ADHD patients: girls

The most recent statistics indicate that the number of diagnoses among children has doubled in the past 10 years and prescriptions for Ritalin have nearly tripled among children five to 18 years old.

David Stein, a psychologist at Longwood College

in Virginia, claims parent training techniques can eliminate the need for drugs. "Kids with ADHD are normal kids who simply do not think or pay attention to what they are doing," he says. "If parents learn to rigorously control the consequences of their children's behavior, the children make dramatic behavioral improvements."

Though the majority of experts still believe that medication is the most effective treatment for the disorder, behavior modification proponents like Stein are beginning to make inroads.

George J. Dupaul, professor of psychology at Lehigh University who has written over 80 journal articles and books on ADHD, says the combination approach works best. "If you look at studies of kids with ADHD as a group, most have shown that the combination of Ritalin and behavior therapy is much better than either treatment in isolation," he says. Still, he says, the majority of kids with ADHD require Ritalin.

And presumably, the majority are at least old enough to say whether it's working or not.

Michael Segell is the author of "Standup Guy: Masculinity That Works," being published by Villard this month.

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Psychiatric drug use in toddlers soars

More kids ages 2 to 4 on Ritalin, antidepressants

Young children are often prescribed psychotropic drugs for pain relief, anxiety, bed wetting and attention-deficit/hyperactivity disorder.



PhotoDisc file

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Feb. 22 — The number of preschoolers in the United States being prescribed antidepressants and stimulants soared in the mid-1990s, despite limited knowledge about the effects of such drugs on young children, according to a study published Tuesday.

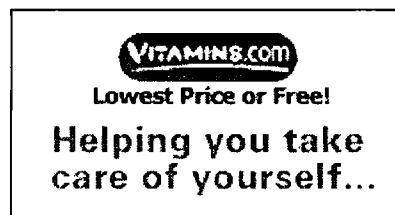
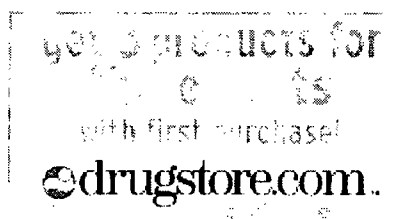
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The number of 2- to 4-year-olds on psychiatric drugs including Ritalin and anti-depressants like Prozac soared 50 percent between 1991 and 1995.

— STUDY AUTHORS

WHEN HE was a toddler, Heath Barker was nicknamed “the red tornado” for his auburn hair and his penchant for tearing things up and jumping off the furniture. When he was just 4, he was diagnosed with attention deficit disorder and prescribed Ritalin.

A study of more than 200,000 preschool-age children shows this was no isolated case.

The number of 2- to 4-year-olds on psychiatric drugs including Ritalin and antidepressants like Prozac jumped 50 percent between 1991 and 1995, researchers reported in the Journal of the American Medical Association.

UNKNOWN EFFECTS

Experts said they are troubled by the findings because the effects of such drugs in children so young are largely unknown. Some doctors worry that such powerful drugs could be dangerous for children’s development.

“Unresolved questions involve the long-term safety of psychotropic medications, particularly in light of earlier ages of initiation and longer durations of treatment,” the report said.

“While it is reassuring that anecdotal reports have rarely documented these problems, the possibility of adverse effects on the developing brain cannot be ruled out,” it added.

The reasons for prescribing such medications in young children include pain relief, anxiety associated with medical, pre-surgery and dental procedures, bed wetting and attention-deficit/hyperactivity disorder in kids 3 years and older.

Although the study did not examine reasons for the increases, Julie Magno Zito, the lead author and an assistant professor of pharmacy and medicine at the University of Maryland, suggested a few possibilities.

With an increasing number of children attending day care, parents may feel pressured “to have their children conform in their behavior,” Zito said. She also said there is a much greater acceptance in the 1990s of psychoactive drugs.

She also said that some of the uses for the drugs are not included in warning materials on drug packages. While this is not uncommon with some drugs for adults

— such as using aspirin to help prevent heart problems
— there may not be enough information on how the psychotropic drugs work for children.

Heath's mother has anecdotal evidence suggesting — as the researchers do — that the number of youngsters on psychiatric drugs is still rising. Through her involvement in Internet support groups for parents of children with behavior problems, Michele Barker said she is hearing of more and more 3- and 4-year-olds being put on drugs like Prozac.

"It's become a quick fix," said Barker, 39, of Hot Springs, Ark.

STUDY DETAILS

The authors reviewed Medicaid prescription records from 1991, 1993 and 1995 for preschoolers from a Midwestern state and a mid-Atlantic state; and for those in an HMO in the Northwest. The states were not identified.

Use of stimulants, antidepressants, antipsychotics and clonidine — a drug used in adults to treat high blood pressure and increasingly for insomnia in hyperactive children — were examined. Substantial increases were seen in every category except antipsychotics, though in some cases the actual number of prescriptions was quite small.

MSNBC's Children's Health archive

The number of children getting any of the drugs totaled about 100,000 in 1991, and jumped 50 percent to 150,000 in 1995. That year, 60 percent of the youngsters on drugs were age 4, 30 percent were 3 and 10 percent were 2-year-olds.

The use of clonidine skyrocketed in all three groups. Although the numbers were small, the researchers said the clonidine increases were particularly remarkable because its use for attention disorders is "new and largely uncharted." They noted that slowed heart beat and fainting have been reported in children who use clonidine with other medications for attention disorders.

'MENTAL HEALTH CRISIS'

"One possible contributing factor is the way mental health services are provided to children," Dr. Joseph T. Coyle of Harvard Medical School's psychiatry department wrote in an editorial accompanying the study. "For example many state Medicaid programs now provide quite limited reimbursement for the evaluation of behavioral disorders in children and preclude more than one 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 appears that behaviorally disturbed children are now increasingly subjected to quick and inexpensive pharmacologic fixes ...” he added.

“These disturbing prescription practices suggest a growing crisis in mental health,” he said.

Dr. David Fassler, chairman of the American Psychiatric Association’s council on adolescents and their families, said the medications studied “can be extremely helpful for some children, even quite young children.” But they should be prescribed only after a comprehensive evaluation and in conjunction with other therapy, he said.

Their use is increasing in part because doctors are getting better at diagnosing behavior disorders at an early age, Fassler said.

However, because their effects on younger children and their development aren’t known, Fassler said, the Food and Drug Administration has recently instructed pharmaceutical companies to study the connection.

Barker said Ritalin calmed her son and helped him do well in school. But it also stole his bubbly personality, so she took him off it after four years.

“He started becoming the so-called zombie,” she said. The family altered his diet and tried nutritional supplements instead.

Now almost 12 and drug-free for nearly four years, Heath is repeating fifth grade and has some learning difficulties. But his mother said he seems happier, and so is she.

“I don’t care if he’s not an honor roll student,” she said, “because he’s healthy.”

The Associated Press and Reuters contributed to this report.

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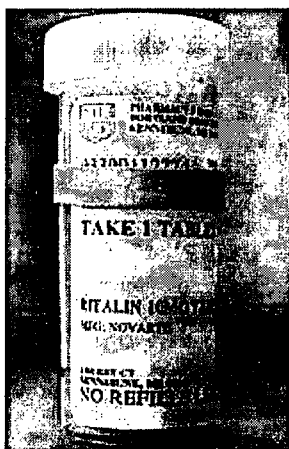
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ABCNEWS

WEB



Kids Using More Psych Drugs

Toddlers Given Medications Not Approved for Their Use

A bottle of Ritalin, a prescription drug for children suffering from attention deficit hyperactivity disorder. (Robert Bukaty/AP Photo)

By Shawna Vogel

abc NEWS.com

BOSTON, Feb. 23 — The early 1990s saw a dramatic increase in the use of stimulants, like Ritalin, antidepressants and other antipsychotic drugs in 2- to 4-year-olds, according to a study in the current issue of the *Journal of the American Medical Association*.



video

Study shows soaring use of psychiatric drugs. RealVideo (download RealPlayer)

Julie Magno Zito, a pharmacologist at the University of Maryland in Baltimore and the lead researcher of the study, found that between 1 percent and 1.5 percent of preschoolers in two state Medicaid programs and in one regional HMO were getting these medications, known as psychotropics.

The investigators analyzed drug use during the time period 1991-1995 in approximately 150,000 children in a Midwestern state Medicaid program, a Middle Atlantic Medicaid program, and in an HMO located in the Northwest.

"What I found very disturbing," said Dr. Joseph T. Coyle, chair of the psychiatry department at Harvard Medical School and author of an editorial accompanying the article, "is that these drugs are being used at ages for which there is absolutely no justification."

Ritalin Most Popular

Indeed Ritalin, which is commonly used to treat attention-deficit/hyperactivity disorder (ADHD), carries a warning against its use in children younger

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Off Label Drug Use in Kids

carries a warning against its use in children younger than 6. Ritalin, and most of the drugs in the study are, therefore, being prescribed off-label, meaning that they weren't originally approved for that use but, according to Food and Drug Administration guidelines, may still be prescribed with caution.

There were hints, even before this study, that psychotropic drug use in young children was on the rise. Zito and her colleagues cited in the article a 1994 report revealing that 3,000 prescriptions for Prozac had been written for children under the age of 1.

When the researchers looked at data from the three sources, they found that stimulants, particularly Ritalin, were by far the most popular psychotropic in 2- to 4-year-olds. In 1995, roughly 12 out of every 1,000 young children in the Midwestern state Medicaid program was getting stimulants — a threefold increase from 1991.

Next most popular in the Medicaid programs were antidepressants, like Prozac. Zito found that the use of these drugs doubled during the early 1990s. By 1995, three out of every 1,000 kids in the Midwestern state were on antidepressants.

By 1995, clonidine, a drug commonly used to treat high blood pressure, had passed antidepressants in popularity in the HMO. Clonidine is often used in combination with Ritalin for the treatment of ADHD. This combined treatment, Zito noted, has been associated with questions of safety, including news reports about sudden death.

Who Is Prescribing These Drugs?

As Coyle points out in his editorial, nobody really knows whether a doctor can reliably diagnose either ADHD, mood disorders or schizophrenia in these very young children.

Disturbed by Zito's analysis, he polled the editorial board of the *Journal of Child and Adolescent Psychopharmacology* and found "most of the experts said they have not or very rarely use these drugs." Which, he says, raises the issue: If the experts feel that this is inappropriate, then who's prescribing these drugs?

"It appears," Coyle writes, "that behaviorally disturbed children are now increasingly subjected to quick and inexpensive pharmacological fixes."

Why Kids Get Psychiatric Drugs

BOSTON, Feb. 23 — As rigorous as the Food and Drug Administration can be in having strict requirements for new medication and device use, one group of patients has gone largely unstudied when it comes to drug approval: children.

In December 1998, the FDA tried to change that. The agency mandated that the manufacturers of any drug that could be used in children conduct studies of the safety and effectiveness of that drug for pediatric patients. Such testing would allow it to be approved for use in the very young and to be labeled properly so

doctors would know how to dose the drug.

Dr. Jon Abramson, the chair of pediatrics at Wake Forest University in Winston-Salem, N.C., and one of the scientists who led the charge to require drug manufacturers to test their medications in children, says the measure has been effective.

Mostly.

That's because once a drug is approved for one age group or condition, it can be used for any person with any condition, as long as a doctor signs off on its use. This type of usage is called "off label," which means a doctor can prescribe a drug for a condition even though the drug is not specifically approved for it. Children are most likely to be treated "off label." In fact, last year, doctors estimated that 70 percent to 80 percent of drugs used on children had not been tested in children.

Because the FDA's recent mandate won't keep a drug from being approved without pediatric testing doctors can continue to prescribe adult drugs to their young patients.

"None of us want to say 'stop using these drugs' because in many instances we don't have any alternative," says Abramson. "None of us are going to let a child die of an infection because a drug is off label."

The American Academy of Pediatrics agrees with Abramson, and has released a statement saying that "lack of approval for a specific use should not prevent physicians from prescribing an available drug in the best interests of their patients. The decision to prescribe a drug rests with the physician."

Most recently, the deaths of 11 children after using the adult heartburn drug Propulsid have highlighted the danger of prescribing medications to youngsters without proper testing. Last year, seven infants in Knoxville, Tenn., developed hypertrophic pyloric stenosis, a condition that causes the opening between the stomach and intestines to narrow, after being given a common antibiotic.

And this week, the *Journal of the American Medical Association* published a report finding that children between the ages of 2 and 4 are increasingly being treated for psychological problems with adult drugs.

"I was rather taken aback when they sent me the paper," says Dr. Joseph T. Coyle, the chair of the psychiatry department at Harvard Medical School, and the author of an editorial accompanying this week's research in *JAMA*. He added that the long-term effects of these drugs are unknown and it is unclear what effect using psychiatric drugs so early in a child's life might have on brain development.

But when a child arrives at a doctor's doorstep, sometimes the instinct to cure a disease can override the professional tenet to "first, do no harm."

"Many of the medications that we are finding very helpful in adults have some very clear potential benefits for use in children — but these are drugs that are not approved for use in children," says Dr. Kenneth C. Copeland, a pediatrics professor at Oklahoma University in Oklahoma City. "I'm really struggling — and I think all of us should struggle with this issue."

— Mary Harris, ABCNEWS.com



WH Meeting fax

M E M O R A N D U M

to: Chris Jennings, Office of Domestic Policy
fax: 456.5557

from: Mary Crosby,
American Academy of Child and Adolescent Psychiatry
Deputy Executive Director

subject: White House Children/Medication Meeting on Monday

date: March 16, 2000

Number of pages: 17

Thanks to the Administration and staff for putting focus on the issue of children and psychotropic medication. Special thanks to Mrs. Clinton and cabinet members for their support.

Knowing that you have access to comprehensive resources, I am sending some examples of American Academy of Child and Adolescent Psychiatry materials and recommended materials, and you can let me know if you want more depth.

Child and adolescent psychiatrists are the only medical specialty trained to treat the mental illnesses of childhood and adolescence. They complete a two-year training program after their general psychiatry training and medical school. They are trained to do comprehensive evaluations of children and adolescents and to develop treatment plans that often include a "treatment team" of psychologists, social workers.

The AACAP website, www.aacap.org, features educational material for parents, consumers and the media. The homepage currently lists, "Children and Psychiatric Medication," as a special area. By clicking on this area, you will find related policy statements and other fact sheets.

The AACAP has a scientific publication, *Journal of the American Academy of Child and Adolescent Psychiatry*, that, while it is not on the Internet yet, can be accessed through medical site searches. For example, the July, 1999 issue (Volume 38, Number 7) contains, "Are Stimulants Overprescribed? Treatment of ADHD in Four U.S. Communities." The lead author is a child and adolescent psychiatrist, Peter Jensen, M.D., who recently moved from NIMH to Columbia University in New York.

For the AACAP members, the national dialogue over psychotropic medications should include the broad areas of:

- Research related to children, adolescents and psychotropic medications.
What do we know and where should the research resources be directed?
- Distribution of research findings and public health education about them.
How should research be interpreted and what are credible sources?

- Influence of managed care.
What effect has managed care had on evaluating, diagnosing and treating children and adolescents?
- Workforce (training) issues.
What can be done to recruit and train professionals who will work with children and adolescents with mental illnesses? How can a shortage specialty like child and adolescent psychiatry receive support for recruitment and training?

The Surgeon General's Report on Mental Health notes the dearth of child and adolescent psychiatrists, yet the federal programs that support recruitment and training have been decreased or eliminated.

My recommendation for a recent news article with appropriate reporting on the problems and misunderstandings about prescribing psychotropic medications for children: U.S. News and World Report, "The Perils of Pills," March 6, 2000.

For a specific disorder such as attention-deficit hyperactivity disorder, I would recommend the report by the AMA's Council on Scientific Affairs, "Diagnosis and Treatment of Attention Deficit Hyperactivity Disorder in School-Age Children." This report (CSA Report 5-Annual Meeting-1997) was written in response to member requests for help in studying the increasing number of diagnoses of ADHD and addressing public concern regarding possible over-prescription of ADHD medications. One of the six recommendations is for the AMA to encourage the creation and dissemination of practice guidelines for ADHD by appropriate specialty societies. The AACAP has had a practice guideline on ADHD available for several years, as well as guidelines and draft guidelines for many other disorders. If you would like to review any of these guidelines, I will have them forwarded.

The AACAP forwarded recommendations to FDA for the psychotropic medications that should be given clinical trials. These recommendations can be forwarded if needed.

Accompanying articles:

- Psychiatric Medication for Children and Adolescents, Part I -- How Medications are Used. Psychiatric Medication for Children and Adolescents Part II: Types of Medications.
- Children's Major Psychiatric Disorders.
- Comprehensive Psychiatric Evaluation.
- Psychiatric Diagnostic Evaluations
- Questions to Ask About Psychiatric Medications for Children and Adolescents
- Work Force Fact Sheet

Please let me know the AACAP can help in any way with the meeting on Monday. Thanks again for your concern about the medication issue. There are many deliverables that can come out of this effort.

###

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: PartIII-Questions to Ask*.

Additional/related *Facts for Families: #00 "Definition of a Child and Adolescent Psychiatrist," #25 "Know Where to Seek Help for Your Child," and #52 "Comprehensive*

AACAP Facts for Families - Psychiatric Medications for Children and Adolescents

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Psychiatric Evaluation." *Your Child* (1998 Harper Collins)/*Your Adolescent* (1999 Harper Collins)

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**For more information
about "Your Child"**

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FACTS *for* FAMILIES

No. 29 (2/00)

PSYCHIATRIC MEDICATION FOR CHILDREN AND ADOLESCENTS PART II: TYPES OF MEDICATIONS

Psychiatric medications can be an effective part of the treatment for psychiatric disorders of childhood and adolescence. In recent years there have been an increasing number of new and different psychiatric medications used with children and adolescents. Research studies are underway to establish more clearly which medications are most helpful for specific disorders and presenting problems. Clinical practice and experience, as well as research studies, help physicians determine which medications are most effective for a particular child. Before recommending any medication, the psychiatrist (preferably a child and adolescent psychiatrist) should conduct a comprehensive diagnostic evaluation of the child or adolescent. The youngster's presenting psychiatric symptoms along with past response to medications and also consideration of possible side effects will determine the choice of medication. Psychiatric medication should only be used as part of a comprehensive treatment plan.

Stimulant Medications: Stimulant medications are often useful as part of the treatment for attention deficit hyperactive disorder (ADHD). Examples include: Dextroamphetamine (*Dexedrine*, *Adderal*), Methylphenidate (*Ritalin*), and Pemoline (*Cylert*).

Antidepressant Medications: Antidepressant medications are used in the treatment of depression, school phobias, panic attacks, and other anxiety disorders, bedwetting, eating disorders, obsessive-compulsive disorder, personality disorders, posttraumatic stress disorder, and attention deficit hyperactive disorder. There are several types of antidepressant medications (tricyclics, serotonin reuptake inhibitors, monoamine oxidase inhibitors and atypical). Examples of tricyclic antidepressants (TCA's) include: Amitriptyline (*Elavil*), Clomipramine (*Anafranil*), Imipramine (*Tofranil*), and Nortriptyline (*Pamelor*). Examples of serotonin reuptake inhibitors (SRI's) include: Fluoxetine (*Prozac*), Sertraline (*Zoloft*), Paroxetine (*Paxil*), Fluvoxamine (*Luvox*), Venlafaxine (*Effexor*), and Citalopram (*Celexa*). Examples of monoamine oxidase inhibitors (MAOI's) include: Phenelzine (*Nardil*), and Tranylcypromine (*Parnate*). Examples of atypical antidepressants include: Bupropion (*Wellbutrin*), Nefazodone (*Serzone*), Trazodone (*Desyrel*), and Mirtazapine (*Remeron*).

Antipsychotic Medications: Antipsychotic medications can be helpful in controlling psychotic symptoms (delusions, hallucinations) or disorganized thinking. These medications may also help muscle twitches ("tics") or verbal outbursts as seen in Tourette's Syndrome. They are occasionally used to treat severe anxiety and may help in reducing very aggressive behavior. Examples of traditional antipsychotic medications include: Chlorpromazine (*Thorazine*), Thioridazine (*Mellaril*), Fluphenazine (*Prolixin*),

PSYCHIATRIC MEDICATION FOR CHILDREN AND ADOLESCENTS PART II: TYPES OF MEDICATIONS, "Facts for Families," No. 29 (2/00)

Trifluoperazine (*Stelazine*), Thiothixene (*Navane*), and Haloperidol (*Haldol*). Newer antipsychotic medications (also known as atypical or novel) include: Clozapine (*Clozaril*), Risperidone (*Risperdal*), Quetiapine (*Seroquel*), Olanzapine (*Zyprexa*), and Ziprasidone (*Zeldox*).

Mood Stabilizers and Anticonvulsant Medications: Mood stabilizers may be helpful in treating manic-depressive episodes, excessive mood swings, aggressive behavior, impulse control disorders and severe mood symptoms in schizoaffective disorder and schizophrenia. Lithium (lithium carbonate, *Eskalith*) is an example of a mood stabilizer. Some anticonvulsant medications can also help control severe mood changes. Examples include: Valproic Acid (*Depakote*, *Depakene*), Carbamazepine (*Tegretol*), Gabapentin (*Neurontin*), and Lamotrigine (*Lamictil*).

Anti-anxiety Medications: Anti-anxiety medications may be helpful in the treatment of severe anxiety. There are several types of anti-anxiety medications: benzodiazepines; antihistamines; and atypicals. Examples of benzodiazepines include: Alprazolam (*Xanax*), lorazepam (*Ativan*), Diazepam (*Valium*), and Clonazepam (*Klonopin*). Examples of antihistamines include: Diphenhydramine (*Benadryl*), and Hydroxyzine (*Vistaril*). Examples of atypical anti-anxiety medications include: Buspirone (*BuSpar*), and Zolpidem (*Ambien*).

Sleep Medications: A variety of medications may be used for a short period to help with sleep problems. Examples include: SRI anti-depressants, Trazodone (*Desyrel*), Zolpidem (*Ambien*), and Diphenhydramine (*Benadryl*).

Miscellaneous Medications: Other medications are also being used to treat a variety of symptoms. For example: clonidine (*Catapres*) may be used to treat the severe impulsiveness in some children with ADHD and guanfacine (*Tenex*) for "flashbacks" in children with PTSD.

When prescribed appropriately by an experienced psychiatrist (preferably a child and adolescent psychiatrist) and taken as directed, medication may reduce or eliminate troubling symptoms and improve daily functioning of children and adolescents with psychiatric disorders.

For additional information see *Facts for Families: #21 Psychiatric Medication for Children and Adolescents: Part I - How Medications Are Used*, #51 *Psychiatric Medication for Children and Adolescents: Part III - Questions to Ask*. See also: *Your Child* (1998 Harper Collins)/*Your Adolescent* (1999 Harper Collins).

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AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY

CHILDREN'S MAJOR PSYCHIATRIC DISORDERS

No. 29

(11/95)

A child with a "major psychiatric disorder" has a very serious illness affecting several areas of the child's life. These areas may include emotions, social or intellectual ability, or the use of language. Children with major psychiatric disorders may also have physical problems or may also be mentally retarded.

When a child and adolescent psychiatrist examines a child to learn if he or she has a major psychiatric disorder, these are some of the signs they look for or ask parents about:

- failure to look or smile at parents or other care givers;
- very strange actions or appearance;
- lack of movement or facial expression;
- lack of interest in or awareness of other people;
- odd way of speaking, or private language that no one else can understand;
- strange conversations with him- or herself;
- odd or repetitive movements, such as spinning, hand-flapping, or headbanging; and
- panic in response to a change in surroundings.

There are many different kinds of major psychiatric disorders. The specific name given to a child's illness will depend upon the combination of symptoms listed above, and on how severe the illness is.

Major psychiatric disorders often last a long time, and may be lifelong. However, when children with these disorders begin treatment early, their health and ability to perform everyday tasks will usually improve.

When parents are concerned that their child may have a major psychiatric disorder, they should seek a comprehensive evaluation (see Facts for Families #52, Comprehensive Psychiatric Evaluation) as soon as possible. Observant parents, pediatricians, teachers and others who see the child regularly can compare the child with others in his or her age group. Their observations are very helpful in the formation of an initial assessment of the child's problem.

A comprehensive evaluation and treatment plan will then involve a child and adolescent psychiatrist, who coordinates his or her own findings with those of parents, special educators, pediatricians, neurologists and developmental and psychological tests.

Comprehensive treatment will involve coordinating several of the following:

- psychotherapy;
- specific learning programs;
- specific social skill and behavior programs;

CHILDREN'S MAJOR PSYCHIATRIC DISORDERS

Page 2 of 2

- psychiatric medication;
- special schools or hospitals; and
- active involvement by the family.

Perhaps because children change so much as they grow, diagnosis of major psychiatric disorders in youngsters is one of the most difficult areas of medicine. Thus, it is extremely important that physicians with adequate training and experience be involved in helping the child, and that parents seek help as soon as they begin to be worried about their child.

**For more information
about "Your Child"**

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COMPREHENSIVE PSYCHIATRIC EVALUATION

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AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY

COMPREHENSIVE PSYCHIATRIC EVALUATION

No. 52

(11/95)

Evaluation by a child and adolescent psychiatrist is appropriate for any child or adolescent with emotional or behavioral problems. Most children and adolescents with serious emotional and behavioral problems need a comprehensive psychiatric evaluation.

Comprehensive psychiatric evaluations usually require several hours over one or more office visits for the child, parents and family. With the parents' permission, other significant people (such as the family physician, school personnel or other relatives) may be contacted for additional information.

The comprehensive evaluation frequently includes the following:

- Description of present problems and symptoms;
- Information about health, illness and treatment (both physical and psychiatric);
- Parent and family histories;
- Information about the child's development;
- Information about school and friends;
- Information about family relationships;
- Psychiatric interview of the child or adolescent;
- If needed, laboratory studies such as blood tests, x-rays, or special assessments (for example, psychological, educational, speech and language evaluation).

The child and adolescent psychiatrist then develops a formulation. The formulation describes the child's problems and explains them in terms that the parents and child can understand. Biological, psychological and social parts of the problem are combined in the formulation with the developmental needs, history and strengths of the child or adolescent.

Time is made available to answer the parents' and child's questions.

Parents often come to such evaluations with many concerns, including:

- Is my child normal? Am I normal? Am I to blame?
- Am I silly to worry?
- Can you help us? Can you help my child?
- Does my child need treatment? Do I need treatment?
- What is wrong? What is the diagnosis?
- What are your recommendations? How can the family help?
- What will treatment cost, and how long will it take?

Parents are often worried about how they will be viewed during the evaluation. The child and adolescent psychiatrist is there to support the family and to be a partner, not to judge or blame. They listen to concerns, and help the child or adolescent and his/her family define the short and long-term goals of the evaluation. Parents should always ask for

COMPREHENSIVE PSYCHIATRIC EVALUATION

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explanations of words or terms they do not understand.

When a treatable problem is identified, recommendations are provided and a specific treatment plan is developed. Child and adolescent psychiatrists are specifically trained and skilled in conducting comprehensive psychiatric evaluations with children, adolescents and families.

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POLICY STATEMENT

Psychiatric Diagnostic Evaluations

Submitted by the Work Group on Consumer Issues, December 1998

Approved by the Council on March 3, 1999

The American Academy of Child and Adolescent Psychiatry (AACAP), which represents over 6,700 child and adolescent psychiatrists, opposes arbitrary limits on time or number of sessions for the initial psychiatric diagnostic evaluation. The insurance industry, managed care companies, and health administrators must adopt reasonable and clinically appropriate policies and guidelines regarding the psychiatric diagnostic evaluation of children and adolescents. Moreover, states and the Federal government must assure appropriate access to psychiatric evaluation for all children and adolescents.

The psychiatric assessment of the child differs from that of the adult in several important respects. Such evaluations require examination of the current problem with attention to developmental, behavioral, emotional, cognitive, educational, biomedical, family, peer, and social components. A thorough history of both the child and the family, including a comprehensive review of systems and a child mental status exam is a necessity.

A comprehensive psychiatric evaluation usually requires several hours to complete and is often best performed over several sessions, including sessions for the child and parents separately and together. In addition, a full evaluation usually requires the collection of information from a variety of outside sources, such as the school, child's pediatrician, psychological testing, and social service agencies. By contrast, many managed care companies currently are authorizing one diagnostic session. This is inappropriate management because it leads to inadequate and/or insufficient information, condensed evaluations, diagnostic errors, and inadequate treatment planning.

Other resources:

- *Facts for Families*, #52 "Comprehensive Psychiatric Evaluations"
- AACAP "Practice Parameters for the Psychiatric Assessment of Children and Adolescents"

FACTS *for* FAMILIES

No. 51 (11/95)

QUESTIONS TO ASK ABOUT PSYCHIATRIC MEDICATIONS FOR CHILDREN AND ADOLESCENTS

Medication may be an important part of treatment for some psychiatric disorders in children and adolescents. Psychiatric medication should only be used as one part of a comprehensive treatment plan. Ongoing evaluation and monitoring by a physician is essential. Parents should be provided with complete information when psychiatric medication is recommended as part of their child's treatment plan. Children and adolescents should be included in the discussion about medications, using words they understand. By asking the following questions, children, adolescents, and their parents will gain a better understanding of psychiatric medications:

1. What is the name of the medication? Is it known by other names?
2. What is known about its helpfulness with other children who have a similar condition to my child?
3. How will the medication help my child? How long before I see improvement? When will it work?
4. What are the side effects which commonly occur with this medication?
5. What are the rare or serious side effects, if any, which can occur?
6. Is this medication addictive? Can it be abused?
7. What is the recommended dosage? How often will the medication be taken?
8. Are there any laboratory tests (e.g. heart tests, blood test, etc.) which need to be done before my child begins taking the medication? Will any tests need to be done while my child is taking the medication?
9. Will a child and adolescent psychiatrist be monitoring my child's response to medication and make dosage changes if necessary? How often will progress be checked and by whom?
10. Are there any other medications or foods which my child should avoid while taking the medication?

**Questions to Ask About Psychiatric Medications for Children and Adolescents,
"Facts for Families," No. 51 (11/95)**

11. Are there any activities that my child should avoid while taking the medication? Are any precautions recommended for other activities?
12. How long will my child need to take this medication? How will the decision be made to stop this medication?
13. What do I do if a problem develops (e.g. if my child becomes ill, doses are missed, or side effects develop)?
14. What is the cost of the medication (generic vs. brand name)?
15. Does my child's school nurse need to be informed about this medication?

Treatment with psychiatric medications is a serious matter for parents, children and adolescents. Parents should ask these questions **before** their child or adolescent starts taking psychiatric medications. Parents and children/adolescents need to be fully informed about medications. If, after asking these questions, parents still have serious questions or doubts about medication treatment, they should feel free to ask for a second opinion by a child and adolescent psychiatrist. Parents seeking a referral for any reason to a local child and adolescent psychiatrist may contact the AACAP, 3615 Wisconsin Avenue, NW, Washington, D.C. 20016, (202) 966-7300.

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AACAP WORK FORCE FACT SHEET

"There is a dearth of child psychiatrists...Furthermore, many barriers remain that prevent children, teenagers, and their parents from seeking help from the small number of specially trained professionals who are available...This places a burden on pediatricians, family physicians, and other gatekeepers to identify children for referral and treatment decisions."
(Mental Health: A Report of the Surgeon General, 1999)

Status of Work Force and Prevalence Issues for Child and Adolescent Psychiatrists

- Approximately 7,000 child and adolescent psychiatrists, who are trained to diagnose and treat the mental disorders of childhood and adolescence, are practicing, teaching and researching across the United States.
- Child and adolescent psychiatry requires two years of additional training beyond the three-year general psychiatry program and medical school. About 300 child and adolescent psychiatrists complete training each year.

The 1999 Surgeon General's Report on Mental Health states that:

- ▶ Almost 21% of U.S. children ages 9 to 17 (**15.1 million**) had a diagnosable mental or addictive disorder associated with at least minimum impairment.
- ▶ There are approximately six million to nine million children and adolescents in the United States with serious emotional disturbances, accounting for nine to thirteen percent of all children.
- ▶ Four million youth suffer from a major illness that results in significant impairments at home, at school, and with peers.
- ▶ At any one time between 10 and 15 percent of the child and adolescent population have some symptoms of depression.
- In 1990, the *Journal of the American Medical Association* (JAMA) projected that utilization of psychiatric services would increase at a greater rate than utilization of general medicine services and outstrip the growth in supply of psychiatrists.
- In 1993, JAMA projected increases in the use of mental health services and estimated a much slower growth in the supply of adult and child psychiatrists.

Both of these projections were correct.

Marketplace/Utilization

In 1999, the Surgeon General's Report on Mental Health stated that,

- "Today, in established market economies such as the United States, mental illness is the second leading cause of disability and premature mortality. Mental disorders collectively account for more than 15 percent of the overall burden associated with all forms of cancer."
- The report also states, "Today, the *majority* of those who need mental health treatment do not seek it."
- And, "The supply of well-trained mental health professionals also is inadequate in many areas of the country especially in rural areas. Particularly keen shortages are found in the numbers of mental health professionals serving children and adolescents with serious mental disorders and older people."

A 1999 survey conducted by WellChild, a foundation established by Blue Cross and Blue Shield of Massachusetts, found that pediatricians in Massachusetts agreed that children's emotional health is "an indispensable foundation for physical health, social relationships and achievement," only 37 percent felt their medical education was adequate preparation for the role they play in responding to children's emotional health needs.

Documentation of a Child and Adolescent Psychiatry as a Shortage Specialty

- **Original GMENAC Report:** In 1980, the report of the Graduate Medical Education National Advisory Committee (GMENAC) recommended that child and adolescent psychiatry triple its 3,000 physicians in the 1980's to 8,000-10,000 by 1990. This range was based on 1980 estimated prevalence rates of disorders of childhood and adolescence. (1980 GMENAC Report Modeling, Research, and Data Technical Panel, Volume II, p.246.)
- **Follow-up Abt Report:** In 1990, an Abt Associates report updated the 1980 GMENAC report. The report, prepared for the Council on Graduate Medical Education (COGME), a committee of the Department of Health and Human Services, concluded that by 1990, the nation would need 33,359 child and adolescent psychiatrists, 34,065 in 2000, and 32,470 child and adolescent psychiatrists in 2010. The decline in 2010 is due to lower population projections for children after 1990. In the 1990 report, the new formula used, for example, a prevalence rate for major affective disorders that increased four times the 1980 projections. (Abt Associates Inc., Reexamination of the Adequacy of Physician Supply Made in 1980 by the GMENAC for Select Specialties, 1991, p. 37-38)

**Physician Projections from the Bureau of Health Professions, 2000
Health Resources and Services Administration, PHS, DHHS**

- Most supply and forecast modeling done by the Bureau is **utilization based**: what is expected by **age**, by gender, demographics, etc.
- The actual number of physicians in 1998 is 759,000; projection for 2020 is 894,000
- The Bureau data shows 6,300 child and adolescent psychiatrists throughout the country, which reflects the projection. The projected number of child and adolescent psychiatrists in 2020 is 8,312, which is a 43 percent increase from 1995.
- The Bureau's utilization-based projections for increased use of general and child and adolescent psychiatrists are:
1995 - 2000 = child and adolescent psychiatry 31 percent; general psychiatry 6 percent
1995 - 2005 = child and adolescent psychiatry 56 percent; general psychiatry 11 percent
1995 - 2010 = child and adolescent psychiatry 75 percent; general psychiatry 14 percent
1995 - 2015 = child and adolescent psychiatry 94 percent; general psychiatry 17 percent
1995 - 2020 = child and adolescent psychiatry 100 percent; general psychiatry 19 percent
- Projections are done according to the numbers of physicians practicing at PGY10 by major professional activity.

Prepared by American Academy of Child and Adolescent Psychiatry
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FAX COVER

TO: *Barbara Woolley*

FAX: *2/456-6218*

FR: *Jay Cutler*

Please contact me at (202) 682-6060 if there are any questions.

Number of pages transmitted including cover: *9* Date: *3/15/00*

Message:

Barbara -

Now you can diagnose the kids!

Jay

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DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS

FOURTH EDITION

DSM-IVTM



PUBLISHED BY THE
AMERICAN PSYCHIATRIC ASSOCIATION
WASHINGTON, DC

Attention-Deficit/Hyperactivity Disorder

Diagnostic Features

The essential feature of Attention-Deficit/Hyperactivity Disorder is a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a comparable level of development (Criterion A). Some hyperactive-impulsive or inattentive symptoms that cause impairment must have been present before age 7 years, although many individuals are diagnosed after the symptoms have been present for a number of years (Criterion B). Some impairment from the symptoms must be present in at least two settings (e.g., at home and at school or work) (Criterion C). There must be clear evidence of interference with developmentally appropriate social, academic, or occupational functioning (Criterion D). The disturbance does not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and is not better accounted for by another mental disorder (e.g., a Mood Disorder, Anxiety Disorder, Dissociative Disorder, or Personality Disorder) (Criterion E).

Inattention may be manifest in academic, occupational, or social situations. Individuals with this disorder may fail to give close attention to details or may make careless mistakes in schoolwork or other tasks (Criterion A1a). Work is often messy and performed carelessly and without considered thought. Individuals often have difficulty sustaining attention in tasks or play activities and find it hard to persist with tasks until completion (Criterion A1b). They often appear as if their mind is elsewhere or as if they are not listening or did not hear what has just been said (Criterion A1c). There may be frequent shifts from one uncompleted activity to another. Individuals diagnosed with this disorder may begin a task, move on to another, then turn to yet something else, prior to completing any one task. They often do not follow through on requests or instructions and fail to complete schoolwork, chores, or other duties (Criterion A1d). Failure to complete tasks should be considered in making this diagnosis only if it is due to inattention as opposed to other possible reasons (e.g., a failure to understand instructions). These individuals often have difficulties organizing tasks and activities (Criterion A1e). Tasks that require sustained mental effort are experienced as unpleasant and markedly aversive. As a result, these individuals typically avoid or have a strong dislike for activities that demand sustained self-application and mental effort or that require organizational demands or close concentration (e.g., homework or paperwork) (Criterion A1f). This avoidance must be due to the person's difficulties with attention and not due to a primary oppositional attitude, although secondary oppositionalism may also occur. Work habits are often disorganized and the materials necessary for doing

the task are often scattered, lost, or carelessly handled and damaged (Criterion A1g). Individuals with this disorder are easily distracted by irrelevant stimuli and frequently interrupt ongoing tasks to attend to trivial noises or events that are usually and easily ignored by others (e.g., a car honking, a background conversation) (Criterion A1h). They are often forgetful in daily activities (e.g., missing appointments, forgetting to bring lunch) (Criterion A1i). In social situations, inattention may be expressed as frequent shifts in conversation, not listening to others, not keeping one's mind on conversations, and not following details or rules of games or activities.

Hyperactivity may be manifested by fidgetiness or squirming in one's seat (Criterion A2a), by not remaining seated when expected to do so (Criterion A2b), by excessive running or climbing in situations where it is inappropriate (Criterion A2c), by having difficulty playing or engaging quietly in leisure activities (Criterion A2d), by appearing to be often "on the go" or as if "driven by a motor" (Criterion A2e), or by talking excessively (Criterion A2f). Hyperactivity may vary with the individual's age and developmental level, and the diagnosis should be made cautiously in young children. Toddlers and preschoolers with this disorder differ from normally active young children by being constantly on the go and into everything; they dart back and forth, are "out of the door before their coat is on," jump or climb on furniture, run through the house, and have difficulty participating in sedentary group activities in preschool classes (e.g., listening to a story). School-age children display similar behaviors but usually with less frequency or intensity than toddlers and preschoolers. They have difficulty remaining seated, get up frequently, and squirm in, or hang on to the edge of, their seat. They fidget with objects, tap their hands, and shake their feet or legs excessively. They often get up from the table during meals, while watching television, or while doing homework; they talk excessively; and they make excessive noise during quiet activities. In adolescents and adults, symptoms of hyperactivity take the form of feelings of restlessness and difficulty engaging in quiet sedentary activities.

Impulsivity manifests itself as impatience, difficulty in delaying responses, blurting out answers before questions have been completed (Criterion A2g), difficulty awaiting one's turn (Criterion A2h), and frequently interrupting or intruding on others to the point of causing difficulties in social, academic, or occupational settings (Criterion A2i). Others may complain that they cannot get a word in edgewise. Individuals with this disorder typically make comments out of turn, fail to listen to directions, initiate conversations at inappropriate times, interrupt others excessively, intrude on others, grab objects from others, touch things they are not supposed to touch, and clown around. Impulsivity may lead to accidents (e.g., knocking over objects, banging into people, grabbing a hot pan) and to engagement in potentially dangerous activities without consideration of possible consequences (e.g., riding a skateboard over extremely rough terrain).

Behavioral manifestations usually appear in multiple contexts, including home, school, work, and social situations. To make the diagnosis, some impairment must be present in at least two settings (Criterion C). It is very unusual for an individual to display the same level of dysfunction in all settings or within the same setting at all times. Symptoms typically worsen in situations that require sustained attention or mental effort or that lack intrinsic appeal or novelty (e.g., listening to classroom teachers, doing class assignments, listening to or reading lengthy materials, or working on monotonous, repetitive tasks). Signs of the disorder may be minimal or absent when the person is under very strict control, is in a novel setting, is engaged in especially interesting activities, is in a one-to-one situation (e.g., the clinician's office), or while the person experiences frequent rewards for appropriate behavior. The symptoms are more likely

to occur in group situations (e.g., in playgroups, classrooms, or work environments). The clinician should therefore inquire about the individual's behavior in a variety of situations within each setting.

Subtypes

Although most individuals have symptoms of both inattention and hyperactivity-impulsivity, there are some individuals in whom one or the other pattern is predominant. The appropriate subtype (for a current diagnosis) should be indicated based on the predominant symptom pattern for the past 6 months.

314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type. This subtype should be used if six (or more) symptoms of inattention and six (or more) symptoms of hyperactivity-impulsivity have persisted for at least 6 months. Most children and adolescents with the disorder have the Combined Type. It is not known whether the same is true of adults with the disorder.

314.00 Attention Deficit/Hyperactivity Disorder, Predominantly Inattentive Type. This subtype should be used if six (or more) symptoms of inattention (but fewer than six symptoms of hyperactivity-impulsivity) have persisted for at least 6 months.

314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type. This subtype should be used if six (or more) symptoms of hyperactivity-impulsivity (but fewer than six symptoms of inattention) have persisted for at least 6 months. Inattention may often still be a significant clinical feature in such cases.

Recording Procedures

Individuals who at an earlier stage of the disorder had the Predominantly Inattentive Type or the Predominantly Hyperactive-Impulsive Type may go on to develop the Combined Type and vice versa. The appropriate subtype (for a current diagnosis) should be indicated based on the predominant symptom pattern for the past 6 months. If clinically significant symptoms remain but criteria are no longer met for any of the subtypes, the appropriate diagnosis is Attention-Deficit/Hyperactivity Disorder, In Partial Remission. When an individual's symptoms do not currently meet full criteria for the disorder and it is unclear whether criteria for the disorder have previously been met, Attention-Deficit/Hyperactivity Disorder Not Otherwise Specified should be diagnosed.

Associated Features and Disorders

Associated descriptive features and mental disorders. Associated features vary depending on age and developmental stage and may include low frustration tolerance, temper outbursts, bossiness, stubbornness, excessive and frequent insistence that requests be met, mood lability, demoralization, dysphoria, rejection by peers, and poor self-esteem. Academic achievement is often impaired and devalued, typically leading to conflict with the family and school authorities. Inadequate self-application to tasks that require sustained effort is often interpreted by others as indicating laziness, a poor sense of responsibility, and oppositional behavior. Family relationships are often characterized by resentment and antagonism, especially because variability in the individual's symp-

tomatic status often leads parents to believe that all the troublesome behavior is willful. Individuals with Attention-Deficit/Hyperactivity Disorder may obtain less schooling than their peers and have poorer vocational achievement. Intellectual development, as assessed by individual IQ tests, appears to be somewhat lower in children with this disorder. In its severe form, the disorder is very impairing, affecting social, familial, and scholastic adjustment. A substantial proportion of children referred to clinics with Attention-Deficit/Hyperactivity Disorder also have Oppositional Defiant Disorder or Conduct Disorder. There may be a higher prevalence of Mood Disorders, Anxiety Disorders, Learning Disorders, and Communication Disorders in children with Attention-Deficit/Hyperactivity Disorder. This disorder is not infrequent among individuals with Tourette's Disorder; when the two disorders coexist, the onset of Attention-Deficit/Hyperactivity Disorder often precedes the onset of the Tourette's Disorder. There may be a history of child abuse or neglect, multiple foster placements, neurotoxin exposure (e.g., lead poisoning), infections (e.g., encephalitis), drug exposure in utero, low birth weight, and Mental Retardation.

Associated laboratory findings. There are no laboratory tests that have been established as diagnostic in the clinical assessment of Attention-Deficit/Hyperactivity Disorder. Tests that require effortful mental processing have been noted to be abnormal in groups of individuals with Attention-Deficit/Hyperactivity Disorder compared with control subjects, but it is not yet entirely clear what fundamental cognitive deficit is responsible for this.

Associated physical examination findings and general medical conditions. There are no specific physical features associated with Attention-Deficit/Hyperactivity Disorder, although minor physical anomalies (e.g., hypertelorism, highly arched palate, low-set ears) may occur at a higher rate than in the general population. There may also be a higher rate of physical injury.

Specific Culture, Age, and Gender Features

Attention-Deficit/Hyperactivity Disorder is known to occur in various cultures, with variations in reported prevalence among Western countries probably arising more from different diagnostic practices than from differences in clinical presentation.

It is especially difficult to establish this diagnosis in children younger than age 4 or 5 years, because their characteristic behavior is much more variable than that of older children and may include features that are similar to symptoms of Attention-Deficit/Hyperactivity Disorder. Furthermore, symptoms of inattention in toddlers or preschool children are often not readily observed because young children typically experience few demands for sustained attention. However, even the attention of toddlers can be held in a variety of situations (e.g., the average 2- or 3-year-old child can typically sit with an adult looking through picture books). In contrast, young children with Attention-Deficit/Hyperactivity Disorder move excessively and typically are difficult to contain. Inquiring about a wide variety of behaviors in a young child may be helpful in ensuring that a full clinical picture has been obtained. As children mature, symptoms usually become less conspicuous. By late childhood and early adolescence, signs of excessive gross motor activity (e.g., excessive running and climbing, not remaining seated) are less common, and hyperactivity symptoms may be confined to fidgetiness or an inner

feeling of jitteriness or restlessness. In school-age children, symptoms of inattention affect classroom work and academic performance. Impulsive symptoms may also lead to the breaking of familial, interpersonal, and educational rules, especially in adolescence. In adulthood, restlessness may lead to difficulty in participating in sedentary activities and to avoiding pastimes or occupations that provide limited opportunity for spontaneous movement (e.g., desk jobs).

The disorder is much more frequent in males than in females, with male-to-female ratios ranging from 4:1 to 9:1, depending on the setting (i.e., general population or clinics).

Prevalence

The prevalence of Attention-Deficit/Hyperactivity Disorder is estimated at 3%-5% in school-age children. Data on prevalence in adolescence and adulthood are limited.

Course

Most parents first observe excessive motor activity when the children are toddlers, frequently coinciding with the development of independent locomotion. However, because many overactive toddlers will not go on to develop Attention-Deficit/Hyperactivity Disorder, caution should be exercised in making this diagnosis in early years. Usually, the disorder is first diagnosed during elementary school years, when school adjustment is compromised. In the majority of cases seen in clinical settings, the disorder is relatively stable through early adolescence. In most individuals, symptoms attenuate during late adolescence and adulthood, although a minority experience the full complement of symptoms of Attention-Deficit/Hyperactivity Disorder into mid-adulthood. Other adults may retain only some of the symptoms, in which case the diagnosis of Attention-Deficit/Hyperactivity Disorder, In Partial Remission, should be used. This diagnosis applies to individuals who no longer have the full disorder but still retain some symptoms that cause functional impairment.

Familial Pattern

Attention-Deficit/Hyperactivity Disorder has been found to be more common in the first-degree biological relatives of children with Attention-Deficit/Hyperactivity Disorder. Studies also suggest that there is a higher prevalence of Mood and Anxiety Disorders, Learning Disorders, Substance-Related Disorders, and Antisocial Personality Disorder in family members of individuals with Attention-Deficit/Hyperactivity Disorder.

Differential Diagnosis

In early childhood, it may be difficult to distinguish symptoms of Attention-Deficit/Hyperactivity Disorder from **age-appropriate behaviors in active children** (e.g., running around or being noisy).

Symptoms of inattention are common among children with low IQ who are placed in academic settings that are inappropriate to their intellectual ability. These behaviors must be distinguished from similar signs in children with Attention-Deficit/Hyperactivity Disorder. In children with **Mental Retardation**, an additional diagnosis of Attention-

Deficit/Hyperactivity Disorder should be made only if the symptoms of inattention or hyperactivity are excessive for the child's mental age. Inattention in the classroom may also occur when children with high intelligence are placed in academically **understimulating environments**. Attention-Deficit/Hyperactivity Disorder must also be distinguished from difficulty in goal-directed behavior in children from inadequate, disorganized, or chaotic environments. Reports from multiple informants (e.g., babysitters, grandparents, or parents of playmates) are helpful in providing a confluence of observations concerning the child's inattention, hyperactivity, and capacity for developmentally appropriate self-regulation in various settings.

Individuals with **oppositional behavior** may resist work or school tasks that require self-application because of an unwillingness to conform to others' demands. These symptoms must be differentiated from the avoidance of school tasks seen in individuals with Attention-Deficit/Hyperactivity Disorder. Complicating the differential diagnosis is the fact that some individuals with Attention-Deficit/Hyperactivity Disorder develop secondary oppositional attitudes toward such tasks and devalue their importance, often as a rationalization for their failure.

Attention-Deficit/Hyperactivity Disorder is not diagnosed if the symptoms are better accounted for by **another mental disorder** (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorder, Personality Disorder, Personality Change Due to a General Medical Condition, or a Substance-Related Disorder). In all these disorders, the symptoms of inattention typically have an onset after age 7 years, and the childhood history of school adjustment generally is not characterized by disruptive behavior or teacher complaints concerning inattentive, hyperactive, or impulsive behavior. When a Mood Disorder or Anxiety Disorder co-occurs with Attention-Deficit/Hyperactivity Disorder, each should be diagnosed. Attention-Deficit/Hyperactivity Disorder is not diagnosed if the symptoms of inattention and hyperactivity occur exclusively during the course of a **Pervasive Developmental Disorder** or a **Psychotic Disorder**. Symptoms of inattention, hyperactivity, or impulsivity related to the use of medication (e.g., bronchodilators, isoniazid, akathisia from neuroleptics) in children before age 7 years are not diagnosed as Attention-Deficit/Hyperactivity Disorder but instead are diagnosed as **Other Substance-Related Disorder Not Otherwise Specified**.

■ Diagnostic criteria for Attention-Deficit/Hyperactivity Disorder

A. Either (1) or (2):

- (1) six (or more) of the following symptoms of **inattention** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Inattention

- (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

(continued)

□ **Diagnostic criteria for Attention-Deficit/Hyperactivity Disorder** (*continued*)

- (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 (e.g., toys, school assignments, pencils, books, or tools)
 - (h) is often easily distracted by extraneous stimuli
 - (i) is often forgetful in daily activities
- (2) six (or more) of the following symptoms of **hyperactivity-impulsivity** have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity

- (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

Impulsivity

- (g) often blurts out answers before questions have been completed
- (h) often has difficulty awaiting turn
- (i) often interrupts or intrudes on others (e.g., butts into conversations or games)

- B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.
- C. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and at home).
- D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

(*continued*)

☐ **Diagnostic criteria for Attention-Deficit/Hyperactivity Disorder** (*continued*)

- 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 (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder).

Code based on type:

314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both Criteria A1 and A2 are met for the past 6 months

314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: if Criterion A1 is met but Criterion A2 is not met for the past 6 months

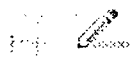
314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: if Criterion A2 is met but Criterion A1 is not met for the past 6 months

Coding note: For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, "In Partial Remission" should be specified.

314.9 Attention-Deficit/Hyperactivity Disorder Not Otherwise Specified

This category is for disorders with prominent symptoms of inattention or hyperactivity-impulsivity that do not meet criteria for Attention-Deficit/Hyperactivity Disorder.

03/18/2000 08:26:37 AM

 Ann O'Leary
03/18/2000 08:26:37 AM

Record Type: Record

To: Devorah R. Adler/OPD/EOP@EOP
cc: Ruby Shamir/OPD/EOP@EOP, Heather H. Howard/OPD/EOP@EOP
Subject: Re:

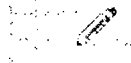
Devorah -

I'm sorry for my disorganization. My parents flew in from Maine yesterday and it has been a bit hectic. I have several more suggestions below in red. Could you please page me when you have a final draft and also let me know when we are getting to the press? Thanks much.

-Ann

----- Forwarded by Ann O'Leary/OPD/EOP on 03/18/2000 08:14 AM -----

03/17/2000 06:29:01 PM

 Ann O'Leary
03/17/2000 06:29:01 PM

Record Type: Record

To: Devorah R. Adler/OPD/EOP@EOP
cc: Ruby Shamir/OPD/EOP@EOP
bcc: Records Management@EOP
Subject: Re: 

Devorah -

See comments in **BOLD** throughout.

Page me if you need me. I'll send you more info. shortly.

-Ann

Devorah R. Adler

03/17/2000 11:11:17 AM

 Devorah R. Adler
03/17/2000 11:11:17 AM

Record Type: Record

To: Ann O'Leary/OPD/EOP@EOP

cc:

Subject:

**DRAFT: FIRST LADY HILLARY RODHAM CLINTON LAUNCHES NEW FEDERAL
EFFORT TO ENSURE [THE APPROPRIATE TREATMENT OF CHILDREN WITH
EMOTIONAL AND BEHAVIORAL DIFFICULTIES] ~~SAFE USE OF PSYCHOTROPIC
MEDICATION IN CHILDREN~~**

March 20, 2000

Today, First Lady Hillary Rodham Clinton, together with Secretary Shalala and representatives of parents and a broad range of health and education professionals, launched ~~an~~ **unprecedented** (GIVEN MEG'S EFFORTS I WOULD CUT -- which we should praise upfront) public-private effort to ensure that that children with emotional and behavioral conditions are appropriately diagnosed, treated, monitored, and managed by qualified professionals. While progress has been made in diagnosing and treating these conditions, justifiable concerns have been raised about the inappropriate (both over and under) utilization of ~~psychotropic~~ medications such as Ritalin, clonidine, and Prozac in very young children. Just as important, there is a lack of understanding amongst parents, teachers, and health professionals about the best diagnostic, pharmacological, and behavioral interventions now available.

In order to provide the information necessary to improve diagnosis, treatment, and management practices to ~~both~~ parents, **caregivers**, providers, ~~and teachers~~ **educators**, the First Lady will announce new Federal action, including: the release of a new, easy to understand fact sheet about treatment of children with mental disorders for parents; a new commitment by the National Institute of Mental Health (NIMH) to conduct additional research on the impact of psychotropic medication on children under the age of seven; the initiation of a process at FDA to improve pediatric labeling information for children under the age of seven; ~~and~~ a national conference hosted by the Surgeon General, NIMH, ~~and~~ the Food and Drug Administration (FDA), ~~and the U.S. Department of Education~~ on Treatment of Children with Behavioral and Mental Disorders to take place this fall; ~~and a pledge from the U.S. Department of Education to distribute information kits to parents and teachers on Attention Deficit Hyperactivity Disorder (ADHA).~~ She will also praise private sector efforts to improve diagnosis and treatment protocols for young children under the age of six (**do we have any specifics?**).

IMPROVING TREATMENT THERAPIES FOR YOUNG CHILDREN WITH BEHAVIORAL AND MENTAL DISORDERS. New regulatory authority for pediatric labeling as well as new financial incentives included in PDUFA (**spell out**), have significantly improved the information available to both parents and physicians about the appropriate use of medications for children. In the 18 months since these initiatives have been implemented, research has been completed on 19 drugs, resulting in new safety information being added to six drugs with changes expected for the other 13. Studies of an additional 125 drugs are

already underway. However, recent research indicates that more needs to be learned about young children with emotional and behavioral disorders. Recent studies published in the *Journal of the American Medical Association* reviewing selected provider data found that:

- **The number of children aged two through four taking stimulants such as Ritalin more than doubled.** Ninety percent of preschoolers on medication were on Ritalin or a similar stimulant in order to treat attention deficit disorders, and the number of these children increased 169 percent over a five year period. Although there is a 4:1 ratio in the number of boys to girls taking medications for ADHD, the number of girls being diagnosed and treated with attention deficit disorders increased over this time period; in one study, the proportion of girls taking Ritalin or a similar stimulant increased by 60 percent.

- **The number of children under the age of five on clonidine tripled.** The increase in children using clonidine, used to treat insomnia in children with attention deficit disorders, is notable as the increase in its use has occurred without research to ensure that it is a safe and effective treatment. Adverse effects, including rapid or irregular heartbeat and fainting, have been reported in children using the drug together with other medications for attention-deficit disorder. The increased use of the drug since 1991 helps explain the increase in clonidine poisoning in children (is this problem widespread -- I'm afraid it could scare people).

- **Many children are inappropriately treated.** Studies indicate wide geographic variation in the numbers of children receiving psychotropic drugs such as Ritalin. One study indicated that in some suburban areas, as many as 40 percent of children were on Ritalin, as opposed to less than X percent of children in urban areas. [need NIMH cite]. Other research indicates racial variations as well; a study of one Maryland HMO indicated that as African-Americans children were 2.5 times less likely to receive Ritalin as white children. This wide variation in treatment patterns supports the need for more research to determine appropriate treatment protocols for children with emotional and behavioral disorders.

- **Failure to treat emotional and behavioral disorders has severe life-long consequences.** Studies suggest that many children with untreated emotional and behavioral disorders fail to reach their full potential. Brain damage causing lifelong psychologic or social damage may stem from an on-going cycle of punishment and ostracism for behaviors that the child cannot control without help. Children with these types of problems are at significantly higher risk for anti-social activities later on than those without behavioral problems. It is evident that an accurate early diagnosis, education, support, and medication, if necessary, can overcome many early problems and help prevent long-term negative behavior.

(I THINK IT IS IMPORTANT TO ADD THAT MEDICATION CAN HELP CHILDREN WITH SEVERE EMOTIONAL AND BEHAVIORAL DISORDERS)

- **More research is necessary to ensure informed treatment decisions.** Many of the drugs being used by very young children have not been tested in children under the age of 16;

none have been tested for children under the age of six. More research is necessary to ensure that providers and parents have the information they need, especially information about the impact of medication on brain development, to make appropriate treatment decisions.

NEW FEDERAL EFFORT TO ENSURE THE SAFE AND EFFECTIVE USE OF ~~PSYCHOTROPIC~~ DRUGS IN YOUNG CHILDREN [WITH BEHAVIORAL AND EMOTIONAL PROBLEMS].

Today, First Lady Hillary Rodham Clinton launched a new Federal effort to ensure that providers and parents have the information they need to make appropriate treatment decisions for children with behavioral and mental disorders. This multi-faceted effort includes:

- **New efforts to provide parents with up-to-date information on the appropriate treatment of children with mental disorders.** This week, the National Institute of Mental Health will release a new fact sheet to help parents of children with mental disorders make the right decisions about their child's treatment. This fact sheet includes easy to understand information on the inclusion of medication in an overall treatment plan; how to help determine if a child's problems are serious; and how to get help. Upon release, this fact sheet will be distributed to X providers nationwide **[WILL GROUPS DISTRIBUTE??]**. In addition, the Department of Education will soon release a research based information kit on the many things for parents and teachers can do to help children with ADHD.
- **Initiate a process for the development of additional pediatric labeling requirements for psychotropic drugs used in children.** Today, FDA will announce that it will work with its Pediatric Advisory Commission to design research protocols that will be used to develop new pediatric dosage information to be included on the labels of drugs such as methylphenidate, clonidine, and other drugs commonly used in **very young** children. These studies, which will be based on national research goals, will be designed to address the ethical issues associated with the study of these drugs in this vulnerable population.
- **Announced that NIMH will dedicate \$X million in a landmark study to determine the impact of the use of medication for behavioral and emotional conditions in young children.** Today, the National Institute of Mental Health announced that within the next X months, it ~~would~~ **will** invest \$X million in research to determine the efficacy of medications used to treat behavioral and emotional conditions in very young children. This research, conducted in concert with FDA, will assemble the latest information on the use of these drugs, determine safety and efficacy, and identify discrepancies between clinical practice and scientific evidence.
- **A national Conference on the Treatment of Children with Behavioral and Mental Disorders.** This summer, the Office of the Surgeon General will coordinate a Federal Conference on Treatment of Children with Behavioral and Mental Disorders. This national conference, which will build on the success of the recent White House Conference on Mental Health hosted by Tipper Gore, will include representatives of the provider, research, consumer

advocacy, and education communities. Topics of discussion include: developing a research strategy that can be used to develop interventions that can be used by providers nationwide; presenting research based strategies for parents and teachers of children with behavioral and emotional difficulties; how best to ethically determine the efficacy and safety of medications in young children; and strategies to address the difficulty of accurate diagnosis in preschoolers.

- ~~Information for parents and teachers on ADHD. (NEED TO ADD INFO)~~ instead move up to section with NIMH

NEW PRIVATE SECTOR COMMITMENT TO ENSURING APPROPRIATE DIAGNOSIS OF EMOTIONAL AND BEHAVIORAL DISORDERS IN YOUNG CHILDREN. Today, the First Lady will praise the American Academy of Pediatrics (AAP) for their new commitment to release diagnosis and treatment protocols that focus on children under the age of six with emotional and behavioral disorders. Upon their completion in *[insert date]* this important information will be distributed to all X members of the AAP.

FIRST LADY HILLARY ROHDAM CLINTON'S LONGSTANDING COMMITMENT TO CHILDREN. In 1997, the First Lady was a strong advocate for appropriate pediatric labeling for parents and health care professionals. In addition, the First Lady championed the passage of the Better Pharmaceuticals for Children Act, enacted in 1997 as part of the FDA Modernization Act, that provides additional financial incentives for companies to conduct these studies. The number of studies to determine the safety of specific drugs in children conducted in 18 months since the passage of this legislation is ten times higher than the number of studies conducted in the five years before the Act's passage.

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Original Contribution

Vol. 283 No. 8
February 23, 2000

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Trends in the Prescribing of Psychotropic Medications to Preschoolers

Julie Magno Zito, PhD; Daniel J. Safer, MD; Susan dosReis, PhD; James F. Gardner, ScM; Myde Boles, PhD; Frances Lynch, PhD

Context Recent reports on the use of psychotropic medications for preschool-aged children with behavioral and emotional disorders warrant further examination of trends in the type and extent of drug therapy and sociodemographic correlates.

Objectives To determine the prevalence of psychotropic medication use in preschool-aged youths and to show utilization trends across a 5-year span.

Design Ambulatory care prescription records from 2 state Medicaid programs and a salaried group-model health maintenance organization (HMO) were used to perform a population-based analysis of three 1-year cross-sectional data sets (for the years 1991, 1993, and 1995).

Setting and Participants From 1991 to 1995, the number of enrollees aged 2 through 4 years in a Midwestern state Medicaid (MWM) program ranged from 146,369 to 158,060; in a mid-Atlantic state Medicaid (MAM) program, from 34,842 to 54,237; and in an HMO setting in the Northwest, from 19,107 to 19,322.

Main Outcome Measures Total, age-specific, and gender-specific utilization prevalences per 1000 enrollees for 3 major psychotropic drug classes (stimulants, antidepressants, and neuroleptics) and 2 leading psychotherapeutic medications (methylphenidate and clonidine); rates of increased use of these drugs from 1991 to 1995, compared across the 3 sites.

Results The 1995 rank order of total prevalence in preschoolers (per 1000) in the MWM program was: stimulants (12.3), 90% of which represents methylphenidate (11.1); antidepressants (3.2); clonidine (2.3); and neuroleptics (0.9). A similar rank order was observed for the MAM program, while the HMO had nearly 3 times more clonidine than antidepressant use (1.9 vs 0.7). Sizable increases in prevalence were noted between 1991 and 1995 across the 3 sites for clonidine, stimulants, and antidepressants, while neuroleptic use increased only slightly. Methylphenidate prevalence in 2 through 4-year-olds increased at each site: MWM, 3-fold; MAM, 1.7-fold; and HMO, 3.1-fold. Decreases occurred in the relative proportions of previously dominant psychotherapeutic agents in the stimulant and antidepressant classes, while increases occurred for newer, less established agents.

Conclusions In all 3 data sources, psychotropic medications prescribed for preschoolers increased dramatically between 1991 and 1995. The predominance of medications with off-label (unlabeled) indications calls for prospective community-based, multidimensional outcome studies.

JAMA. 2000;283:1025-1030

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The prevalence of psychotropic medication treatment for children and adolescents with emotional and behavioral disorders has significantly increased in the United States during the last few decades, particularly in the last 15 years. Specifically, the 5 through 14-year-old age group has experienced a great increase in stimulant treatment for attention-deficit/hyperactivity disorder (ADHD), and the 15 through 19-year-old age group has had sizable increases in the use of antidepressant medications.^{1, 2}

Approved and unapproved indications for psychotropic medications in young children are not extensive. These include: short-term use of analgesics and sedatives/hypnotics for pain relief; hydroxyzine for situational anxiety associated with medical, presurgical, and dental procedures; tricyclic antidepressants for nocturnal enuresis (6-year-olds and older); and amphetamines for ADHD in those 3 years old and older.³ Accordingly, the prevalence of psychotropic medication treatment for children younger than 5 years old has not received much professional attention until recently.⁴⁻⁶

Concern about this age group relates to off-label (unlabeled) use, ie, for treatment indications with little or no proven efficacy and lacking product package insert labeling information approved by the US Food and Drug Administration (FDA).⁷ One psychiatric newsletter, citing FDA-compiled marketing data, reported that 3000 prescriptions for fluoxetine hydrochloride were written for children aged younger than 1 year in 1994.⁸ In a 1998 professional meeting report,⁵ pediatric researchers noted that 57% of 223 Michigan Medicaid enrollees aged younger than 4 years with a diagnosis of ADHD received at least 1 psychotropic medication to treat this condition during a 15-month period in 1995-1996. Of the treatments, methylphenidate and clonidine were prescribed most often.

Although the use of psychotropic medication in preschool-aged children compared with older youths is relatively small, the reports cited argue for additional assessment to more systematically estimate its use. Consequently, 3 large, computerized data sources were used to estimate total, age-specific, and gender-specific psychotropic medication prevalence for 2 through 4-year-olds; to compare prevalence in the youngest age group with that in older children and adolescents; and to show utilization trends in the 5-year span from 1991-1995.

METHODS**Data Sources**

Three large data sets were assembled from 2 types of health care systems. The first 2 are outpatient data sets from 2 geographically distinct Medicaid populations, 1 in a Midwestern state and 1 in a mid-Atlantic state. The third set of data comes from a group-model health maintenance organization (HMO) serving a predominantly employed population in the northwest region of the United States. The total enrollments for those younger than age 20 years in 1991 and 1995, respectively, are as follows: Midwestern Medicaid (MWM), 669,164 and 687,722; mid-Atlantic Medicaid (MAM), 165,502 and 248,466; and group-model HMO (HMO), 131,038 and 131,860. These populations included both continuous and noncontinuous enrollees for each study year. The Medicaid youth populations were almost entirely eligible under Aid to Families with Dependent Children, and a small proportion qualified because of disability status (Supplemental Security Income) or foster care status. Nonwhites were overrepresented in the Medicaid populations and were underrepresented among HMO enrollees according to

methylphenidate -
brandname Ritalin
clonidine -
brandname Catapres
fluoxetine hydrochloride -
brand name Prozac

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and were underrepresented among HMO enrollees according to general statistical profiles of the settings.⁹

Study Measures

Psychotropic medication prevalence was defined for each study year as the frequency of persons with 1 or more HMO pharmacy records or Medicaid prescription claims for a psychotropic medication class, subclass, or specific medication per 1000 enrolled youths. Time trends were assessed across the 5-year span with data from 3 cross-sectional annual analyses (1991, 1993, and 1995).

For age-specific prevalence, children were grouped into 4 age strata (aged 2-4, 5-9, 10-14, and 15-19 years) according to US census categories. Data analyses focused on children aged 2 through 4 years. We were unable to investigate psychotropic medication use in infants 1 year old or younger in the 2 Medicaid populations because year of birth is recorded in a 2-digit field. Thus, "95" could refer to someone born in 1895 or 1995. We were unable, therefore, to distinguish those 1 year old and younger from 100- and 101-year-olds. We do present data on methylphenidate use in infants 1 year old or younger from the HMO program, as 4-digit years of birth were available. From 1991-1995, the number of enrollees aged 2 through 4 years ranged from 146,369 to 158,060 in the MWM program; from 34,842 to 54,237 in the MAM program, and from 19,107 to 19,322 in the HMO.

A separate analysis was performed to examine medication use among preschool-aged children by year of age. Gender-specific prevalence provided separate prevalence rates for boys and for girls.

Psychotropic Medications

Three psychotropic medication classes were examined: stimulants (methylphenidate, other stimulants), antidepressants (selective serotonin reuptake inhibitors [SSRIs], tricyclic antidepressants [TCAs], and other antidepressants), and neuroleptics. Selection was based on the frequent use of stimulants and antidepressants and the public health significance of the use of neuroleptics in the very young. In addition, 2 specific medications (methylphenidate and clonidine) were examined because their use alone or as a combined treatment has increased substantially since the early 1990s. All the drugs were identified using a data dictionary encompassing the national drug codes for each of the 3 study years. The study was given an exempt classification by the institutional review board—expedited review.

RESULTS

Total Psychotropic Medication Prevalence

The rank order of psychotropic medication prevalence in 1995 for the MWM program shows that, per 1000 enrollees, stimulants (12.3) were the leading treatment among those 2 through 4 years old, followed by antidepressants (3.2), clonidine (2.3), and neuroleptics (0.9) (Table 1). Within classes, methylphenidate prevalence (11.1 per 1000 enrollees) represented 90% of the stimulant treatment, while TCA prevalence (2.4 per 1000 enrollees) led the antidepressant class. A similar ranking of medication prevalence in 1995 was observed for the MAM program, while preschool-aged children in the HMO had nearly 3 times more clonidine use than antidepressant use (Table 1).

anti
psychotic

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Pronounced differences in psychotropic prevalence across the 3 sites are apparent from Table 1. Stimulant and antidepressant use in 1995 was considerably less among preschoolers in the MAM program and HMO than among those in the MWM program. Enrollees in the MWM program and in the HMO led in the use of clonidine, whereas its use in the MAM program was one-half to two-thirds that of the other sites. Neuroleptic use per 1000 enrollees in either Medicaid program (0.9 in the MWM program, and 0.5 in the MAM program) was more common than in the HMO (0.2).

Time Trends in Psychotropic Medication Prevalence Across a 5-Year Span

The rate of psychotropic medication prescribed for preschoolers in the MWM program increased substantially from 1991-1995. The increase was greatest for clonidine (28.2-fold), stimulants (3.0-fold), and antidepressants (2.2-fold). By contrast, neuroleptic use did not increase substantially during this time. Comparisons of psychotropic medication between sites showed that trends were similar in all 3 sites, with minor deviations for neuroleptics and antidepressants in the population enrolled in the HMO (Table 1). Specifically, the methylphenidate prevalence increase by site was: MWM, 3-fold; MAM, 1.7-fold; and HMO, 3.1-fold. Increases were more dramatic when the base prevalence was low. For example, methylphenidate use in the HMO was the lowest of the 3 sites, but its rise from 1.3 per 1000 enrollees in 1991 to 4.0 per 1000 in 1995 represented the largest methylphenidate increase (3.1-fold) across the 3 sites (Table 1).

Age-Specific Methylphenidate Medication Prevalence

Methylphenidate use according to age group in children and adolescents in the MWM program was most prominent for those aged 5 through 14 years (Figure 1). By comparison, children 2 through 4 years old were treated at approximately one tenth the rate of their 5 through 14-year-old counterparts. The time trend analysis revealed that those in all 4 age groups experienced increases in the use of methylphenidate during the 5-year period. The largest methylphenidate increase (311%) was among 15 through 19-year-olds, whereas the 2 through 4-year-olds, like the 5- through 14-year-olds, had a smaller but still substantial increase (169% to 176%). The increase in prevalence within the preschool-aged group was greater for older children in the MWM program (from 6.9 to 20.8 per 1000 4-year-olds vs 1.1 to 3.5 per 1000 2-year-olds). The age-specific trends by year of age for those in the MAM program and HMO were consistent with those in the MWM program (Figure 1). There was no methylphenidate use in infants 1 year old or younger in the HMO population.

Gender-Specific Methylphenidate Medication Prevalence

There was a greater proportional increase in preschool-aged girls receiving methylphenidate from 1991 through 1995; in the HMO, the male-to-female ratio decreased from 7:1 to 4:1 during this time. A similar but less dramatic trend was evident in the MAM program (4:1 in 1991 to 3:1 in 1995). By contrast, the gender ratio for methylphenidate treatment in the MWM program was stable over these years (3:1 in 1991 and in 1995).

Changes in Drug Utilization and Off-Label Use

Changes in the use of older agents with a well-established efficacy profile were observed. For example, despite a general increase in total stimulant use, methylphenidate use in the MAM program decreased proportionally by 7% from 1991 to 1995, while the use of other stimulant medications rose from 15% to 27% of total stimulant use among preschoolers. In all 3 sites, TCAs were the mainstay of the antidepressant category in 1991, and their prevalence remained relatively stable through 1995. By contrast, the use of SSRI antidepressants increased dramatically at the Medicaid sites,

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antidepressants increased dramatically at the Medicaid sites, although by 1995 these drugs comprised only a small proportion of antidepressants used in the HMO (Figure 2). Thus, antidepressant use increased, particularly through off-label use, in the preschool-aged group.

COMMENT

Several prominent trends characterized the use of psychotropic medications in preschoolers during the early to mid 1990s. Overall, there were large increases for all study medications (except the neuroleptics) and considerable variation according to gender, age, geographic region, and health care system. These findings are remarkable in light of the limited knowledge base that underlies psychotropic medication use in very young children.¹⁰ Controlled clinical studies to evaluate the efficacy and safety of psychotropic medications for preschoolers are rare.³ Efficacy data are essentially lacking for clonidine and the SSRIs and methylphenidate's adverse effects for preschool children are more pronounced than for older youths.¹¹ Consequently, the vast majority of psychotropic medications prescribed for preschoolers are being used off-label.⁷ Specific study findings are discussed below according to 3 major outcomes: prevalence findings for specific medications; age- and gender-specific data; and geographic and health care system variations.

Prevalence Findings

Stimulant treatment in preschoolers increased approximately 3-fold during the early 1990s. The prominence of stimulant and clonidine use is consistent with Michigan Medicaid use patterns for children younger than 4 years with an ADHD diagnosis.⁵ The data show greater US methylphenidate prevalence for children younger than age 5 years than was reported in a prevalence study in Western Australia (0.26% to 0.64% vs approximately 0.1%).¹² Hypothesized reasons for the overall increased stimulant use include: (1) a larger pool of eligible youths because of expanded diagnostic criteria for ADHD since 1980¹³; (2) more girls being treated for ADHD as evidenced by the narrowing of the gender ratio even among preschoolers; (3) greater acceptance of biological treatments for a behavioral disorder; and (4) the expanded role of school and preschool health personnel in identifying medical needs.¹⁴

Methylphenidate accounted for the vast majority of stimulant use (eg, 90% of the 1995 stimulant use in the MWM program). There was a modest but consistent decrease in the proportion of methylphenidate use relative to other stimulants across the 3 time periods. Generalizing from the efficacy and adverse effect experience of stimulants in older youths to preschoolers is often not valid,¹¹ at least partly because of preschoolers' developmental immaturity.

Clonidine had the most dramatic increases, although its use in 1995 was only 15% to 35% of the prevalence rate of stimulants. Clonidine use is particularly notable because its increased prescribing is occurring without the benefit of rigorous data to support it as a safe and effective treatment for attentional disorders. Cardiovascular adverse effects including bradycardia, atrioventricular block, and syncope with exercise have been reported in children treated with clonidine in combination with other medications for the treatment of ADHD and its comorbidities.^{15, 16} Problems with abrupt withdrawal producing noradrenergic overdrive have been reported. Its use to combat the insomnia associated either with ADHD itself or secondary to the stimulant treatment of ADHD is new and largely

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beating too
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secondary to the stimulant treatment of ADHD is new and largely uncharted,^{17, 18} and its increased use for ADHD since 1991 helps explain the increased clonidine poisonings in children taking either their own medications or that of siblings.^{19, 20}

The combined use of clonidine and methylphenidate has been associated with questions of safety^{16, 21} and has been debated.²² Unfortunately, the present data do not distinguish single vs concomitant medication use, information vital to understanding how these agents are being used in children. Such an analysis is better undertaken in a continuously enrolled cohort so that censored data do not create artifactual findings. We are currently conducting a continuously enrolled retrospective cohort study.

Antidepressants were the second most commonly prescribed psychotropic class of drugs for preschoolers, and their use increased substantially from 1991-1995. Tricyclic antidepressants still represent the bulk of early childhood antidepressant use, although the growth in use of SSRIs was strong in those enrolled in both Medicaid programs but very modest in those in the HMO. The proportional decrease in use of TCAs was largely explained by the recent increase in use of SSRIs, a trend we have previously shown for older youths² and one that has been documented in adults.²³ The use of TCAs for enuresis is common among 5 through 13-year-olds,²⁴ but its use in the preschool group is puzzling. It is also likely that some use of imipramine and desipramine was related to the treatment of ADHD in preschoolers.²⁵

Neuroleptic use was infrequent and relatively stable across the study period. The neuroleptic prevalence rate in this preschool data showed rates one-tenth to one-half the annual prevalence among 5 through 19-year-olds in Rome from 1986 through 1991.²⁶ Both the neuroleptic and antidepressant findings bring new information on population-based prevalence and provide some benchmarks to chart the use of these agents in ambulatory settings. Additional clinical interpretation, however, awaits prospective outcome studies.

Age- and Gender-Specific Prevalence Findings

Preschoolers' use of methylphenidate showed increases similar to those of 5 through 14-year-olds, suggesting that the expanded use of this medication for attentional disorders in US youths extends even to the very young. It is notable that the largest gains in use occurred among high school-aged students (15 through 19-year-olds), a trend that has been documented from county school survey data.¹³

Geographic and Health Care System Variations

Disparities in psychotropic medication prevalence data between the 2 state Medicaid program populations are provocative and suggest numerous hypotheses. These include differences between the states in (1) policies for eligibility or access to continuing care; (2) the proportion of individuals with emotional or mental disorders that may be related to the proportion of youths receiving Supplemental Security Income and foster care in each state; (3) preschool health assessment and referral programs; (4) physician specialty training, particularly among psychiatrists and primary care providers, with resultant referral or practice differences; (5) the cultural values that underlie families' decisions to accept or reject medication for behavioral or mental disorders; and (6) racial/ethnic population differences that may affect cultural orientations and beliefs. Also notable is the finding that the HMO prevalence rates, collectively, were substantially lower than those of the Medicaid programs. In this instance, geography and clinical population factors confound the prevalence findings related to HMO vs Medicaid systems. The presence of less severely disabled youths in the HMO population is likely to explain a large part of the differences, but geographic and patient cultural factors need to be considered as well. Also, the rapid

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patient cultural factors need to be considered as well. Also, the rapid expansion of Supplemental Security Income benefits since 1990 resulted in more youths with ADHD being eligible for Medicaid coverage than in previous years.²⁷

Limitations

The study is limited in several ways. First, the findings may be generalizable to comparable Medicaid programs and to group-model HMO enrollees, but the extent to which they may apply to other treatment settings is unknown. Second, the cross-sectional nature of the data from the 3 study years do not permit a follow-up of the natural course of treatment. Until a continuously enrolled cohort is assembled, descriptive data on the natural course of treatment and prescription changes over time cannot be adequately assessed. However, noncontinuously enrolled individuals make up the bulk of the Medicaid membership. Thus, capturing these annual data snapshots of both noncontinuous and continuous enrollees is useful for clinical description. Third, no diagnostic codes were linked to the medications in this analysis, thus limiting information about why certain medications were selected. Fourth, computerized data sources use a limited number of variables to describe the clinical patterns in the usual practice settings. However, they have the advantage of describing the usual practice setting without the artificiality and the interference that prospective studies impose on physicians' decisions about medication and patients' decisions about treatment. Compared with data from specialty clinic samples, data from community treatment settings provide a far more accurate assessment of medication practices, therapy variations, and treatment. Adding outcome assessments would allow the effectiveness of the treatments to be evaluated.

Clinical Research Recommendations

Because children's responses to medications are not necessarily similar to those of adults, systematic and careful outcome research specifically needs to be done for them.⁷ Two types of studies would help provide more systematic information on psychotropic drug therapy in children. First, epidemiologic (naturalistic) studies could describe youth treatment in major medical settings (eg, traditional preferred provider organizations, Medicaid, salaried medical group-model HMOs, and other managed care organizations) to document types of treatments, diagnosis, severity, and time in treatment and to evaluate clinical outcomes. Outcome measures could include symptom control; social, day care, and preschool functioning; parent satisfaction; reasons for initiation and discontinuation; and adverse drug events.²⁸ Second, randomized, double-blind, controlled clinical trials are needed for off-label indications to evaluate dosages, efficacy, and safety of single and multiple agents shown to be commonly used or widely recommended. For disorders that occur very infrequently or questionable combinations of drug therapy with unknown risks, a case registry approach may be useful.

Future studies using large databases for clinical descriptive information should require that the year of birth be stored as a 4-digit number to avoid misclassification of elders as youths. Finally, youths in Medicaid programs should be subdivided by type of eligibility (eg, low income [formerly Aid to Families with Dependent Children, now called Temporary Assistance for Needy Families], Supplemental Security Income, or foster care) so that the total treatment prevalence, which includes children with known disabilities and major social stressors, will not be unfairly compared with that of less impaired youths in non-Medicaid populations.²⁷

Unresolved questions involve the long-term safety of psychotropic medications, particularly in light of earlier ages of initiation and longer durations of treatment. While it is reassuring that anecdotal reports have rarely documented these problems, the possibility of adverse effects on the developing brain cannot be ruled out.²⁹

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adverse effects on the developing brain cannot be ruled out.²⁹ Active surveillance mechanisms for ascertaining subtle changes that the developing personality may undergo as a result of a psychotropic drug's impact on brain neurotransmitters should be developed.

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REFERENCES

1. Safer DJ, Zito JM, Fine EM. Increased methylphenidate usage for attention deficit disorder in the 1990s. *Pediatrics*. 1996;98(6 pt 1):1084-1088. [MEDLINE](#)
2. Zito JM, dosReis S, Safer DJ, Gardner J. Trends in psychotropic prescriptions for youths with Medicaid insurance from a midwestern state: 1987-1995. Paper presented at: New Clinical Drug Evaluation Unit Meeting; June 1998; Boca Raton, Fla.
3. Greenhill LL. The use of psychotropic medication in preschoolers: indications, safety, and efficacy. *Can J Psychiatry*. 1998;43:576-581. [MEDLINE](#)
4. Minde K. The use of psychotropic medication in preschoolers: some recent developments. *Can J Psychiatry*.

COMMENTAUTHOR/ARTICLE
INFORMATIONREFERENCESINDEX OF
FIGURES AND
TABLES*Can J Psychiatry.*

1998;43:571-575.

MEDLINE

5.

Rappley MD, Gardiner JC, Mullan PB, Wang J, Alvarez FJ.
Psychotropic medications in children ages 1 to 3 with ADHD.
Paper presented at: Pediatric Academic Societies Meeting (Joint
Specialties and Themes: Behavioral Pediatrics); May 4, 1998; New
Orleans, La.

6.

Pathiyal A, Miwa LJ, Sverdiov LS, Gardner E, Jones JK.
Patterns of methylphenidate use.
Paper presented at: American Society for Clinical Pharmacology
and Therapeutics; March 31, 1998; New Orleans, La.

7.

Vitiello B, Jensen PS.
Medication development and testing in children and adolescents:
current problems, future directions.

Arch Gen Psychiatry.

1997;54:871-876.

MEDLINE

8.

Grinfeld MJ.

Psychoactive medications and kids: new initiatives launched.

Psychiatric Times.

1998;15:69.

9.

Zito JM, Safer DJ, Riddle MA, Johnson RE, Speedie SM, Fox M.
Prevalence variations in psychotropic treatment of children.

J Child Adolesc Psychopharmacol.

1998;8:99-105.

MEDLINE

10.

Jensen PS, Vitiello B, Leonard H, Laughren TP.

Child and adolescent psychopharmacology: expanding the research
base.*Psychopharmacol Bull.*

1994;30:3-8.

MEDLINE

11.

Firestone P, Musten LM, Pisterman S, Mercer J, Bennett S.
Short-term side effects of stimulant medication are increased in
preschool children with attention-deficit/hyperactivity disorder: a
double-blind placebo-controlled study.

J Child Adolesc Psychopharmacol.

1998;8:13-25.

MEDLINE

12.

Valentine J, Zubrick S, Sly P.

National trends in the use of stimulant medication for attention deficit
hyperactivity disorder.*J Paediatr Child Health.*

1996;32:223-227.

MEDLINE

13.

Safer DJ, Zito JM.

Pharmacoepidemiology of methylphenidate and other stimulants for
the treatment of ADHD.In: Greenhill LL, Osman BB, eds. *Ritalin: Theory and Practice*. 2nd
ed. Larchmont, NY: MA Liebert Publishers; 2000:7-26.ABSTRACTINTRODUCTIONMETHODSRESULTSCOMMENTAUTHOR/ARTICLE
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14.
Davilla RR, Williams ML, MacDonald JT.
Clarification of policy to address the needs of children with attention deficit hyperactivity disorders within general and/or special education.
Memorandum from: US Dept of Education. Washington, DC: US Dept of Education, Office of Special Education; September 16, 1991.

15.
Cantwell DP, Swanson J, Connor DF.
Case study: adverse response to clonidine.
J Am Acad Child Adolesc Psychiatry.
1997;36:539-544.
[MEDLINE](#)

16.
Swanson JM, Flockhart DA, Udeh D, Cantwell DP, Connor DF, Williams L.
Clonidine in the treatment of ADHD: questions about safety and efficacy [letter].
J Child Adolesc Psychopharmacol.
1995;5:301-304.

17.
Prince JB, Wilens TE, Biederman J, Spencer TJ, Wozniak JR.
Clonidine for sleep disturbances associated with attention-deficit hyperactivity disorder: a systematic chart review of 62 cases.
J Am Acad Child Adolesc Psychiatry.
1996;35:599-605.
[MEDLINE](#)

18.
Ahmann PA, Waltonen SJ, Olson KA, Theye FW, Van Erem AJ, LaPlant RJ.
Placebo-controlled evaluation of Ritalin side effects.
Pediatrics.
1993;91:1101-1106.
[MEDLINE](#)

19.
Erickson SJ, Duncan A.
Clonidine poisoning—an emerging problem: epidemiology, clinical features, management and preventive strategies.
J Paediatr Child Health.
1998;34:280-282.
[MEDLINE](#)

20.
Kappagoda C, Schell DN, Hanson RM, Hutchins P.
Clonidine overdose in childhood: implications of increased prescribing.
J Paediatr Child Health.
1998;34:508-512.
[MEDLINE](#)

21.
Popper CW.
Combining methylphenidate and clonidine: pharmacologic questions and news reports about sudden death.
J Child Adolesc Psychopharmacol.
1995;5:157-166.

22.
Wilens TE, Spencer TJ, Swanson JM, Connor DF, Cantwell D.
Combining methylphenidate and clonidine: a clinically sound medication option vs. ill-advised.
J Am Acad Child Adolesc Psychiatry.
1999;38:614-619.
[MEDLINE](#)

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23.

Pincus HA, Tanielian TL, Marcus SC, et al.
Prescribing trends in psychotropic medications: primary care,
psychiatry, and other medical specialties.

JAMA.

1998;279:526-531.

[MEDLINE](#)

24.

Foxman B, Valdez RB, Brook RH.

Childhood enuresis: prevalence, perceived impact, and prescribed
treatments.

Pediatrics.

1986;77:482-487.

[MEDLINE](#)

25.

Geller B, Reising D, Leonard HL, Riddle MA, Walsh BT.

Critical review of tricyclic antidepressant use in children and
adolescents.

J Am Acad Child Adolesc Psychiatry.

1999;38:513-516.

[MEDLINE](#)

26.

Traversa G, Spila-Alegiani S, Arpino C, Ferrara M.

Prescription of neuroleptics for children and adults in Italy.

J Child Adolesc Psychopharmacol.

1998;8:175-180.

[MEDLINE](#)

27.

Perrin JM, Kuhlthau K, McLaughlin TJ, Ettner SL, Gortmaker SL.

Changing patterns of conditions among children receiving
Supplemental Security Income disability benefits.

Arch Pediatr Adolesc Med.

1999;153:80-84.

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28.

Hoagwood K, Jensen PS, Petti T, Burns BJ.

Outcomes of mental health care for children and adolescents, I: a
comprehensive conceptual model.

J Am Acad Child Adolesc Psychiatry.

1996;35:1055-1063.

[MEDLINE](#)

29.

Vitiello B.

Pediatric psychopharmacology and the interaction between drugs
and the developing brain.

Can J Psychiatry.

1998;43:582-584.

[MEDLINE](#)

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DRAFT: FIRST LADY HILLARY RODHAM CLINTON LAUNCHES NEW FEDERAL EFFORT TO ENSURE SAFE USE OF PSYCHOTROPIC MEDICATION IN CHILDREN

March 20, 2000

Today, First Lady Hillary Rodham Clinton, together with Secretary Shalala and representatives of parents and a broad range of health professionals, launched an unprecedented public-private effort to ensure that ~~that~~ children with emotional and behavioral conditions are appropriately ^{health care} diagnosed, treated, monitored, and managed by qualified professionals. While progress has been made in diagnosing and treating these conditions, justifiable concerns have been raised about the inappropriate (both over and under) utilization of psychotropic medications such as Ritalin, clonidine, and Prozac in very young children. Just as important, there is a lack of understanding among ~~among~~ parents, teachers, and health professionals about the best diagnostic, pharmacological, and behavioral interventions now available. ^{parents and teachers}

In order to provide the ^{teachers,} information necessary to improve diagnosis, treatment, and management practices to ~~both~~ parents and providers, the First Lady will announce new Federal action, including: the release of a new, easy to understand fact sheet about treatment of children with mental disorders for parents; a new commitment by the National Institute of Mental Health (NIMH) to conduct additional ^{enhancement} research on the impact of psychotropic medication on children under the age of seven; the ^{enhancement} initiation of a process at (FDA) to improve pediatric labeling information for young children; and a national conference hosted by the Surgeon General, NIMH, and the ~~Food and Drug Administration (FDA)~~ ^{Food and Drug Administration} on Treatment of Children with Behavioral and Mental Disorders to take place this fall. She will also praise ^{providers} private sector efforts to improve diagnosis and treatment protocols for young children under the age of six.

IMPROVING TREATMENT ~~THEMES~~ FOR YOUNG CHILDREN

BEHAVIORAL AND MENTAL DISORDERS. New regulatory authority for pediatric labeling as well as new financial incentives included in the FDA Modernization Act, have significantly improved the information available to both parents and physicians about the appropriate use of medications for children. In the 18 months since these initiatives have been implemented, research has been completed on 19 drugs, resulting in new safety information being added to six drugs with changes expected for the other 13. Studies of an additional 125 drugs are already underway. However, recent research indicates that more needs to be learned ^{conditions} about young children with emotional and behavioral ~~disorders~~. Recent studies published in the *Journal of the American Medical Association* reviewing selected provider data found that:

- The number of children aged two through four taking stimulants such as Ritalin more than doubled. ~~Ninety percent of preschoolers on medication were on Ritalin or a similar stimulant in order to treat attention deficit disorders, and the number of these children increased by 150 percent over a five year period.~~ Although there are a disproportionate number of boys taking medication for attention deficit disorders as opposed to girls (a ratio of 4:1), the number of girls being diagnosed and treated with attention deficit disorders increased over this time period; in one study, the proportion of girls taking Ritalin or a similar stimulant increased by 60 percent.

→ It is estimated that .5-1.2% of pre-schoolers were on Ritalin or similar stimulant in order to treat attention deficit hyperactivity ~~disorders~~ ÷ 1995. This is a 2 to 3 fold increase since 1991. ~~(1991)~~

Insert A

Surveys indicate that there is both probable over and under prescribing of Ritalin. For example, studies show that in middle class children the use for ADHD is higher than what one would expect given the number of children who are likely to have ADHD in this group.

Insert 13

A child who is depressed, for example, will have difficulty learning and forming peer relationships, and may feel increasingly isolated, withdrawn and angry. If left untreated, children with serious depression could become hostile—even violent—or could take their own lives.

- The number of children under the age of five ^{after} on clonidine increased exponentially. The 28-fold increase in children using clonidine, used to treat ~~inappropriate~~ children with attention deficit disorders, is notable as the increase in its use has occurred without research to ensure that it is a safe and effective treatment. Adverse effects, including rapid or irregular heartbeat and fainting, have been reported in children using the drug together with other medications for attention-deficit disorder. The increased use of the drug since 1991 helps explain the increase in clonidine poisoning in children.
- ✓ Many children are ^{diagnosed and} inappropriately treated. Studies indicate wide geographic variation in ^(Insert A) the numbers of children receiving psychotropic drugs such as Ritalin. One study indicated ~~that in some suburban areas, as many as 40 percent of children were on Ritalin, as opposed to less than 1 percent of children in urban areas. (need NIMH data)~~ Other research indicates racial variations as well; a study of one Maryland HMO indicated that ~~if~~ African-Americans children were 2.5 times less likely to receive Ritalin as white children. This wide variation in treatment patterns supports the need for more research to determine appropriate treatment protocols for children with emotional and behavioral disorders.
- ✓ Failure to ^{appropriately} treat emotional and behavioral disorders ^{can have} severe life-long consequences. Studies suggest that ~~that~~ many children with untreated emotional and behavioral ~~disorders~~ ^{conditions} fail to reach their full potential. Brain damage causing lifelong psychological or social damage may stem from an on-going cycle of punishment and ostracism for behaviors that the child ~~cannot control without help~~. ^(Insert B) Children with these types of problems are at significantly higher risk for anti-social activities later on than those without behavioral problems. It is evident that an accurate early diagnosis, education, support, and medication, if necessary, can overcome many early problems and help prevent long-term negative behavior.
- More ^{being prescribed for} research is necessary to ensure informed treatment decisions. Many of the drugs ^{years} being ~~used by~~ very young children have not been tested in children under the age of 16; ^{years} ~~have been tested for~~ children under the age of six. More research is necessary to ensure that providers and parents have the information they need, especially information about the impact of medication on brain development, to make appropriate treatment decisions.

NEW FEDERAL EFFORT TO ENSURE THE SAFE AND EFFECTIVE USE OF PSYCHOTROPIC DRUGS IN YOUNG CHILDREN.

^{diagnostic and} Clinton launched a new Federal effort to ensure that providers and parents have the information ^{teachers,} they need to make appropriate treatment decisions for children with behavioral and mental disorders. This multi-faceted effort includes:

- New efforts to provide parents with up-to-date information on the appropriate ^{diagnosis} treatment of children with mental disorders. This week, the National Institute of Mental Health will release a new fact sheet to help parents of children with mental disorders ^{understand} make the right decisions about their child's treatment. This fact sheet includes ^{easy to understand} information on the inclusion of medication in an overall treatment plan; how to help ^{how to evaluate} determine if a child's problems are serious; and how to get help. Upon release, this fact sheet ^{appropriate} will be distributed to ^{when and} providers nationwide. ^{of other} ^{therapies} ^{parents through} ^{and teachers} ^{parents through}

^{Report}
 Surgeon General's Supplement on Children's Mental Health -
~~the~~ * add language attached

- Committee*
move down
- Initiate a process for the development of pediatric labeling information for psychotropic drugs used in young children. Today, FDA will announce that it will work with its Pediatric Advisory Commission to design research protocols that will be used to develop new pediatric dosage information to be included on the labels of drugs such as methylphenidate, clonidine, and other drugs ^{increasingly} used in children ^{to treat young} under the age of seven. These studies, which will begin after national research goals have been identified, will be designed to address the ethical and scientific issues associated with the study of these drugs in this vulnerable population.

- move up*
- Announced that NIMH will dedicate ^{more than} \$5 million on research on attention deficit disorder and Ritalin use in preschoolers. Today, the National Institute of Mental Health announced that it plans to invest ^{more than} \$5 million on research to determine the efficacy of medications used to treat behavioral and emotional conditions in very young children. This research, ^{consultation} conducted in ~~consultation~~ with FDA, will assemble the latest information on the use of these drugs, ~~determine safety and efficacy~~, and identify discrepancies between clinical practice and scientific evidence.

- health care*
- A national Conference on the Treatment of Children with Behavioral and Mental Disorders. This fall, the Office of the Surgeon General, ^{Diagnosis and} together with NIMH, and FDA, will coordinate a Federal Conference on Treatment of Children with Behavioral and Mental Disorders. This national conference, which will build on the success of the recent White House Conference on Mental Health hosted by Tipper Gore, will include representatives of the provider, research, consumer advocacy, and education communities. Topics of discussion include: developing a research strategy that can be used to ^{accelerate} develop interventions studies of that can be used by providers nationwide; how best to ethically determine the efficacy and safety of medications in young children; and strategies to address the difficulty of accurate diagnosis in ^{young children} preschoolers. ^{range of treatments and services}

NEW PRIVATE SECTOR COMMITMENT TO ENSURING APPROPRIATE DIAGNOSIS OF EMOTIONAL AND BEHAVIORAL DISORDERS IN YOUNG CHILDREN. Today, the First Lady will praise the American Academy of Pediatrics (AAP) for their new commitment to release new clinical practice guidelines for diagnosis and evaluation of children with attention deficit ~~and~~ hyperactivity disorder being treated by primary care physicians. Upon their completion this spring this important information will be distributed to all X members of the AAP.

FIRST LADY HILLARY ROHDAM CLINTON'S LONGSTANDING COMMITMENT TO CHILDREN. For over 25 years, Hillary Clinton has worked to strengthen families by fighting for policies that

Add website links for NIMH; surgeon general's mental health report

A.

To: Elizabeth Summy@IOS.IO@OS.DC
From: "Damon Thompson" <DThompson@osophs.dhhs.gov>
Certify: Y
Priority: Normal
Subject: language on supplemental report
Date: Fri Mar 17 17:42:57 2000
Attached: Headers.822

The Office of the Surgeon General, the National Institute of Mental Health and the Center for Mental Health Services will develop a Supplemental Report to the Surgeon General's Report on Mental Health that was released in December 1999. This report, which will be completed by the end of the year, will focus on children's mental health issues.

National Institute of Mental Health

6001 Executive Boulevard
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FAX TRANSMISSION COVER SHEET Office of the Director

Date: March 16, 2000

To: Chris Jennings
The White House

FAX: 202-456-5557

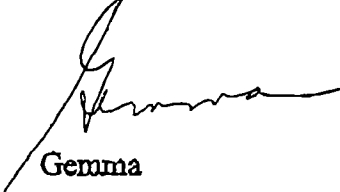
Re: Upcoming WH Meeting

Sender: Gemma Weiblinger
Special Assistant to the Director and
Chief, Legislative Analysis and Development Branch

**YOU SHOULD RECEIVE 3 PAGES, INCLUDING THIS COVER SHEET. IF YOU DO NOT
RECEIVE ALL THE PAGES, PLEASE CALL (301) 443-3673.**

Chris:

Steve asked me to get this to you this morning. Of course, call him or me if you have any questions.


Gemma

MAR 16 2000

National Institutes of Health
National Institute of Mental Health
6001 Executive Blvd.
Bethesda, Maryland 20892

TO: Chris Jennings

FROM: Director, NIMH

SUBJECT: Recap of Issues to be Discussed at White House Monday

I thought it might be useful to summarize very briefly my understanding of the main points that need to be addressed at Monday's meeting with the First Lady, as discussed in yesterday's conference call. At the end, I have included several bullets on what I view as the most important overall agenda items for our future conference.

- First and foremost, it is important that the focus **not** be solely on whether medication use in children is "good" or "bad." As you stated clearly at the end of the call, the focus must be on the best ways to identify the real needs of children, to educate families, and to monitor the selected treatments closely. The press made much of the fact that medications were being prescribed largely by practitioners without adequate training and that children were getting inadequate evaluations and follow-up.
- Consideration of a problem behavior should include a thorough evaluation of each child's unique situation, such as age, family and social situation, and other factors that make up the child's complete contextual framework. Such evaluation will provide a sound basis for deciding whether intervention is needed and, if so, which ones: behavioral, psychosocial, or medication (either alone or in combination).
- Another critical factor is adequate follow-up of each child to assess the effects of the interventions.
- People who are the "front-line" players in kids' lives--parents, pediatricians, other primary health care providers, teachers, day care providers, and others--must be included in these discussions.
- In addition to ensuring that health care providers are educated about these issues, there is a critical need for accurate public information that will be useful to parents, teachers, day care providers, and others who deal directly with children on a regular basis.

In terms of medication use in children in general, there should be a focus on:

- The safety and efficacy of medications. In recent press reports this has focused on medication use in toddlers, and information on this age group is scant and critically

NIMH
National Institute
of Mental Health

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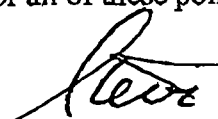
important to obtain. Indeed, with toddlers there is a real problem of actually making an accurate diagnosis. This makes careful follow-up over time even more critical.

- Too often there is a mismatch between those who could benefit from medications and those getting them. For example, it has been reported that use of Ritalin in middle-class non-minority populations is often higher than overall prevalence of Attention Deficit Hyperactivity Disorder would predict, while far less than would be expected in some inner-city poor neighborhoods.
- We need basic information about the effects of medications on brain development. We should not forget the terrible impact of untreated mental illness on brain development (including the inability to learn effectively or to form healthy peer relationships).

I would see the agenda for the conference that will be announced on Monday as follows:

- We need to plan a research strategy. This strategy should build in from the outset the need to deliver real world interventions that would be relevant to children being treated and seen everyday in pediatricians' and family doctors' offices throughout the country.
- We need to ask how much knowledge about school-age children can be extrapolated to younger children and to address ethical questions about research with younger children.
- We need to develop a plan to close the large gap between what is already known and what is actually being done in practice.
- In addition, there are some subtopics that would be important to address, such as:
 - Beyond guidelines: changing practice in primary care and incorporating others involved closely with children--such as teachers, school nurses, and school psychologists--to ensure careful evaluation and follow-up.
 - How best to ethically determine efficacy and safety of medications and the effect of long-term use, recognizing that childhood is a period of brain development.
 - Address the mismatch between those who are getting medications and those who need them.
 - The difficulty of diagnosis in preschoolers.

Of course, I would be happy to discuss any or all of these points.



Steven E. Hyman, M.D.