Debate Over Drugs For ADHD Reignites
Long-Term Benefit For Children at Issue

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New data from a large federal study have reignited a debate over the effectiveness of long-term drug treatment of children with hyperactivity or attention-deficit disorder, and have drawn accusations that some members of the research team have sought to play down evidence that medications do little good beyond 24 months.

The study also indicated that long-term use of the drugs can stunt children's growth.

The latest data paint a very different picture than the study's positive initial results, reported in 1999.

One principal scientist in the study, psychologist William Pelham, said that the most obvious interpretation of the data is that the medications are useful in the short term but ineffective over longer periods but added that his colleagues had repeatedly sought to explain away evidence that challenged the long-term usefulness of medication. When their explanations failed to hold up, they reached for new ones, Pelham said.

"The stance the group took in the first paper was so strong that the people are embarrassed to say they were wrong and we led the whole field astray," said Pelham, of the State University of New York at Buffalo. Pelham said the drugs, including Adderall and Concerta, are among the medications most frequently prescribed for American children, adding: "If 5 percent of families in the country are giving a medication to their children, and they don't realize it does not have long-term benefits but might have long-term risks, why should they not be told?"

The disagreement has produced a range of views among the researchers about how to accurately present the results to the public. One e-mail noted that an academic review of the group's work, called the Multimodal Treatment Study of Children With ADHD (MTA), asked why the researchers were "bending over backward" to play down negative implications for drug therapy.

Peter Jensen, one of Pelham's fellow researchers, responded that Pelham was biased against the use of drugs and was substituting his personal opinion for science.

Jensen said Pelham was the only member of the team of researchers who took away "the silly message" that the study raised questions about the long-term utility of drugs, but interviews and e-mails show that Pelham was not alone.
The MTA was designed to test whether children diagnosed with attention-deficit hyperactivity disorder, or ADHD, do better when treated with drugs, with drugs plus talk therapy, with talk therapy alone or with routine medical care alone. Children with the disorder have trouble paying attention, are restless and hyperactive, and are sometimes disruptive in school.

The initial 14-month analysis published in 1999 randomly assigned children to one of four treatment options and showed clearly that those treated with medication did much better than those who got only talk therapy or routine care. The drugs' manufacturers distributed thousands of reprints of the article to physicians at a time when diagnoses of ADHD were spiraling upward. Because children given drugs alone appeared to do about as well as those treated with both drugs and talk therapy, the study skewed treatment in the direction of medication.

In a second phase of the study, the researchers followed the children and compared how they fared, but researchers no longer randomly assigned them to the various treatment options, making this phase less scientifically rigorous.

In August 2007, the MTA researchers reported the first follow-up data, which by then no longer showed differences in behavior between children who were medicated and those who were not. But the data did show that children who took the drugs for 36 months were about an inch shorter and six pounds lighter than those who did not.

A news release issued by the National Institute of Mental Health (NIMH) at the time, however, presented the results in a more favorable light. The release, dated July 20, 2007, was titled "Improvement Following ADHD Treatment Sustained in Most Children." The release noted that the initial advantages of drug treatment were no longer evident, but it quoted Jensen as saying this did not mean that long-term drug therapy was ineffective.

Jensen said, "We were struck by the remarkable improvement in symptoms and functioning across all treatment groups." And rather than saying the growth of children on medication was stunted, the release said children who were not on medication "grew somewhat larger."

As the MTA study continued to find smaller and smaller behavioral differences between children who were medicated and those who were not, use of the drugs soared. Pelham said most parents and doctors took away the message that the study had found drug therapy effective over the long run. In 2004, physicians wrote 28.3 million prescriptions for ADHD drugs; last year, they wrote 39.5 million, according to data provided by IMS Health.

With the MTA having followed the children for eight years, the latest data have confirmed that there are no long-term differences between children who were continuously medicated and those who were never medicated. Some of the data were published online yesterday in the Journal of the American Academy of Child and Adolescent Psychiatry.

In a telephone interview, Jensen denied that the researchers had misled the public, pointing out that some children getting the drugs did do better over the long term. Looking at overall results was not as useful as studying how particular groups of children fared, he said.

Jensen and another co-author, L. Eugene Arnold at Ohio State University, who are both psychiatrists, emphasized the importance of individualizing treatment -- and warned parents against abruptly terminating drug therapy.
The subgroup analysis found that children in homes that were socially and economically stable did the same in the long term with or without medication. Children from troubled or deprived backgrounds slid backward as soon as the intensive therapy stopped and they went back to their communities. About one-third -- those with the least impairment to begin with -- continued to improve over the long term.

Jensen and co-author Benedetto Vitiello at the NIMH said drugs may not have shown an overall long-term benefit because the quality of routine care that children received may have been inferior to the care they got during the initial part of the study. Jensen said the take-home message is that community care needs improvement.

Brooke Molina, also a co-author and a University of Pittsburgh associate professor of psychology and psychiatry, argued in an e-mail that if the researchers wanted to draw attention to subgroups that might be helped by medication over the long run, they also should acknowledge that "long-term treatment with medication may not be efficacious" for others.

In an interview, Molina said the data do not "support that children who stay on medication longer than two years have better outcomes than children who don't." In an e-mail she shared with Pelham, she noted that academic "reviewers thought we were bending over backward (inappropriately) to dismiss the failure to find medication effects at 8 years."

James Swanson, another MTA co-author and a psychologist at the University of California at Irvine, said he believes that the researchers have been open about the diminishing benefits of medication therapy. He cited a variety of scientific publications in which he and others reported data showing that medications lost effectiveness over time and stunted growth.

"If you want something for tomorrow, medication is the best, but if you want something three years from now, it does not matter," he said. "If you take medication long-term beyond three years, I don't think there is any evidence that medication is better than no medication."

Pelham, who has conducted many drug therapy studies, said the drugs have a valuable role: They buy parents and clinicians time to teach youngsters behavioral strategies to combat inattention and hyperactivity. Over the long term, he said, parents need to rely on those skills.

A yet-to-be-published study, Pelham added, found that 95 percent of parents who were told by clinicians to first try behavioral interventions for ADHD did so. When parents were given a prescription for a drug and then told to enroll their children in behavioral intervention programs, 75 percent did not seek out the behavioral approaches.