One-On-One with William E. Pelham, Jr., Ph.D.



WILLIAM E. PELHAM, JR., PH.D. is currently professor of psychology, pediatrics and psychiatry at State University of New York (SUNY) Buffalo and the director of the Center for Children and Families. He served as one of the six lead investigators in the ground-breaking National Institute of Mental Health Multimodal Treatment Study of AD/HD (NIMH MTA).¹ We had a chance to sit down with Dr. Pelham at the CHADD Conference in Miami Beach, Fla., last fall when he received the Hall of Fame Award for his long career in clinical research. He discussed the advances he's seen during his 30 years of researching and studying individuals with AD/HD, the success of his summer treatment program, and what he's learned about the multimodal treatment of AD/HD in children.

Pelham began his nationally recognized summer treatment program in 1980 to study the effects of methylphenidate on academic functioning in a classroom setting. It was the first study of its type. In order to conduct the study, Pelham and his colleagues needed to observe children in a classroom setting when school was not in session. Summer became the optimum time for their research.

At first, Pelham planned to observe the children for an hour at a time, but this presented logistical difficulties for working parents. Parents then recommended that he consider observing the children for a half or full day. Pelham agreed and set up a camp in conjunction with the program. He also ran a free parent training program as a bonus for the parents who participated. At the end of the summer, the parents were so pleased with the way their children had responded that they asked him to consider running the camp the following summer and charging for the service. Pelham thought it was an interesting idea because it would provide a great environment for the kids and allow him to conduct research in other areas as well.

"I like that it combines the best of clinical work with the best of research," says Pelham. "So we started it with the intention of doing a study, but we were driven very much by the parent and family needs of what to do with the children. I wish more professionals offered this program in their home communities so more parents and children could experience its benefits!

Dr. Pelham's decades of experience and research have resulted in an unparalleled level of expertise in the multimodal treatment of AD/HD.



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The staff members that work in our summer treatment program are usually college students who are doing summer internships. They receive intensive training in how to work with children, and many of them go on to professional careers in psychology and medicine. There are literally dozens of faculty members at universities who began their careers as undergraduate counselors in our summer treatment programs."

Pelham's work on treatments for AD/HD began in 1972, when he was in graduate school and worked in Dan and Sue O'Leary's treatment centers at Stony Brook.

"We were initially developing behavioral treatments as an alternative to medication and most children did quite well with behavioral treatments alone. But there were several children in those early studies who clearly needed *both* medication *and* behavioral interventions, and that was what got me interested in a long line of studies on multimodal treatment." Pelham's decades of experience and research have resulted in an unparalleled level of expertise on the subject. We asked him some specific questions concerning the information gained through his research studies, especially in relation to the use of medication as part of a multimodal treatment approach.

Attention: What have you learned during your years of research?

Pelham: Over the years, the major thing I have learned is that the essential components of treatment for AD/HD are the psychosocial approaches—doing behavioral parent training, classroom management interventions in school, and behavioral interventions with the children that focus mainly on peer relationships. Medication should be an adjunct to that. It's a very helpful adjunct for many children, but medication should not be the first line of treatment, it should be the second line of treatment. Medication is helpful

but it can't provide the building blocks for development that behavioral interventions can.

The other major thing that I have learned is that if you use behavioral interventions, the literature is very clear that you can dramatically reduce the dose of medication you are using with children. To the extent that lower doses mean fewer side effects and fewer potential long-term problems, then that's a very good benefit of using behavior therapy along with medication.

Attention: But that's not what you hear in the mainstream media.

Pelham: Parents would probably be surprised to learn that the FDA-approved labeling for the AD/HD medications says that medication is not indicated for all children with AD/HD, that it should be used only as part of a comprehensive treatment program, and that other remedial measures (that is behavioral and educational interventions) should be tried first.

The investigators of the MTA study, of which I'm one of seven, continue to tell parents and physicians that they should push doses to high levels, and I think that's a misinterpretation of the study's results. We just did a study this summer [2002] with an NIMH grant, which shows that we can use behavioral interventions plus 15 mg of Ritalin [methylphenidate] (5 mg three times a day), which is a very low dose for an average elementary school child, and get results that are better than 60 mg a day of Ritalin alone without behavioral modification. It's the second study of this kind we've done in the last two years.

So in my view, parents who want to keep medication doses low need to learn effective behavioral management interventions. In my experience in our own setting, the majority of parents do not want their child medicated in the evening. Some of the newer agents medicate children for 12-14 hours, and there is a market for that for some kids. But in my view, most don't need those really long-acting forms. Parents are willing to use medication if it is needed, but they would prefer to manage their child at home without medication if they can do that. Lots of research shows that parents can learn to effectively handle their children's challenging behavior in the home setting quite well without medication. In the study I just mentioned, we found that only 25 percent of parents needed to and chose to use medication at home and on weekends after their children had attended our summer program and they had received parent training.

Reliance on medication as the sole form of inter-



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vention will not help their child's functioning in adolescence (when almost all individuals with AD/HD stop taking medication) and adulthood.

And that's the other strong rationale for using behavioral interventions. When you use behavioral interventions, you're teaching new skills. People don't forget the skills they learn. We have a major focus on teaching sports skills to kids with AD/HD in our summer programs. If you teach a child to be a better baseball player, and therefore make him more popular among kids in the neighborhood; he'll be a better baseball player forever. Medication will help him pay attention when he's playing baseball, but it won't teach him to catch, throw and hit. That's an example of where a child might have an attention problem and a skills deficit, and both forms of treatment might be helpful.

Attention: What else should our readers know or understand?

Pelham: One area we should talk about is the side effects of medication. The MTA follow-up data will be published soon, and that's the biggest study to date that looks at the effects of medication on growth. The American Academy of Pediatrics (AAP) guidelines minimized the impact of stimulants on growth. However, the MTA study found a definite, adverse effect of the MTA approach to medication on the children's growth—on their height gain and their weight gain.

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The most important thing to keep in mind about issues like this is that parents need to be informed about such things. I don't know a single parent who would say, 'Oh, yes, I would like to give my child that medication even though it would make him five inches shorter.' They would be shocked if they knew that might be the case and they weren't being told, and I don't think most parents are told this by their physician. Parents should ask their doctors a lot more about medication than they typically do. All of us are used to trusting our doctors, and we don't read up on medications and other treatments as much as we should for our children with AD/HD (and ourselves, for that matter!) And again...I want to emphasize that medication for children with AD/HD is not bad, it just needs to be used conservatively in my opinion. Used in low doses, in combination with behavioral treatments, and not used outside of school hours when possible, medication may be a very useful intervention for many children with AD/HD.

And the second point that is important is that the focus in treatment should be addressing impairment and problems in daily life functioning, not looking solely at symptoms. One of the things that has misled the field is the emphasis that a lot of the recent studies, including the MTA, have put on the effect of the treatment on reducing DSM symptoms² of the disorder, that is the DSM checklist where you just took the symptoms of AD/HD and see if the medication makes them better. Well it does. It's hard to beat medication

on making the DSM symptoms better during the period when medication is active. But I have never had a mother come into my office and say, 'I was lying in bed last night reading the DSM and I noticed that my child has some symptoms of AD/HD.' Parents don't come in because they were referred for their child's DSM symptoms. They're referred because their child has problems in daily life functioning. He's getting into trouble with kids in the neighborhood. He's not getting his work done at school. He's breaking school rules, getting sent to the office, getting into fights at home, not doing what the parents want. All those things are the reasons people come in for treatment and that's what the focus of treatment should be. Those sorts of problems are always the focus of behavioral interventions.

One of the major findings from the MTA that is not common knowledge yet is that if you looked at parent measures of satisfaction, there is no comparison between the behavioral conditions, both combined and behavioral, and medication. Parents are twice as likely to report strong satisfaction with the behavioral interventions, either alone or in combination with the medication compared to the medication alone group. Now, if the AAP is correct, and I believe they are, and AD/HD is a chronic disorder, and we need to use a chronic disease model of treatment, one of the major things you do in a chronic disease model of treatment is make sure that your intervention is palatable to families because you know you'll have to do it over years, not over just weeks or months. And in the field of chronic medical illnesses with children, everybody says that doing things that families will accept and do in the long run is the key to treatment. What the MTA satisfaction data show is that parents have lukewarm feelings about medication when it is the only form of intervention, but if it is combined with behavioral treatments, then they are more accepting.

So if one asks in the MTA study, which intervention had the best combination of *effectiveness* and *parent satisfaction*? It's by far the combined treatment. And if you figured out an index to multiply those two together—effectiveness and satisfaction—then the behavioral intervention was a little less effective than the medication, but it was much more palatable. So what you end up with in the MTA, I think, is when you combine those two big modalities, combined treatment is by far the best, medication and behavioral are roughly equal. This means to me that parents have a choice.



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Attention: In another MTA finding scheduled for publication this year, the investigators found that the majority of children (62 percent) in the behavioral treatment groups were still not taking medication two years later. Pelham believes this means they're doing well enough with behavioral interventions that their parents did not believe they needed additional treatment.

For parents who choose to implement behavioral interventions like those in the MTA study without medication first and with the goal of keeping their child off of medication, Pelham believes they have a nearly two in three in chance of success based on the current data.—PLH

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