

Behavioral Interventions and the Context of Multimodal Treatment

Dr. Pelham's observations and opinions may resonate with many readers. Following is a different viewpoint.

● **by Andrew Adesman, M.D.**

I AGREE WITH Dr. Pelham that behavioral interventions can be very effective and often are a critical component of a multimodal approach to treating youths with AD/HD. I also agree with Dr. Pelham that medication dosing should be individualized to the needs of the child, and that not all children require dosing for 12 hours per day, 365 days each year. And I concur that greater emphasis needs to be placed on impairment, not symptoms, as the criteria for judging treatment needs and success.

It must be remembered that the MTA study only enrolled children with AD/HD, Combined type—thus the MTA findings do not necessarily apply to children with AD/HD, Inattentive Type. Also, the MTA focused on children primarily in elementary school, where school-based behavioral interventions are easier to implement and monitor. Behavioral interventions are less easily employed in middle school and high school settings where students have multiple teachers and more variable schedules.

Regarding medication, Dr. Pelham states that parents and physicians are being directed to “push doses to high levels” when in fact physicians are being advised to use the most effective dose of medication for each individual child, recognizing that in some instances physicians may not presently be using optimal doses. Dr. Pelham states that “lower doses mean fewer potential long-term problems.” It is unclear to what Dr. Pelham is alluding, since I am not aware of any long-term problems with stimulant therapy—dose-related or otherwise.

Dr. Pelham suggests that behavioral interventions should be applied for a year and that medication can always be added subsequently if a multimodal approach is still needed. I think this recommendation fails to consider several accepted realities.

To begin with, the MTA data has shown that stimulant medication, when properly prescribed and monitored, is the single most effective treatment for AD/HD. Although parents of children in the behavioral treatment group were “more satisfied,” the children treated with medication alone demonstrated greater improvement. To encourage families to initially pursue behavior therapy in lieu of stimulant medication is to suggest that parents forego the single most effective therapy. The children in the MTA who achieved the most improvement were treated with medication—either alone or with behavior therapy.

Second and equally critical, it is not feasible for many families to access the multitude of validated behavioral interventions that were provided in the MTA. Health insurance policies do not cover, many families cannot afford, and many communities cannot provide the same breadth and intensity of services. Thus, Dr. Pelham is encouraging families to forego medication without regard to the feasibility of receiving the specific array of services provided in the MTA protocol. (For the record, although the FDA-approved labeling for the new long-acting stimulant medications do consistently encourage a multimodal approach, they do *not* state that stimulant therapy cannot be part of an initial treatment plan.)

With respect to the effects of medication on growth, Dr. Pelham suggests that children might experience as much as a four or five inch height deficit if treated continuously with a three times a day dosing for 12 years. There are several reasons why this projection is unreasonable. To begin with, this extreme figure presumes that children will experience the same degree of growth suppression each of the 12 years that they are being treated. A recent study looking at growth suppression with Adderall (mixed salts of a single-entity amphetamine product) showed there was a greater effect on growth between six and 18 months than between 18 and 24 months of treatment with medication. Thus, in this study, growth suppression diminished over time—suggesting one cannot extrapolate. Second, children are not being treated with three times per day short-acting doses, but instead with long-acting preparations such as Adderall XR and Concerta. A more recent study with Adderall XR (extended release mixed salts of a single-entity amphetamine product) suggests that the greatest effect on height is seen in tall individuals, and that shorter individuals have the least growth suppression. Lastly, a growth study with Concerta (methylphenidate treatment for 12 hours) found that after 20 months of treatment, there was less than a 1/4 inch difference compared to national norms.

The MTA has shown that behavioral and pharmacological interventions are effective when used alone and perhaps most effective when used together in a multimodal approach. Unfortunately, most parents are not able to access the range and quality of behavioral services that were provided to children in the MTA, and community physicians seldom utilize the systematic approach to medication monitoring and adjustment that was used in the MTA. The MTA thus identifies areas for improvement with respect to both behavioral and medical interventions. Nonetheless, with the recent development of longer-acting stimulant formulations, children are now able to benefit from medication during school and, where needed, after school, with the convenience and confidentiality of once-a-day dosing.

Dr. Pelham is right to suggest that parents and professionals together need to develop a treatment plan that is individualized to meet the specific needs of each child. However, if we expect parents to make informed decisions regarding their child's treatment, they must have clear and accurate information. ■

Andrew Adesman, M.D., is Director, Developmental & Behavioral Pediatrics, Schneider Children's Hospital in New Hyde Park, New York. He serves on the CHADD board of directors and is a member of the *Attention!*[®] editorial advisory board.



Behavioral interventions are less easily employed in middle school and high school where students have more teachers and variable schedules.