A New Treatment for Inattentive ADHD

ATTENTION RESEARCH UPDATE

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Children with the inattentive type of ADHD (ADHD-I) show high rates of attention difficulties without the hyperactive and impulsive behavior shown by children with ADHD Combined Type (ADHD-C). The inattentive type of ADHD is quite common and is associated with significant impairment with school work, planning and organizational skills, processing speed, and peer relations. Even so, children with ADHD-I tend to be identified later than those with ADHD-C, perhaps because they do not typically display the disruptive behavior problems that command parents' attention early on. They are also less disruptive in the classroom and teachers may be less aware that they are struggling academically.

Most treatment research on ADHD has been focused on children with ADHD-C. For example, the MTA Study - the largest ADHD treatment study ever conducted - included only children with ADHD-C. The role of medication treatment for ADHD-I is less well documented than for ADHD-C. Medication benefits may be less obvious in children with ADHD-I because they exhibit less disruptive and impulsive behavior. Parents may be less willing to medicate their children with ADHD-I because their behavior problems are less overt. And, medication alone may be less effective for the academic struggles that are especially important in children with ADHD-I.

Behavioral treatments for ADHD have also been developed primarily to meet the needs of children with ADHD-C, as many behavioral interventions focus on reducing disruptive and impulsive behavior and typically devote less attention to promoting alertness, organization and planning skills. Because traditional behavioral treatments are not tailored to the specific needs of children with ADHD-I they may be less effective for these children.

The lack of interventions specifically matched to the impairments experienced by most children with ADHD-I was addressed in a study published recently in the *Journal of Consulting and Clinical Psychology* [Pfiffner et al., (2014). A two-site randomized clinical trial of integrated psychosocial treatment for ADHD-Inattentive Type. *Journal of Consulting and Clinical Psychology*. Online first publication, May 26, 2014. http://dx.doi.org/10.1037/a0036887].

Participants were 199 7-11 year-old children (58% boys) diagnosed with ADHD-I. These children were recruited from via mailings to principles, school mental health providers, pediatricians, and child mental health professionals. Following an initial phone screening for ADHD-I conducted with parents and teachers, structured interviews were conducted in person to confirm that all participants met full DSM-IV criteria for ADHD-I.

These participants were randomly assigned to 1 of 3 treatment conditions: Child Life and Attention Skills (CLAS), a newly developed treatment designed specifically for children with ADHD-I; Parent-focus treatment (PFT), a behavioral parent training program, and Treatment as Usual (TAU), in which parents pursued whatever treatment they chose to. These treatments are described below.

Child Life and Attention Skills (CLAS) - The CLAS intervention included parent, teacher, and child components.

Parent component - The parent component included 10 90-minute parent group meetings and up to 6 30-minute family meetings. During group meetings, parents were educated about ADHD-I and how it impacted children's functioning. They learned strategies that included effectively using rewards and positive consequences, establishing daily routines, giving effective directions, avoiding power struggles,

stress management, how to organize and structure their home to promote their child's adaptive functioning, and how to use negative consequences.

Relative to traditional ADHD parenting programs, greater attention was paid to teaching parents how to address executive functioning deficits that characterize many children with ADHD-I, e.g., planning, organizing, working memory, prioritizing). For example, they were taught how to set up specific routines for getting homework done and for helping children to organize the various tasks they needed to complete. Each week they were given homework that involved practicing and implementing specific skills at home; these assignments and troubleshooting problems parents had implementing new strategies were discuss at each session before new content was introduced. Parents were also taught skills for interacting effectively with teachers and how to help develop, evaluate, and reinforce classroom interventions developed in conjunction with their child's teacher.

Child component - The child component included 10 90-minute child group meetings focused on teaching children skills for independence, e.g., academic, study, and organizational skills, and social skills, e.g., conversational skills, dealing with teasing, friendship making, etc. Children were also taught strategies to promote attention, time management skills, and task completion. Specific plans were developed for morning, after school and evening routines with tasks and activities specified clearly. Role plays were used frequently in teaching and practicing the skills and rewards were provided to improve the use of skills taught. The latter was done through having children bring in records from their parents and teacher indicating how well they had done in meeting specific home and school challenges that required the use of newly developing skills.

Teacher component - The teacher component included an initial 30-minute orientation meeting with the teacher, child, parent(s) and therapist followed by up to 5 subsequent meetings. Teachers were given an overview of ADHD-I, how it affects children in the classroom, and taught strategies for promoting children's attention and organizational skills. They also set up a daily report card system called the Classroom Challenge in which they rated children 3 times per day on up to 4 specific goal behaviors. These included such behaviors as 'getting started right away', 'finishing work on time', and 'turning in homework'. Specific social behaviors, e.g., 'playing with a peer at recess', were also included. These ratings were taken home daily so that parents were informed about their child's progress on important school goals. Teachers were instructed on the skills children were working on in the child group and how to support and reinforce those skills.

Parent focused training (PFT) - PFT included only the parent training component from CLAS. The skills taught were identical to those described above but did not include training parents to work effectively with teachers. There was no child skills group, direct consultation with teachers, or home-school daily report card.

Treatment as usual (TAU) - When children were assigned to this condition, parents received a list of community treatment providers but were not given specific treatment recommendations - what they pursued was up to them. Fourteen percent of these children went on to receive medication treatment, one-third received some form of psychotherapy (child therapy or parenting group), 51% received educational intervention at school, and 53% received some type of classroom accommodation.

Measures - Data was collected from both parents and teachers before treatment began, immediately following treatment, and 5 to 7 months after treatment ended. The latter assessment occurred during the following school year when children were with a new teacher. At each time point,ratings were collected

to measure the presence of DSM-IV inattentive symptoms, organizational skills relevant to academic success, and social skills. Parents and teachers rated children's overall improvement from baseline immediately after treatment; parents completed a similar rating at the long-term follow up.

Results

Post-treatment - Immediately following treatment, parent and teacher ratings indicated that compared to children in TAU children in CLAS showed fewer inattentive symptoms, better organizational skills, better social skills, and greater overall improvement. The magnitude of the group differences were in the moderate to large range. According to parents, nearly 55% of CLAS participants now showed 'normalized' levels of inattentive symptoms compared to only 30% TAU children. For teachers, the corresponding figures 58% vs. 33%

Differences between CLAS and PFT were more modest but still evident on teacher ratings of inattentive symptoms, parent and teacher ratings of organizational skills, teacher ratings of social skills, and teacher ratings of overall improvement. Effect sizes were small to moderate. Normalized inattentive symptoms for PFT children were reported by 43% of parents (vs. 55% for CLAS) and 44% of teachers (vs. 58% for CLAS). These differences were not significant.

Follow-up - At the 5-7 month follow-up CLAS remained superior to TAU based on parent ratings of inattentive symptoms, organizational skills, and overall improvement. Differences between CLAS and PFT were only evident for organizational skills and the effect size was modest. For teacher ratings (as noted above, these were ratings provided by a new teacher as children had advanced to the next grade) CLAS was not superior to TAU or PFT on any measure.

Consumer satisfaction - Parents and teachers reported a high level of satisfaction with CLAS. Over 95% felt the child and parent skills taught were very useful and 96% would recommend the program to others. Ninety-four percent of teachers in CLAS felt the intervention was helpful and 83% said they would be likely to continue to program. In addition, approximately 80% of parents in the PFT would have preferred to have had the child and teacher components to supplement the parent training they received.

Summary and Implications

The authors of this study made a laudable effort to design a psychosocial intervention specifically tailored to meet the needs of children with ADHD-I. The intervention they designed was thorough and comprehensive, and carefully integrated work with parents, teachers and children. Teaching parents how to work effectively with teachers to support their child - something that often proves challenging for parents - was an especially nice feature of the intervention.

In many ways, results from the study are highly encouraging. Immediately following treatment, both parents and teachers reported superior gains across multiple areas for children who received CLAS compared to either PFT or TAU. In several instances, differences between CLAS and the other groups were of substantial magnitude. And, it was clear that parents and teacher were highly satisfied with the program and believed that it had real value.

Against this positive backdrop, there are several concerns to keep in mind. The first concerns the feasibility of providing this intervention outside of a grant funded research project. CLAS involved 10 1.5 hour meetings with parents and children, and up to 6 30-minute meetings with teachers. Delivering this in a regular community setting could be challenging and the extend to which this could happen remains unknown.

Second, an important study limitation is that outcome measures were restricted to the parents and teachers who participated in the intervention. One could argue that they had a vested interest in the treatment's success, given the time and effort they had devoted to it. Although parents in PFT had also devoted significant time, the effort required by CLAS was still greater. As a result, the ratings provided by parents - and especially by teachers - may have been influenced by this factor in favor of CLAS relative to the other interventions.

This is especially concerning given that teacher ratings at follow-up showed no beneficial effects of CLAS compared to PFT or TAU. Recall that these ratings were completed by a new teacher who may have been unaware of treatments children and parents had received. In a sense, these were the only 'blind' ratings in the study, and the fact that no effects were found on any of the measures raises some questions about the validity of the other ratings. This is an important study limitation that the authors appropriately acknowledge, and they note that including objective measures of outcome such as 'blind' observations of "...parent-child interactions, classroom behavior and/or peer interactions, homework products, or tests of academic achievement would avoid these rater biases and are important to include in future studies."

These limitations not withstanding, the valuable contribution of this study is in developing a psychosocial intervention that is specifically tailored to the needs of children with ADHD-I, something that is long overdue. I particularly appreciated the efforts to help parents develop the skills and knowledge to work effectively with their child's teacher to promote his/her success at school. This is an important effort and provides a strong foundation on which other researchers can build.

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