Combination of treatments could lead to lower and safer doses of medication in children with ADHD

April 8 2014

Balancing a low dose of behavior therapy with a low dose of medication may be the key to helping children with Attention Deficit Hyperactivity Disorder (ADHD), according to a new study by researchers at FIU's Center for Children and Families.

High doses of stimulant medication and intensive behavior therapy are each known to be effective individual modes of treatment. But medication may suppress a child's growth and decrease appetite, while intensive behavior therapy is costly, time-intensive and may not be feasible for many families. The researchers say finding a balance may be the key to more effectively treating ADHD.

"Our data show that stimulant doses can be reduced dramatically if a child is treated with behavior modification," said lead researcher William E. Pelham, Jr., chairman of the FIU Department of Psychology and director of the Center for Children and Families. "Given concerns about long-term side effects of these medications, such as growth reduction, providing behavioral interventions would appear to minimize the need for medication and maximize response to very low doses for the majority of children with ADHD."

During the center's nine-week Summer Treatment Program, the researchers tested whether a combination of low dose medication and a low dose of behavioral therapy would have the same effects on an

ADHD child's behavior as an intense single form of treatment. Forty-eight children between the ages of 5 and 12 with a diagnosis of ADHD were observed during structured and unstructured recreational interaction. Results suggested there were no benefits to combined treatments when the intensity of each treatment was high.

The study proves a child who experiences side effects from medication may benefit from a decrease in dosage coupled with low levels of behavior modification, according to Pelham. Plus, low levels of behavior modification may be implemented at home and school since parents and teachers may provide the requisite framework for the child. The findings, which were supported by a grant from the National Institute for Mental Health, were recently published in the *Journal of Abnormal Child Psychology*.

Pelham and his FIU collaborators are conducting a number of studies funded by the NIMH that examine medication, behavioral interventions, and their combination in children with ADHD. In this year's Summer Treatment Program, an expected 84 ADHD children will begin participating in a study that examines whether children develop tolerance to medication in combination with behavioral intervention. The study will also examine if taking a child off the medication just during weekends will help eliminate the tolerance issue, which often results in a child being prescribed higher doses of medication during the school year. Enrollment for this study is currently under way for the upcoming Summer Treatment Program, which begins in June. Information is available by calling the FIU Center for Children and Families at 305-348-0477. Enrollment will begin in the late summer for another study examining ways of helping ADHD teens stick with medication as a part of their overall treatment program.

The Summer Treatment Program, which operates similar to a summer recreational camp, but designed specifically for children with ADHD

and behavior disorders, has been recognized by the American Psychological Association and CHADD (Children and Adults with ADHD) as a model program. The program has been conducted at a number of universities and medical centers in the U.S. since 1980 and has been offered at FIU's Center for Children and Families since 2010.

Provided by Florida International University