Common Use of Stimulants and Alpha-2 Agonists to Treat Preschool Attention-Deficit Hyperactivity Disorder: A DBPNet Study

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Abstract

OBJECTIVE:
To describe the use of stimulants and alpha-2 agonists (A2As) for the treatment of preschool-aged children with attention-deficit hyperactivity disorder (ADHD) at 2 Developmental-Behavioral Pediatrics Research Network sites.

METHODS:
Demographic information, diagnoses, and medications prescribed by developmental-behavioral pediatricians (DBPs) were extracted from the electronic health record for all outpatient visits from January 1, 2010, to December 31, 2011. The subset of visits for children aged 2 to 5 years who had a diagnosis of ADHD was included in this analysis. Multivariable models were constructed to identify factors associated with prescribing stimulants and A2As.

RESULTS:
Over the 2-year period, 984 children with a diagnosis of ADHD were seen at 1779 visits. Of the 984 children, 342 (34.8%) were prescribed a stimulant, and 243 (24.7%) were prescribed an A2A. Both medications were prescribed at the same visit at least once during the 2-year period for 97 children (9.9%). Alpha-2 agonists were prescribed more often at site 2 than site 1 (OR [odds ratio] = 1.62, p = 0.015). Stimulants were more likely to be prescribed for older preschool-aged children (OR = 1.66, p < 0.001), and A2As were more likely to be prescribed for younger children (OR = 0.82, p = 0.02). Both stimulants and A2As were more likely to be prescribed to children with ADHD and comorbid conditions.

CONCLUSION:
Alpha-2 agonists are commonly used by some DBPs for preschool ADHD. Variation in the use of A2As across sites may indicate a lack of consensus on when to use these medications and suggests a need for comparative effectiveness research to better define the relative benefits and side effects of A2As and stimulants for the treatment of preschool ADHD.