by Meghan Miller, PhD

Questions About ADHD Medication

THIS UPDATE examines some of the recent research on medications for ADHD.

MEDICATION & SUBSTANCE USE RISK

Is risk for substance use reduced in adolescents with ADHD who are treated with stimulant medications?

Many parents of youth with ADHD are concerned about whether treating their child's ADHD with stimulant medications may increase the risk for illicit substance use. This study compared data collected from two samples: teens with ADHD who took part in an ADHD medication study, and teens with and without ADHD who were involved in a naturalistic, non-medication study. The researchers compared the youth who were in the medication study to those who were not on self-reported drug and alcohol use, and found that rates of substance use were actually lower in the teens enrolled in the medication trial. This suggests that, among teens and under conditions of close monitoring of stimulant medication treatment, there is not increased risk for alcohol and substance use.

Hammerness, P. et al. (2017). Do stimulants reduce the risk for alcohol and substance use in youth with ADHD? A secondary analysis of a prospective, 24-month open-label study of osmotic-release methylphenidate. Journal of Attention Disorders, 2, 71-77.

POLYPHARMACY & ADHD

What is the prevalence of multi-medication treatment in newly diagnosed children with ADHD, and how does this change over time?

Although medication is a common and evidence-based treatment for ADHD, little research has focused on the questions of prevalence, efficacy, and safety of polypharmacy—or the combined use of multiple medications—in ADHD. This study focused on describing the types of medications newly diagnosed children with ADHD receive, and how their medication profiles changed over a five-year period. Using data from Medicaid billing records of 16,626 children who were first diagnosed with ADHD between three and fourteen years of age (with no prior psychotropic medication use), the researchers examined the medications prescribed over a period of five years. A large proportion of the children received stimulants (79%) as well as non-ADHD medications such as antidepressants (33%) and alpha-agonists such as clonidine or guanfacine (23%).

In terms of polypharmacy, 25% of the children received multiple medications at least once. Increases in the use of non-ADHD medications and polypharmacy were seen over time but only among children who were diagnosed with ADHD at earlier ages, between three and nine years. This may be because children who are diagnosed younger have more severe symptoms or co-occurring challenges, although the increase in polypharmacy was only partially explained by increases in additional diagnoses. Ultimately, this study suggests that further research is needed in order to understand the effects of polypharmacy and to refine and improve quality of care, especially among younger children with ADHD.

Winterstein, A.G. et al (2017). Differential risk of increasing psychotropic polypharmacy use in children diagnosed with ADHD as preschoolers. Journal of Clinical Psychiatry, epub ahead of print.

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