



ADHD Correlates with Substance Use Disorders



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Parents and teachers can easily imagine how attention-deficit/hyperactivity disorder (ADHD) can result in academic and social challenges. Many, however, are not aware of the greatly increased risk of substance use disorders. Consider these facts faced by children diagnosed with ADHD:¹⁻⁵

- They are 2.5 times more likely to develop a substance use disorder.
- They are nearly three times more likely to have a lifetime of nicotine use.
- They are almost twice as likely to develop alcohol dependence.
- They are nearly twice as likely to develop cocaine dependence.
- ADHD is associated with an earlier age of onset of substance use and a higher variety of substances.
- This risk extends into adulthood.
- These increased risks exist independent of other factors such as family, academics, and environment.
- The greater the number of inattention and hyperactivity/impulsivity symptoms, the greater the risk of substance use.



While guidelines are more equivocal about recommending medication for patients younger than six, the American Academy of Pediatrics (AAP) guidelines for ADHD recommend both *stimulant* medication and behavioral interventions as first-line treatments for children age 6+ with an ADHD diagnosis.⁶ However, doctors, knowing that the diagnosis presents a higher risk of substance misuse, abuse, and diversion, carefully consider those risks when prescribing ADHD medications. ADHD stimulant medications are Drug Enforcement Administration Class II controlled substances. Non-stimulant ADHD medications are available, but the stimulant medications, while being the most subject to misuse, are also the most commonly prescribed and believed to be more effective.⁷ Between 16% and 23% of school-aged children report they have been approached to divert their prescription stimulant medication.⁸⁻⁹ Across 21 studies, non-prescribed stimulant use ranged from 5% to 9% in grade school, with the prevalence reaching 35% by college.¹⁰ While putting those prescriptions into the home and community adds to the overall risk of misuse, there is no evidence that prescribing stimulant ADHD medication to a child increases the risk of substance abuse for that child. On the contrary, there is some evidence that prescribing stimulants reduces the risk of substance use disorders for the individual child, and the earlier treatment begins - the better, but the AAP considers this evidence inconclusive.⁷ Another ongoing concern with pharmacological ADHD treatments is that there is no known endpoint for this approach.⁷

The theories for the mechanisms underlying the association between ADHD and substance use disorders are varied, but a general consensus seems to be that moderating the symptoms of inattention and hyperactivity, improving executive function, and improving academic performance should moderate the risk of substance use.⁷ To this end, parents and child-care professionals should consider pediatric therapy (occupational and speech) as an important component of the treatment plan for children diagnosed with ADHD. In children diagnosed with ADHD, language impairment commonly exists, and there is some evidence that the language impairment contributes more to variance in achievement, working memory, and executive function than does ADHD.^{11,12} Snowling et al. demonstrated that when language delay is resolved by 5.5 years, children have particularly good psychosocial outcomes in adolescence.¹³ What's more, Gerry Leisman et al., The National Institute for Brain Rehabilitation Sciences, is finding that **certain multi-modal pediatric therapy programs are, after only 12 weeks, improving children diagnosed with ADD/ADHD to such an extent that 81% no longer rate as ADD/ADHD on the parent-rated Brown Scale.**¹⁴ This is part of a body of research demonstrating that pediatric therapy services are highly effective at improving attention and hyperactivity in ADD/ADHD diagnoses.¹⁵⁻¹⁹

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