The Effectiveness and Tolerability of Central Nervous System Stimulants in School-Age Children with Attention-Deficit/Hyperactivity Disorder and Disruptive Mood Dysregulation Disorder across Home and School.


J Child Adolesc Psychopharmacol. 2016 Jan 15. [Epub ahead of print]

Abstract

OBJECTIVE:
This study examines the effectiveness and tolerability of stimulants in children with attention-deficit/hyperactivity disorder (ADHD) and disruptive mood dysregulation disorder (DMDD).

METHODS:
To be eligible, participants had to meet Diagnostic and Statistical Manual of Mental Disorders, 4th ed., Text Revision (DSM-IV) criteria for the combined subtype of ADHD and National Institute of Mental Health (NIMH) severe mood dysregulation criteria. The Diagnostic and Statistical Manual of Mental Disorders, 5th ed. (DSM-V) DMDD criteria were retrospectively assessed after the study was completed. An open-label medication trial lasting up to 6 weeks was completed to optimize the central nervous system (CNS) stimulant dose. Measures of affective symptoms, ADHD symptoms and other disruptive behaviors, impairment, and structured side effect ratings were collected before and after the medication trial.

RESULTS:
Optimization of stimulant medication was associated with a significant decline in depressive symptoms on the Childhood Depression Rating Score-Revised Scale (p<0.05, Cohen's d=0.61) and Mood Severity Index score (p<0.05, Cohen's d=0.55), but not in manic-like symptoms on the Young Mania Rating Scale. There was a significant reduction in ADHD (p<0.05, Cohen's d=0.95), oppositional defiant disorder (ODD) (p<0.05, Cohen's d=0.5), and conduct disorder (CD) symptoms (p<0.05, Cohen's d=0.65) as rated by parents. There was also a significant reduction in teacher-rated ADHD (p<0.05, Cohen's d=0.33) but not in ODD symptoms. Medications were well tolerated and there was no increase in side effect ratings seen with dose optimization. Significant improvement in functioning was reported by clinicians and parents (all p's<0.05), but youth still manifested appreciable impairment at end-point.

CONCLUSIONS:
CNS stimulants were well tolerated by children with ADHD comorbid with a diagnosis of DMDD. CNS stimulants were associated with clinically significant reductions in externalizing symptoms, along with smaller improvements in mood. However, most participants still exhibited significant impairment, suggesting that additional treatments may be needed to optimize functioning.