Heterotypic trajectories of dimensional psychopathology across the lifespan: the case of youth-onset attention deficit/hyperactivity disorder

Manfro AG, Santoro M, Polanczyk GV, Gadelha A, Pan PM, Bressan RA, Brietzke E, Talarico F, Belangero S, Rohde LA, Salum GA.


BACKGROUND:
Recent studies have demonstrated the existence of a distinct late-onset attention deficit/hyperactivity disorder (ADHD) trajectory. Our objective is to test if there are distinct ADHD trajectories regarding age of onset from childhood to adolescence and to compare clinical manifestations, cognitive functions and genetic risk for ADHD among distinct longitudinal groups.

METHOD:
Nine hundred and twenty four children and adolescents from the community participated in the study. We compared clinical, cognitive features and genetic risk among four groups of participants: (a) childhood-limited, (b) youth-onset, (c) childhood-onset with youth persistence, and (d) community comparisons without ADHD. Symptomatic and diagnostic assessments were performed using the Development and Well-Being Behavior Assessment, the Strengths and Difficulties Questionnaire, and the Child Behavior Checklist. Cognitive functions were measured using a battery of standardized tests. Genetic risk for ADHD was calculating using summary statistics from the Psychiatric Genomics Consortium.

RESULTS:
Half of the adolescents (52%) with ADHD had their symptom onset in adolescence. The impairment level of this group in adolescence is similar to the persistent group. Despite not having ADHD, the youth-onset group already presented in childhood more symptoms from other domains of psychopathology, higher shared variance in psychiatric symptomatology (p-factor), school impairment, and executive dysfunctions than community comparisons. Furthermore, the youth-onset group presented lower levels of genetic risk for ADHD compared to other cases.

CONCLUSIONS:
A significant proportion of adolescents with ADHD were youth-onset cases and presented similar impairment levels as those cases with early-onset ADHD. The presence of cognitive impairments and higher levels of clinical symptoms in the youth-onset group already at childhood speaks in favor of a heterotypic trajectory of psychopathology suggesting that youth-onset ADHD might be an artificial consequence of categorizing dimensional psychopathology into discrete diagnostic groups.