Cumulative exposure to childhood adversity, and treated attention deficit/hyperactivity disorder: a cohort study of 543 650 adolescents and young adults in Sweden.

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Abstract

BACKGROUND:
Though childhood adversity (CA) has been associated with the risk of attention deficit/hyperactivity disorder (ADHD), little is known about the effect of cumulative CAs and whether there are clusters of CAs that are more closely related with ADHD.

METHODS:
We used a Swedish cohort of 543 650 individuals born 1987-1991. Register-based CAs included familial death, substantial parental substance abuse and psychiatric disorder, substantial parental criminality, parental separation, household public assistance recipiency, and residential instability. Individuals were followed from year 2006 when they were 15-19 years of age, for treated ADHD, defined as a registered ICD diagnosis and/or prescription of medications to treat ADHD. Logistic regression analysis was used to calculate odds ratios (OR) with 95% confidence intervals (CI). Latent Class Analyses (LCA) were used to identify clusters based on the different CAs.

RESULTS:
All CAs increased the odds of ADHD in late adolescence and early adulthood; ORs ranged from 1.6 (95% CI 1.5-1.8) for familial death to 2.7 (95% CI 2.6-2.9) for household public assistance. We found a dose-response relationship between cumulative CA and ADHD; individuals with 4+ CAs had a markedly increased risk for ADHD (OR 5.5, 95% CI 5.0-6.0). LCA analyses revealed six distinct classes of CA associated with ADHD, of which 'exposure to most adversities' entailed highest risk.

CONCLUSION:
CA is a strong risk factor for ADHD, particularly when accumulated. Early and efficient detection of CA is of importance for interventions targeted to improve long-term mental health outcomes among disadvantaged children.