Physical activity of young people with attention deficit hyperactivity disorder and/or autism spectrum disorders

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Abstract

Young people with Attention-Deficit/Hyperactivity Disorder (ADHD) and/or Autism Spectrum Disorder (ASD) are less likely to engage in physical activity (PA) than typically developing individuals, which influences symptoms and wellbeing. The present study explored PA rates among individuals with ADHD and/or ASD via secondary data analysis of The Child and Youth Mental Health (ChYMH) assessment and the Child and Youth Mental Health Instrument for Developmental Disabilities (ChYMH-DD). This study utilized ChYMH/ChYMH-DD data collected between 2013 and 2016 from individuals aged 4 to 18 years. Young people with provisional diagnoses of ADHD (n=931, Mage=11.68 years ± 3.49), ASD (n=163, Mage=12.24 years ± 3.38), or dual diagnosis (n=151, Mage=12.17 years ± 3.00) were included. The "total hours of exercise or PA" measure indicated that 63.7% (ADHD), 47.2% (ASD), and 47.7% (dual) of young people achieved less than 3 hours of PA over a three-day period. Spearman's rho found that increasing PA was negatively correlated with the following: age, cognitive skills, communication, distractibility/hyperactivity, and sensory difficulties. Conversely, PA was positively correlated with involvement in extracurricular activities, clubs/teams, and family recreation. PA was more common in males than females and in children than youth, which is reflective of typically developing individuals. This study found that over 50% of young people failed to reach 60 minutes of PA at any level per day. More research is needed to determine the intensity and type of PA, why increased symptom severity was associated with higher rates of PA, and causality of PA behaviours in those with ADHD and/or ASD.