Today’s piece was prepared by Cassie Chou, MD, based on the article from CBSnews.com entitled, [ADHD drugs may up risk of heart problems in kids](http://www.cbsnews.com/news/adhd-drugs-may-up-risk-of-heart-problems-in-kids/)

This article cites a study “[Cardiovascular Safety of Stimulants in Children with ADHD: A Nationwide Prospective Cohort Study](http://www.ncbi.nlm.nih.gov/pubmed/24956171).” 714,000 Danish children were followed for an average of 9.5 years. Of 8300 diagnosed with ADHD, 111 (1.3%) had identified cardiovascular events: cardiovascular/heart disease NOS (54%), arrhythmias (23%), cerebrovascular disease (9%), hypertension (8%), ischemic heart disease (2%), heart failure (2%), heart disease caused by rheumatic fever (2%), pulmonary heart disease (<1%) and cardiac arrest (<1%). The authors use a broad definition of cardiovascular events and the 5 children with ADHD who had a serious cardiac event (cardiac arrest, uncompensated heart disease and ischemic heart disease) were not on stimulants. The authors highlighted an inverse dose-response relationship between stimulant treatment and cardiovascular events, with a higher percentage of children who had a cardiovascular event having their stimulant dose lowered in the last 12 months.

The article states cardiovascular events are rare, but notes findings raise the question of whether drug benefits outweigh possible harms, which may alarm readers. Stimulants can increase heart rate and blood pressure. The FDA recommends monitoring patients treated with stimulants for these changes and advises against use in patients with serious heart problems. The news article also mentions two 2011 articles (NEJM and JAMA) finding no link between ADHD drugs and serious cardiac events, but fails to mention the Danish study also found no link between stimulant use and *serious* cardiac events. Additionally, stating “children seemed at higher risk of heart problems if their doctors had lowered their drug dosage” is misleading since the authors did not account for rationale for lowering the dose and this was not a cause and effect analysis.

**RESOURCES ON ADHD medication and cardiovascular events:**

**ADHD consumer information** <http://www.nimh.nih.gov/health/topics/attention-deficit-hyperactivity-disorder-adhd/index.shtml> *Prepared by the National Institute of Mental Health*

Parents medication guide <http://www.parentsmedguide.org/pmg_adhd.html> *Prepared by the APA and AACAP*

FDA drug safety information <http://www.fda.gov/drugs/drugsafety/ucm277770.htm>

**NEJM article:** [ADHD Drugs and Serious Cardiovascular Events in Children and Young Adults](http://www.nejm.org/doi/full/10.1056/NEJMoa1110212)

**JAMA article:** [ADHD Medications and Risk of Serious Cardiovascular Events in Young and Middle-aged Adults](http://jama.jamanetwork.com/article.aspx?articleid=1104778)

And that’s today’s developmental and behavioral pediatrics: IN THE NEWS!