

ADHD drugs may up risk of heart problems in kids, study finds

July 4 2014, by Randy Dotinga, Healthday Reporter



But problems are rare, findings should not cause alarm, experts say.

(HealthDay)—Whether drugs used to treat attention deficit hyperactivity disorder boost the risk of heart conditions in children remains a subject of concern. Now, research from Denmark suggests medications such as Ritalin and Concerta make rare cardiac problems twice as likely, although still uncommon.

"The risk of adverse cardiac effects of ADHD medication is real and should not be forgotten," said study lead author Dr. Soren Dalsgaard, an associate professor at Aarhus University.

However, doctors and parents should not be alarmed and take kids off stimulant medication if they have benefits from it and no cardiac symptoms, he said. "But we should continue to monitor cardiovascular status," he added.

The findings aren't definitive because they don't prove cause-and-effect and they seem to conflict with some previous research that looked at fewer heart conditions over shorter periods of time.

The inattention, hyperactivity and impulsivity associated with ADHD can make it hard for children with the disorder to learn and socialize. Stimulant drugs taken on a daily basis can help control these behaviors.

Worldwide, the number of children and teens with ADHD who take stimulant medications is increasing, according to background research in the study. Experts say these drugs can boost heart rate and blood pressure.

"The most common cardiac effects are benign—very small, clinically insignificant increases in heart rate or blood pressure," said Dr. Andrew Adesman, chief of developmental and behavioral pediatrics at Cohen Children's Medical Center of New York in New Hyde Park.

Alarms sounded because of reports of sudden deaths, heart attack and stroke related to ADHD drugs, which has led some physicians to assess heart health before starting young people on the drugs.

But a 2011 study of U.S. children and young adults published in the *New England Journal of Medicine* found no link between ADHD drugs and heart attacks, sudden death and stroke. And in 2012, a study in the *Journal of the American Medical Association* found no sign of a link in young and middle-aged adults either.

The new study, published online recently in the *Journal of Child and Adolescent Psychopharmacology*, followed 714,000 children in Denmark, born from 1990 to 1999, for an average of 9.5 years. Of those, 8,300 were diagnosed with ADHD after age 5.

Of the total with ADHD, 111 kids—or a little more than 1 percent—had a heart problem such as high [blood pressure](#), cardiac arrest, irregular heartbeat or general cardiovascular disease.

When the researchers adjusted their statistics to take into account certain differences, they found those who took methylphenidates such as Ritalin or Concerta—whether diagnosed with ADHD or not—were about twice as likely to suffer from [heart problems](#).

The researchers didn't examine whether ADHD itself could be linked to heart problems.

In a news release, journal editor Dr. Harold Koplewicz said the study "confirms the small but real risk we have understood for some time through prior reports and clinical experience." Koplewicz is president of the Child Mind Institute in New York City.

The findings raise the question of whether the benefits of the drugs outweigh the possible harms. In the big picture, few children who took the drugs actually developed heart problems, study lead author Dalsgaard said.

"Indeed, the benefits from ADHD medication can be worth the risk of adverse effects, but we should not underestimate the risk of cardiac effects," he said.

Adesman emphasized the rarity of heart problems in ADHD patients. Parents may wish to talk to a pediatric cardiologist if their child has an existing heart problem and they wish to put them on a stimulant for ADHD, he said.

"In my experience, most cardiologists will support treatment with [stimulant medication](#) for most [children](#) with congenital heart

disease—even for kids who have had [open heart surgery](#) to repair a malformed heart," he said.

More research is planned, Dalsgaard said, especially to unravel an unusual finding in the study. Children seemed at higher risk of heart problems if their doctors had lowered their [drug](#) dosage. It's not clear if the change in dose contributed to the [heart](#) issues or whether there's another explanation.

More information: For more about ADHD, see the [U.S. National Institute of Mental Health](#).

Copyright © 2014 [HealthDay](#). All rights reserved.

Citation: ADHD drugs may up risk of heart problems in kids, study finds (2014, July 4) retrieved 24 April 2024 from <https://medicalxpress.com/news/2014-07-adhd-drugs-heart-problems-kids.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--