

New study confirms long-term suspicions that ADHD is more common in boys. Interesting further conclusion relates it as more common to lower educated people. Read on for more of the Mayo findings.

Helping Hearts Heal

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Study Confirms ADHD Is More Common in Boys

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Sept. 15, 2004 -- Boys are three times more likely than girls to develop attention deficit hyperactivity disorder (ADHD), but having well-educated parents lowers the risk, according to findings from one of the strongest studies ever to access early life risk factors for ADHD.

Mayo Clinic researchers reviewed the school and medical records of all children born between 1976 and 1982 in Olmsted County, Minn., to identify early risks for ADHD.

Male sex was the greatest risk factor for developing the disorder, but other suspected influences, such as birth to a single parent, low birth weight, being born a twin, and complications during labor and delivery were found to have no impact on ADHD risk.

"Our findings are very consistent with the studies that have been done before," Mayo epidemiologist and lead researcher Jennifer St. Sauver, PhD, tells WebMD. "Our results confirm that male sex and low parental education significantly increase ADHD risk."

Nature and Nurture

In January of 2002, William Barbaresi, MD, and Mayo colleagues reported that 7.5% of children up to the age of 19 have ADHD. In their latest study, published in the September issue of the journal Mayo Clinic Proceedings, the researchers identified 305 ADHD cases among the 5,701 children born in Olmsted County during the six-year study period.

Their finding that male sex was associated with a threefold increase in risk confirms the long-recognized sex difference in the diagnosis of ADHD, Barbaresi tells WebMD.

"There has been a fair amount of debate about whether the preponderance of males with ADHD is due to diagnostic bias, the notion being that boys are just more disruptive than girls so their symptoms are more obvious," he says. "The fact that we had the medical and school records for every single child born in the community during this six year period makes us confident that the gender difference we saw was real."

Likewise, the finding that the odds of having ADHD decrease as maternal and paternal education levels increase was not unexpected.

Parental education is frequently used as a marker for socioeconomic status, which has previously been linked to ADHD. The Mayo researchers suggest that the parental education finding supports both an environmental and genetic cause for the disorder.

"Less educated parents may have less effective parenting styles and may provide a less structured environment, leading to exacerbation of ADHD symptoms," they wrote. "Alternatively, low parental education may be a marker for parental educational difficulties due to parental symptoms of ADHD, again suggesting a genetic component in ADHD development."

Diagnosis Isn't Simple

University of California, San Diego pediatrics professor Martin Stein, MD, says it has become clear over the last decade or so that ADHD is a biological disorder that is influenced by environmental factors.

"We know that ADHD runs in families, with 40% or 50% of children with ADHD having a parent or other close relative with it, too," he tells WebMD. "But that being said, the way a child's family, school, and community respond to symptoms will have an impact on how the condition manifests."

A spokesman for the American Academy of Pediatrics, Stein says the organization's guidelines for the diagnosis and treatment of ADHD, published within the last few years, should help clinicians and parents better identify the condition. The AAP web site has the most up-to-date information for parents on the disorder.

"ADHD is not something that can be easily diagnosed in a 15- to 20-minute pediatric visit," he says. "An accurate assessment should include interviews with the parent and child and some information from a teacher, usually in the form of a written narrative. It should take at least two or three visits to make an accurate diagnosis."

SOURCES: St. Sauver, J. Mayo Clinic Proceedings, September 2004; vol 79: pp 1124-1131. Jennifer L. St. Sauver, PhD, epidemiologist, Mayo Clinic College of Medicine, Rochester, Minn. William J. Barbaresi, MD, division of developmental and behavioral pediatrics, Mayo Clinic College of Medicine, Rochester, Minn. Martin Stein, MD, director of developmental and behavioral pediatrics, Children's Hospital of San Diego; professor of pediatrics, University of California, San Diego; spokesman, American Academy of Pediatrics.

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