## Prevalence of ADHD Is Up Among Older Children

BY AUDREY KUBETIN

Editorial Intern

he percentage of adolescents being diagnosed with attention-deficit/hyperactivity disorder is on the rise, but prevalence rates remain constant among younger children, a new study shows.

In children aged 12-17 years, the prevalence of attention-deficit/hyperactivity disorder (ADHD) increased by an average of 4% annually from 1997 to 2006. No significant increase was observed in those aged 6-11 years.

Dr. James M. Perrin, cochair of the American Academy of Pediatrics committee that developed practice guidelines for ADHD, suggested in an interview that this apparent increase in prevalence might stem from increased awareness among physicians that ADHD continues into adolescence and adulthood, rather than resolving in childhood.

The study was conducted by Patricia N. Pastor, Ph.D., and Cynthia A. Reuben of the National Center for Health Statistics. Their results are drawn from the National Health Interview Survey (NHIS), an ongoing, annual household survey conducted by the NCHS (Vital Health Stat. 10 2008;237:1-22).

Between 1997 and 2006, NHIS researchers gathered interviews from about 40,000 households a year. In each household with children, interviewers randomly selected one child and asked an adult family member whether that child had ever been diagnosed with ADHD, a learning disability, or other chronic health conditions.

Average annual percentage changes in ADHD prevalence were modeled using logistic regression. The researchers found that the percentage of children diagnosed with ADHD grew slowly from 1997 to 2006, increasing by an average of 3% a year.

To estimate the prevalence of ADHD, NHIS data from 2004, 2005, and 2006 were pooled to create a single sample of about 23,000 children. About 5% of these had ADHD without an accompanying learning disability, 5% had a learning disability without ADHD, and 4% had both.

Children aged 12-17 years were more likely than children aged 6-11 years to have each of the three diagnoses.

Dr. Pastor and Ms. Reuben suggested this apparent agerelated difference might result from improved access to health care services, as well as from increased knowledge about ADHD. "Although a number of factors may contribute to differences between younger and older children, a higher 'lifetime' prevalence rate among older children

would be expected because of their longer exposure to the possibility of evaluation and diagnosis," they wrote.

They also reported that health insurance coverage might play a role in whether a child is diagnosed with ADHD.

"The prevalence of diagnosed ADHD was similar among children with private insurance coverage and Medicaid. Although many factors may contribute to the differences between insured and uninsured children, access to health care may make it more likely that a child will be diagnosed," they said.

Dr. Pastor and Ms. Reuben acknowledged the risks and limitations of relying on parents and adult family members for information on a child's medical history.

"Neither school nor health records were obtained to determine accuracy of parent reports" of either diagnosed ADHD or learning disabilities, they wrote. "The results do not describe the prevalence of children who have the conditions but who have never been diagnosed."

Nevertheless, they emphasized the importance of following changes in the prevalence of ADHD.

"Given the economic and social costs associated with ADHD and [learning disabilities], monitoring the number and characteristics of children who have been diagnosed with these conditions is critical," they wrote.

## Use of SSRIs, SNRIs Is Tied to Upper GI Bleeding

BY MARY ANN MOON

Contributing Writer

Antidepressants that block action on the serotonin reuptake mechanism seem to raise the risk of upper gastrointestinal bleeding to the same degree that antiplatelet drugs do, according to data from a case-control study involving over 11,000 subjects.

Both selective serotonin reuptake inhibitors (SSRIs) and serotonin-nor-epinephrine reuptake inhibitors (SNRIs) increased the risk of upper gastrointestinal bleeding, particularly when taken with NSAIDs or antiplatelet drugs, wrote Dr. Francisco J. de Abajo of the Spanish Agency for Medicines and Healthcare Products, Madrid, and his associates.

Use of acid suppressors lowered these bleeding risks, they noted.

The researchers used a large, general practice database from the United Kingdom to study whether serotonin reuptake inhibitors raise the risk of serious bleeding. They matched 1,321 cases of upper GI bleeding from erosion, peptic ulcer, or inflammation of the gastric or duodenal mucosa with 10,000 control subjects who had no GI bleeding.

The proportion of subjects currently using SSRIs (5.3%) or SNRIs (1.1%) was significantly higher in cases than in controls (3.0% and 0.3%, respectively). When SSRIs and SNRIs were combined into a single category of "serotonin reuptake inhibitors," the odds of use of the antidepressants were nearly twice as high in cases as in controls.

The magnitude of the effect that serotonin reuptake inhibitors ex-

erted on upper GI tract bleeding was similar to that exerted by antiplatelet agents, Dr. de Abajo and his associates said (Arch. Gen. Psychiatry 2008;65:795-803).

No significant association was found between upper GI bleeding and any other type of antidepressant. Moreover, "[we] did not identify a dose-response effect or a clearcut duration effect in current users of SSRIs or SNRIs, although the effect was more consistent when treatment duration was longer than 3 months," they said.

The increased risk of bleeding was further augmented by the use of NSAIDs or antiplatelet drugs. In contrast, the use of proton pump inhibitors or  $H_2$  antihistamines to suppress stomach acid "greatly reduced" the risk of GI bleeding related to serotonin reuptake inhibitors, as well as the combined effect of these drugs plus NSAIDs or antiplatelet drugs.

The researchers estimated it would be necessary to treat about 2,000 patients a year with serotonin reuptake inhibitors for 1 case of upper GI tract bleeding to be attributed to them, "indicating that the risk is rather low in the general population treated with these drugs. However, when serotonin reuptake inhibitors are combined with NSAIDs or antiplatelet drugs, the number of patients needed to be treated per year for 1 case of upper GI tract bleeding decreases remarkably [to 250-500 patients per year]. In such a high-risk population, the use of acid-suppressing agents would save a relevant number of cases and is worthwhile."

The study was supported in part by AstraZeneca. ■

## Eating Disorder Classifications Of Adolescents Shift Over Time

BY SUSAN LONDON

Contributing Writer

SEATTLE — Sizable proportions of adolescents progress along a spectrum of eating-disordered behavior over time, highlighting the importance of early detection and intervention, Diann M. Ackard, Ph.D., said at an inter-

national conference sponsored by the Academy for Eating Disorders.

Dr. Ackard, a psychologist in private practice in Golden Valley, Minn., and her colleagues assessed the stability of eating disorder classifications among a popu-

lation-based sample of adolescents in Project EAT (Eating Among Teens). In the project, the same adolescents completed surveys about eating behaviors and body image in 1999 and again in 2004, and the survey items were mapped onto DSM-IV criteria.

Analyses were based on 2,516 adolescents in middle school or high school at the first assessment, Dr. Ackard reported at the conference, which was cosponsored by the University of New Mexico. Those in middle school were a mean age of 12.8 years and those in high school were a mean age of 15.8 years in 1999. Fifty-five percent were female.

At the first assessment, 10% of the adolescents met full-threshold criteria for a clinical eating disorder (anorexia nervosa, bulimia nervosa, or binge eating disorder), 39% had some subthreshold symptoms (compensatory behaviors or body image disturbance), and 50% were asymptomatic.

Five years later, considerable flux in the eating disorder groups was evident, Dr. Ackard reported. Among female adolescents who were asymptomatic at the first assessment, 63% remained so at follow-up—but 36% had develo

oped symptoms and 1% had developed full clinical disorders. About 61% of those who initially had some symptoms still had them; another 37% had improved, becoming asymptomatic, but 3% had worsened and developed clinical disorders.

Among male adolescents who were asymptomatic at the first assessment, 74.5% remained

Among females who were asymptomatic at the first assessment, 36% had developed symptoms.

DR. ACKARD

so at the second assessment, but 25% had developed some symptoms and 0.4% had developed clinical disorders. And 38.8% of those who initially had some symptoms still had them; an additional 59.9% no longer had any symptoms, but

1.4% had progressed to a clinical disorder. Finally, all of the male adolescents who initially had a clinical disorder had improved to the point of having only some symptoms.

The study's good news, Dr. Ackard said, is that after 5 years, most asymptomatic youth (68.9% overall) remained symptom free, most with subclinical symptoms (52.4%) did not worsen to full clinical eating disorders and in fact 45.2% became asymptomatic.

In addition, most with clinical eating disorders improved to having only some subclinical symptoms (74%) or no symptoms (18%), said Dr. Ackard, also of the University of Minnesota, Minneapolis, and a research scientist at the Eating Disorders Institute at Park Nicollet Methodist Hospital, St. Louis Park, Minn.

On the flip side, some asymptomatic adolescents worsened to the point of having subclinical symptoms (30%) or clinical disorders (1%), others with symptoms progress to clinical disorders (2%), and a considerable proportion with clinical disorders still had them 5 years later (9%).

She reported that she had no conflicts of interest in association with the study.