

# *The* Economic C

## *Reversing Negative Outcomes*

**W**e all know that children with attention-deficit/hyperactivity disorder (AD/HD) constantly deal with symptoms that affect them physically, academically and socially. However, recent research conducted by Ronald Kessler, J. Russell Ramsay, Ph.D., and colleagues shows that around 40 percent of these children continue to experience the full effects of AD/HD into adulthood, and other adults are affected by residual symptoms or have never been diagnosed. Adults with AD/HD (about 4 percent of the population) are more likely to have difficulties with workplace performance and health and family relationships. Even everyday tasks and leisure activities are more challenging because of ongoing problems with attention, focus and impulsive behaviors.



# Costs of AD/HD

BY PAULA L. NOVASH

These findings are no surprise to anyone in the field, says Ramsay, an assistant professor of psychology in the department of psychiatry at the University of Pennsylvania School of Medicine who is a senior staff psychologist at the Center for Cognitive Therapy and associate director of Penn's Adult AD/HD Treatment and Research Program.

"This phase of research sets a firm, scientific foundation that kids with AD/HD don't always grow out of it, a myth that persists," explains Dr. Ramsay. "And other recent data show that this condition is neither a nuisance disorder nor an excuse, and it can profoundly affect a person's life experience."

## Driving and AD/HD

The data include studies that help researchers learn more about the effects of AD/HD on adults and how repercussions from the condition may prevent people from performing at

their peak and feeling satisfied with their lives. For instance, everyday tasks like driving a car can be especially challenging for adults with AD/HD.

According to a study by Bryan Reimer Ph.D., and colleagues on driving behavior, adults with AD/HD showed higher instances of driving errors, lapses in judgment and traffic violations. These tendencies can result in higher rates of automobile accidents.

"When you think about it, what more complex neuropsychological task is there than driving a car?" Dr. Ramsay points out. "We're constantly thinking of where we're going, maintaining speed, judging cars ahead and behind, determining direction, distractions like radios and cell phones." Young adult drivers with AD/HD are especially at risk for accidents and violations, which may indicate that more experienced drivers develop strategies to compensate for symptoms.



## THE ECONOMIC COSTS OF AD/HD

*According to a study by Reimer and colleagues on driving behavior, adults with AD/HD showed higher instances of driving errors, lapses in judgment and traffic violations. These tendencies can result in high rates of automobile accidents.*



### Conference Notes

Joseph Biederman, M.D., will deliver the keynote address, *Advances in the Neurology of AD/HD*, on Saturday, Oct. 28, 2006. J. Russell Ramsay, Ph.D., will be conducting a pre-conference institute on *Psychosocial Treatments for Adults with AD/HD: Current Evidence and Future Directions* during CHADD's annual conference in Chicago, Ill., Oct. 25–28, 2006. Visit [www.chadd.org](http://www.chadd.org) for more information.

### Workplace performance

Workplace performance, household income and AD/HD are linked in several studies by Stephen V. Faraone, Ph.D., director of medical genetics research and child and adolescent psychiatry research at State University of New York Upstate Medical University, and Joseph Biederman, M.D., of Massachusetts General Hospital and Harvard Medical School. One of these studies surveyed adults who had been diagnosed with AD/HD about their education, employment and general feelings of satisfaction. The subjects were much less likely to be employed, have finished high school or obtained a college degree, and be happy with their family, social and professional lives.

Another study by Dr. Biederman and colleagues showed average household incomes were measurably lower—around \$10,000 on average—for individuals with AD/HD, regardless of academic achievement or personal characteristics. The authors estimate the impact on the U.S. economy to range from \$60 billion to over \$100 billion per year in lost workforce productivity.

“We see other consequences in the workplace, including more absenteeism, problems with executing tasks and a greater tendency to switch jobs in individuals with AD/HD at all levels of educational attainment,” says Dr. Faraone. “Even those patients with AD/HD who achieved in high school were doing worse economically than their peers without the disorder.”

Dr. Faraone notes that it is easy to see how the expectations placed on individuals in the

workplace may cause difficulties for individuals with AD/HD. “Many jobs involve organizing information, completing projects independently and on time, keeping to a schedule, and being present and focused for extended periods,” he says. “In addition, employers and co-workers depend on each others’ contributions, and there may be less opportunity to redo tasks or take extra time while working in a group.”

Healthcare costs for individuals with AD/HD are also high since adults, like children, often have related depression and anxiety-type disorders and also have more accidents, according to research by Howard Birnbaum, Ph.D., and Ronald Kessler, Ph.D. Their families, who may lose work time and have high levels of stress associated with the condition, are also more likely to have health issues.

### Changing outcomes

These results seem to predict mostly negative consequences of adult AD/HD. But timely diagnosis and treatment can change outcomes for adults and their loved ones, says Dr. Faraone.

“One thing to emphasize is that AD/HD is extremely treatable at any age. Many of the adverse outcomes associated with AD/HD can be greatly reduced with proper treatment, and with greater knowledge we can help people take control and reduce the instances of life-long impairment,” he says.

Dr. Faraone points out that the outlook for AD/HD is changing rapidly. “Although we have known for some time now that the medications that are effective for childhood AD/HD are also effective for adult AD/HD, only in the last few years have we had FDA-approved drugs for adults. Also, adults who might have never been diagnosed can look for more understanding and better treatment options.”

Specialists expect that this growing body of research will benefit everyone with AD/HD. More children are receiving effective treatment, so they may be able to do better academically and socially and avoid negative consequences in the future. Many adults who experience milder AD/HD symptoms and are already compensating well will learn more about their condition. There is greater knowledge of the benefits of medication combined with cognitive behavior therapy and other psychosocial treatment. And the data

## THE ECONOMIC COSTS OF AD/HD

*Another study showed average household incomes were measurably lower—around \$10,000 on average—for individuals with AD/HD, regardless of academic achievement or personal characteristics.*



will help enlighten employers and promote workplace accommodations to allow people to achieve.

Dr. Ramsay says there is no lack of motivation in the adults he sees. He often hears that people are frustrated and want to make sense of what is hap-

pening to them. “They often feel that something is getting in their way. They work harder for the same outcomes, and then AD/HD even interferes with their recreational pursuits, like sitting through a movie or concentrating while playing a sport.”

We are constantly learning more about how individuals with AD/HD deal with the world, Dr. Ramsay notes. New resources such as life coaches who specialize in helping individuals with AD/HD are becoming more common.

“We need to be devoted to providing adequate diagnostic assessment, medication management, diagnosis and psychosocial treatment,” Dr. Ramsay emphasizes. “As information about adult AD/HD is widely disseminated and acknowledged, we can improve the health and well-being of our patients, which will also benefit society at large. Overall, everyone is going to win.” ■

---

*Paula L. Novash is a freelance writer.*

*References for this article can be found at [www.chadd.org/references](http://www.chadd.org/references).*

---