ADHD

What does it stand for?
ADHD is Attention Deficit Hyperactivity Disorder.

What is it?
ADHD is the most diagnosed psychiatric disorder in children. Research shows that 3% to 5% of children globally have presented with symptoms and been treated even before the age of seven years.

ADHD is a common chronic disorder in children and 30% to 50% of individuals diagnosed in childhood continue to display symptoms into adulthood.

ADHD can cause behavioural problems and can make normal daily life tasks difficult.

Hyperactivity and impulsivity are the key indicative behaviours of ADHD. The symptoms of ADHD are very difficult to define because it is hard to draw the line between the ‘normal’ levels of hyperactivity and impulsivity in developing children, and those children with levels of inappropriate behaviour requiring professional intervention. Part of the diagnosis suggests that the child must have symptoms for 6 months or more, and to a degree that is greater than other children of the same age.

Indicators can include:

- Easily distracted, missing details, forgetfulness, and frequently switching from one activity to another
- Difficulty focusing on one thing
- Bored with a task after only a few minutes
- Difficulty focusing attention on organising and completing a task or learning something new
- Losing things (e.g., pencils, toys, assignments) needed to complete tasks or activities
- Not seeming to listen when spoken to
- Daydreaming, easily confused, and slow movements
- Difficulty processing information as quickly and accurately as others

Hyperactive Symptoms:

- Nonstop talking
- Darting around, touching or playing with anything in sight
- Trouble sitting still during dinner or school
- Difficulty doing quiet tasks or activities.
- Impatience
- Blurtting out inappropriate comments, showing emotions without restraint, and acting without regard for consequence

Many children and adults exhibit some of these behaviours, but children or adults diagnosed with ADHD are in a situation where such behaviours significantly interfere with their daily tasks.

There is no specific cause for this disorder, though factors such as environment, diet, genetics and other co-existing conditions need to be considered when forming a treatment plan.

I’m concerned about my child! What do I do now?
Your pediatrician can arrange for a psychiatric assessment of your child which includes a full lifestyle assessment and a health overview to rule out any other conditions. A sleep study and other tests may be required.

Research by Stuart Johnston at the University of Wollongong
“I’ve been doing research looking at the brain electrical activity of children with and without Attention Deficit Hyperactivity Disorder (ADHD) for about 14 years. Most of my early research focused on finding out if kids with and without the disorder processed information in the same way, in terms of attention and impulse control.

“During hundreds of data collection sessions, I was often asked by worried parents of children with ADHD, “I’m not keen on medication – are there any options?” I used to answer by saying ‘yes, but none that have a very strong base of evidence.’ However, now the research has moved forward, and I’m glad to be able to say ‘yes, and the evidence supporting some of them is very strong.’

“The treatment options I’m referring to are cognitive training, which involves the use of computer software to practice using and improving a particular psychological ability (e.g., memory, attention) and neuro-feedback, where people use live brain activity displayed on a computer, and a reward system to learn to improve their attention or to relax. Each treatment now has strong research support for reliable ways to reduce symptoms of ADHD and improve behaviour.

“Recently, I’ve been working on bringing these two treatment areas together to enhance the benefits to children with ADHD and also for kids without ADHD to improve their memory, impulse control and attention. These abilities allow you to focus on things that are important, remember what is being said and to resist distractions. If you can do all of those basic things, you can get the most out of learning and social situations. The software we’ve developed combines cognitive training and neuro-feedback training. It’s a computer game with a purpose, requiring kids to practice using these abilities, and being rewarded for doing well.

“This type of non-drug treatment may replace medication for some, or work in conjunction with medications to reduce dosage. There’s a lot more research work to be done. This combined treatment approach has not been done before, so it’s full of challenges, but that’s what makes this such an interesting area to work in. We’ll be recruiting for our current research study until March 2010, so if you’re interested in your child participating, and they are aged between 7 and 14 years, please give me a call on 02 4221 4495 or email sjohnston@uow.edu.au.”

Words: Marie Smith