THE UNHOLY WAR OVER ADHD, DRUGS AND DIAGNOSIS

Heather Jenkins has read all the theories about Attention Deficit Hyperactivity Disorder (ADHD) from carefully structured studies to dingbat claims and everything in between. But even a mild woman has her limits: "ADHD is a genetic brain disorder. It is *not* caused by poor parenting," she states evenly.

"ADHD comes about when neural transmitters are unable to cross the synapses for some reason, which means information is not being relayed. This affects people's concentration and working memory although their long-term memory is fine. Also they have poor problem solving skills and great difficulty regulating their emotions."

The psychologist and Associate Professor of Special Education at Curtin University in Western Australia says poorly informed discussion and media coverage has lead to several misconceptions about ADHD. The first is the title itself. ADHD is not one disorder but three distinct subtypes – inattentiveness/poor concentration; hyperactivity; or a combination of both. Hyperactivity is more common in boys than girls – some put the figure at 9:1 – while attention deficit disorder occurs more often with girls and is sometimes accompanied by anxiety and depression.

One of the most contested areas around ADHD is how it is diagnosed. Some critics claim clinicians have gone overboard and ascribe it to every child with learning or behavioural problems. Not so, says Prof Jenkins: "ADHD can be confirmed by magnetic resonance imaging, but that process is very expensive at present. The standard diagnosis needs to be done by a paediatrician or neuro-psychologist, not a GP, and they give parents a 17-point checklist of symptoms that must be present at school and home. Children need to meet all or most criteria to be diagnosed with ADHD."

Sometimes parents think their children have ADHD says Prof Jenkins when in fact they may have a central auditory processing disorder in which children display problems with language and are also inattentive. Oppositional defiant disorder is also frequently mistaken for ADHD, which is why a proper diagnosis is essential.

"Most parents know something is wrong by the time their children are four or five, although children who are hyperactive and impulsive may show these traits in infancy," she states. "Generally by the time children are seven or eight, parents accept they need to get their children's behaviour diagnosed and it is often a relief when they learn it is ADHD. Then the decision has to be made whether to medicate or not."

The issue of diagnosing ADHD is a fight with feather dusters compared with debates over treatment involving drugs. "Most of what's said about Ritalin is wrong and the scientific evidence is never cited," Prof Jenkins states. "Ritalin helps the neuro-transmitters to function normally and there are brain scan studies that show that.

"Children with ADHD cannot hold things in their head for very long and therefore their learning is compromised. One mother told me she had a prescription for Ritalin in her purse for two years and during that time she watched her child's performance at school get worse and worse although she knew he was an intelligent boy. Eventually she put him on Ritalin and the difference was fantastic.

"A study in America showed a combination of medication, counselling and behaviour management gives the best outcomes. Psychological counselling is helpful, especially strategies that help children to plan and organise their behaviour.

"Children with ADHD need a very structured home life and a wall chart listing the days of the week and the commitments and activities for every day is very useful," she advises. "And red cordial and Coca Cola are the last things hyperactive children need – they need fruit and vegetables and a diet free of additives and food colourings."

Prof Jenkins has just completed a study that investigated the effects of stimulant medication like Ritalin or Concerta with non-stimulant medication e.g. Straterra to see which produced the most improvement in executive functions such as problem solving, organising and the ability to self-regulate emotions.

"The stimulant medication has been used most often because it's always been on the pharmaceutical benefits scheme (PBS) and it's only recently that the non-stimulant medication has been placed on the PBS but it's only available as a second option – that is, the patient must have tried Ritalin or Concerta first."

Putting their children on medication is never a decision parents embrace, Prof Jenkins says and happens generally after they've tried a variety of treatments. By then, many families are under huge stress. How long their children need to remain on medication is always the next question, she states.

"There's a lot of discussion about that. When they reach adulthood, some people use their medication when they think they'll need it, say before a job interview. Many people with ADDH are very creative and when they can channel their energy and focus on tasks, they can achieve far more than most. A friend of mine is a paediatrician and he's got more energy than anyone I know and he's learned how to manage his condition."

Prof Jenkins adds, "There's increasing interest in adults with ADHD. Some people who've struggled all their lives with ADHD are amazed when they take the medication, and in fact some are quite angry, and they say if they'd had the medication as children or adolescents, they might have been saved all the trouble they got into from not being able to regulate their behaviour and emotions."

Drug companies have invested heavily in ADHD research here and overseas, so how much funding, if any, did Prof Jenkins' study derive came from pharmaceutical interests and what were the terms?

"The study is sponsored by the Australian Research Council and all the (entities) that put money in – an education department, one of the children's hospitals, the independent school sector and a small amount of money from a drug company – are informed that the intellectual property is mine and they have no input or influence over it."

DR

New research links back of brain to ADHD

In a world first, researchers at the University of Melbourne have identified a new area of the brain associated with Attention Deficit Hyperactivity Disorder in children. Their research found significant lack of activity in a region at the back of the brain that underpins a child's ability to cope with stress and manage competing stimuli around them.

While previous research into the disorder has focused on the front part of the brain, this is the first to investigate the right parietal lobe, at the back of the brain.

Melissa Casey, a researcher at the University of Melbourne said, "The parietal lobe integrates a whole lot of sensory information and for most of us, we can ignore most sensory information that comes through. But we're finding that with the ADHD brain, where that activation is less, that they're not able to blot out all of that distracting sensory information."

Another researcher Alasdair Vance explained the effects: "lots of new novel stimuli overwhelms this biological system. In that state the children become quite mindless and can develop patterns of behaviour and other ways of coping, that are an attempt to shut down, to simplify, to keep out those noxious stimuli."