

ADHD and Medication – is it over prescribed – the evidence suggests this not the case



There is continued controversy about the use of psychostimulant medication for the treatment of ADHD with NHS recent announcement that prescriptions for Ritalin (Methylphenidate) and other ADHD medications have doubled in the past decade.

Media reporting on this subject has more often adopted a position of over diagnosis and over prescribing but the evidence doesn't stack up. ADHD is estimated by NICE to affect 5% of the childhood population, yet diagnostic prevalence fluctuates between 3% and 5% depending on which part of the UK you live and prescribing rates differ significantly across England and Wales (1)

The media reporting often focuses on poor or neglectful parenting. Poor parenting does not cause ADHD – though it can exacerbate what epidemiological research has proven to be fundamentally a genetic condition (2)(3) whereby normal childhood behaviours such as hyperactivity, poor concentration and memory and impulsivity are of a disproportionate scale. Though first diagnosed in 1902, ADHD has been part of the human condition for millennia. Historically, ADHD neurology could have been a distinct survival advantage in a hunter gatherer culture. It became a 'disorder' when, after years of evolution, we began to educate children in classrooms and socialise them in such a way that placed more emphasis on their intellectual development. ADHD however does not correlate with low intelligence, but rather poor brain function in areas concerned with executive functioning such as problem solving, analysing and prolonged periods of concentration.(4)

Diagnosis is now made more accurate through the use of such things as QB Tests(5) – computerised cognitive function tests that are 80% accurate and able to inform paediatricians if behaviour is the result of a cognitive impairment or just poor socialisation and discipline.

The issue of comorbidity further confuses parents and teachers – 56% of children with ADHD will also have learning disorders such as dyslexia, dyscalculia, dyspraxia, Asperger's syndrome; 8% will experience tics or Tourette's; 41% will have comorbid conduct disorders. Developmental delay can of to three years is also common.(6) Of concern to overstretched health services is the disproportionate number of children with ADHD who experience anxiety, depression, suicidal ideation, addiction and eating disorders – all of which are symptomatic of low emotional resilience that is the result of both genetics and environmental stressors. (7)(12)

The first question we have to ask is why are more children being diagnosed with ADHD? The general consensus among clinicians is that it is a combination of genetic potential and environmental factors that interact in such a way as to determine the presentation of the condition. There is some research however, that suggests older parents are at greater risk of having children with neurodevelopmental disorders such as ADHD and increased risk for IVF children. In modern western society, there is a trend toward having children later in life – on average over 30 years of age, which may account for why we are seeing more children presented for diagnosis.(8)(9)

The average age for a diagnosis is approximately 9 years of age.(6) For children starting school at 5 years, the experience of learning – and being disciplined for forgetting what they have been taught, for apparently ‘not listening’ or not sitting still, can become a source of anxiety. Distressed children do not have the self - awareness or the language to express this emotional distress which further impacts on their cognitive functioning and can lead to tantrums and acting out inappropriate behaviours. ADHD however is not an excuse for underachievement or poor behaviour. We do children no favours if they are encouraged to believe they are not accountable.

We are now moving away from the old notion of ADHD as a purely behavioural disorder and seeing it more in terms of developmental delay and impairment to the brains management system. Aspects of brain function develop two to three years late in children with ADHD. (4)

There is a greater awareness of ADHD now but some educationalists working with the ADHD Foundation believe that many children on the milder end of the spectrum are experiencing greater levels of ‘learner anxiety’ due to pressures at school which may be a reason why many more parents are seeking support and answers – even if that means a diagnosis for a ‘disorder’ is an attempt to ensure their child is given additional support in school and medication to help them achieve at school, reduce.

There is also the issue of many children on the autistic spectrum – 40% of whom have a dual diagnosis of ADHD / ASD who often are given ADHD medications. (9)(10)

The biological argument encourages drug treatment as a way of addressing ADHD, as distinct from the psychosocial position which inclines toward psycho educative and CBT type interventions. The reality however is that there is a place for both interventions. Children on the milder end of the spectrum will benefit from learning skills and strategies to self - manage their condition and by taking a ‘strength based approach’ they can learn to live successfully with the challenges of ADHD. For those children with more severe ADHD, medication is a valuable tool – especially in coping with the pressures of school and examination focussed learning. Pervasive anxiety leading to increased levels of stress hormones can impact on how the child’s brain develops both structurally and functionally, increasing the risk of long term mental health problems.

The pharmaceutical companies who produce these very effective medications state quite clearly that they should not be used in isolation – but rather as an adjunct to psycho - educative and behavioural support. The problem is that in most parts of the UK, medication is not only the first line of treatment but the only line of treatment.(1) Paediatricians are increasingly criticised in the media for over medicating, but they can only offer what the NHS Commissioners in their area will fund – and the reality is that overstretched children’s mental health services do not offer an alternative to medication – or such psychosocial interventions as an adjunct to pharmacology.

Prescribing such medications for children however is not an exact science. Children respond differently to different types of ADHD medication, and some experience unpleasant side effects. Regular medication reviews are necessary as the child grows and develops physically and psychologically, usually requiring six monthly medication reviews with a paediatrician.

There is also the concern about the rise in girls being prescribed ADHD medications – previously boys were diagnosed at a ratio of 4 to 1 girl. A better understanding of how ADHD presents differently in girls who are more likely to present as predominantly inattentive rather than hyperactive, resulting in their being diagnosed later around puberty and early adolescence when they present with comorbid mental health vulnerabilities such as anxiety, depression and eating disorders.(11) It remains a fact that the imperative for diagnosis usually derives from the fact that the parent or the school refer on the basis of poor behaviour rather than cognitive impairment. Sadly the behaviour is a symptom not the core condition.

We do know that childhood mental health problems if addressed before the age of 14, are likely to lead to full recovery and psychological wellbeing. Early diagnosis and intervention is crucial in improving outcomes for these vulnerable children. Equally we should not incline to pathologising children, but instead differentiate for their needs, seeing them as different rather than disordered. Medication is a very successful tool for many children, but it is not a cure and it does not teach them how to live successfully with the condition and learn how to take a strength based approach to achieving their potential.

Pharmacists would benefit from having a better understanding of how this psychostimulant medication works and the common side effects so they can advise parents about what to expect and when to seek a further consultation with a paediatrician to ensure the right type of medication and the right dosage is made. Care should also be taken when offering generic medications and advice given to parents about reporting any potential changes in side effects or efficacy.

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