Finding new ways to deal with childhood problems

In the final part of our education series, Chrissy Thirlaway explains how research has shown that 'retained neonatal reflexes' could be a cause of syndromes such as dyslexia, dyspraxia and ADHD – and explains the work of a group helping to treat these problems in children

We are familiar with such terms as dyslexia, dyspraxia, ADHD, Asperger's – an increasingly long list of labels used to describe children and adults with perceived learning, relational and coordination difficulties. We are less familiar with Retained Neonatal Reflexes and their effects. They seem to slip under the radar of medical intervention and teaching support and yet can be seen to be directly linked to learning difficulties.

Labels for learning difficulties are useful in that they replace the condemnation of children as uncooperative, stupid, naughty, clumsy, messy, disruptive, slow or just plain rude.

But they can also lock a child into a rigid lifelong classification without an increase in understanding or a way forward from the diagnosis other than strategies for managing symptoms, such as a laptop computer, extra time in exams or medication.

At school, accommodating symptoms can make learning and life a little easier but often the outside world does not offer much support. Labels are all too readily applied without proper diagnosis and are in danger of becoming the same inhibiting classifications as were the original disparaging names. They carry a stigma that results in exclusion, low self esteem, failure to attain and depression.

These syndromes are not intellectual disabilities, they are found across all levels of intelligence. But they are especially difficult to identify in children of high intelligence because of their ability to create strategies that mask their difficulties – at a cost to other areas of development. Classroom teachers are not adequately trained to identify children with learning and behavioral problems. A child often gains a reputation for being disruptive, naughty, lazy, uncooperative, before any consideration is given to underlying problems.

When the child is identified as having a particular learning difficulty, the reputation for trouble tends to stick... with the associated lack of self esteem. Often it's the parent who first notices their child's problems attaining skills, physical control and coordination or code processing such as reading or speaking. There is often little understanding or support available. Many GPs are not trained in diagnosis and will advise that the child will "grow out of it".

The most commonly seen disorders are dyslexia, dyspraxia and Attention Deficit Hyperactivity Disorder (ADHD) though increasing numbers of children are being diagnosed as affected by Asperger's Syndrome. To add to the confusion, learning disorders encompass a wide range of symptoms that are grouped into sub-syndromes with a large degree of overlap between the syndromes and no consensus about the definitions of these disorders, each definition covering a range of related developmental disorders.

Categorization shifts with developments in research and refinements in specific aspects of each label. While it is known that there is a hereditary element, the degree to which the population is affected can only be estimated as testing is not widely used and many clinicians and educationalists still lack training in identifying behavioural problems. Sufferers can be affected to different degrees from inconsequential to severely disabling.

Dyslexia is thought to affect five to 17 per cent of the population. It covers difficulties with language and decoding, functions of the left hemisphere of the brain..

Dyspraxia affects between five and 20 per cent of the population and is four times more common in boys. It includes impairment of movement coordination, fine motor control and spatial awareness as well as speech difficulties related to the right hemisphere of the brain.

ADHD affects an estimated five per cent of the population. It is a behavioural problem associated with a combination of lack of attention span and hyperactivity.

Most 'treatments' for these disorders address the symptoms rather than the causes. In fact there is a marked lack of consensus about the causes. An increasing body of research indicates that the major cause is an immature central nervous system displayed as retained neonatal reflexes. Neonatal reflexes are processed in the brain stem and are a cycle of involuntary reactions active from before birth up to the first year of life, evolved to aid birth, contact with the mother, feeding and the processing of sensual information and motor coordination.

Each reflex is vital to the unfolding of the neo-natal reflex cycle. The onset and inhibition of each reflex is related to age and the development of mature neural networks in the cortex.

The rapidly developing brain can be inhibited by chemicals such as adrenaline, noradrenaline and cortisol released into the baby's system due to trauma resulting in the retention of immature neuron systems – neuro-developmental delay.

This can occur before birth if the mother has suffered physical or emotional trauma, an infection or high fever; during birth, a prolonged labour or caesarean section are contributing factors; and during the first year, if the baby suffers physical, or emotional trauma, an infection or high fever.

There are several reflexes active before birth. These aid the birthing process, feeding and security. Other reflexes enable the development of perceptual and motor processing and coordination.

The Moro reflex is stimulated by sudden movement or noise – a baby's arms shoot out with fingers extended in a grasping motion and they show distress. The effect of retention includes oversensitivity to noise and light, lack of concentration, anxiety, mood swings, hyperactivity, poor stamina, body tension, poor sports skills, lowered immunity, timidity, low self esteem.

The Palmar and Plantar reflexes are grasp reflexes activated by stimulus to the inside of the hand causing a grip reaction. Effects of retention include: poor pencil grip, manual dexterity, speech articulation and movements with mouth when writing.