

Speech and language disorders and associated problems: meeting children's needs

Diagnostic labels describing specific diagnoses can be valuable in analyzing a child's problems and may be critical in securing medical and educational services, 'but sometimes we forget that there is actually but one child with one dysfunctional brain' (Rapin I, unpublished). Co-occurring developmental difficulties require an integrated approach in both terminology and care. The term 'neurodevelopmental disorder', as well as encompassing major impairments such as the cerebral palsies, embraces overlapping problems with speech and language, motor-perceptive function, behaviour, and learning.

This intimate relationship between developmental problems can be further understood when one looks at their natural history. Speech and language delay is one of the most common of these. Some 10–14% of 2-year-olds are late talkers and many of these catch up to their peers by 3 years, but around 7% have specific language impairment (SLI) at 5 years. The origins of language impairment can be traced back to infancy. One of the underlying deficits in language learning, slower auditory temporal processing, can be detected as early as 6 months and correlates with later language delay.¹ Certain clinical characteristics of children with SLI have an important bearing on outcome. Children with SLI at 5 years are likely to go on to have reading and spelling problems at school and even those who appear to have caught up by the age of 5 years may have detectable poorer performance on tests of phonological processing and literacy skills at age 15. Bishop's work has demonstrated that children with an isolated speech disorder tend to do well, but those with a co-existing receptive disorder fare rather worse at school.² These children are, in turn, more likely also to have behaviour difficulties, such as low self confidence and social withdrawal, which further impact on their school career and well-being.

Attention deficit has long been known to relate to delay in learning to talk and, clinically, the assessment of attention skills forms an integral part of the examination of the child with suspected language delay. Children who have both ADHD and defects in attention, motor control and perception (DAMP) are a group with co-occurring difficulties who are particularly likely to have problems with school achievement and behaviour at age 13 and psychiatric morbidity at age 16.¹

Two studies in this journal focus on children with co-occurring problems. A population study of 4-year-olds in Finland not only demonstrates high rates of neurodevelopmental dysfunction but also observes that co-occurrence of language delay, attention-behaviour difficulties, or motor-perceptive problems is associated with increased severity of at least one of these areas.³ It is striking that these problems were all detectable in the preschool period despite the fact that ADHD may not emerge fully until the school years. This study adds to the evidence that developmental difficulties

accumulate at an early age and flags up an opportunity to identify precursors before the appearance of signs of the child having failed.

The study by Sturm et al.⁴ finds that the majority of children with another neurodevelopmental disorder, high functioning autism, have associated problems of ADHD or DAMP and many have a major medical diagnosis such as epilepsy or sensory impairment. Interestingly, the earliest descriptions of autism reported co-existing neurological disorders, such as epilepsy, and more recent studies of children with the full range of autistic spectrum disorders have reported even higher epilepsy rates. The study by Sturm et al. highlights the need for children with autism to have a multiprofessional assessment.

Clearly, children with more than one impairment, whether causally related or not, are additionally disadvantaged. A model for care needs to focus on the early detection of multiple impairments and provisional individually-tailored interventions. A further consideration is the possible increase in the number of such children with the increased survival of very preterm infants who may initially appear to have escaped brain insult but may later display subtle neurological, behavioural, or learning problems.

Speech therapists, psychologists, physiotherapists, and occupational therapists are key members of the diagnostic and interventional team. Unfortunately, this is one area where even in many developed countries, including the UK, we may be failing these children. Long delays in arranging for a child with language problems to have a speech therapy assessment or for a child who is failing at school to receive help from an educational psychologist are frustratingly common. There is no doubt that increased numbers of these skilled professionals are required to meet the challenge of fulfilling the needs of this important group of children.

DOI: 10.1017/S0012162204000714

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