Current topic

Medical contribution to the management of dyslexia

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One child in 6 has a special educational need¹ and dyslexia, defined as a lower literacy ability than would be expected from the child's age and general level of intelligence, is one of several learning disabilities. Individual children may have more than one learning disability, for example a perceptual motor or calculating problem as well as a literacy problem (dyslexia). It would be inappropriate, however, to attribute the *range* of their learning disabilities to 'being dyslexic', which is a confusing if common practice.

Delay in the development of reading skills is common among children. In Rutter's study² over three per cent of junior school children on the Isle of Wight had a reading age 28 months less than their chronological age and IQ would have suggested, and in another study³ 11% of children in one Inner London Education Authority were in this category. It is believed that in some inner city schools the reading age of a third of junior school children may be two years less than their chronological age. In these days when educational resources are limited it is unlikely that a child whose performance falls within the low average range, despite a higher IQ, will generate much concern among education authorities whose reluctance to designate certain children as 'special' within the large population with reading problems is understandable.

If a child is failing to reach expectations, therefore, or is competent in oral work but cannot keep up with the class in written work (reading, writing, and arithmetic) he may be suffering frustrations which present in a number of ways. This situation may be exacerbated if a child has more than one problem; perhaps he is clumsy or has family as well as literacy difficulties.⁴ The problems these children have with literacy and coordination may extend into everyday and leisure activities. They may be unpopular and lonely or have difficulty planning a future after school. The predicament has more than educational implications which may not be adequately resolved by excessive emphasis on

remedial reading classes or special examination arrangements.

In discussions on dyslexia between representatives of the medical and educational professions in the United Kingdom, statements have been made which may easily be misunderstood: 'Dyslexia is not due to intellectual inadequacy or faulty teaching, nor is it associated with emotional or anatomical defects'. The first part of this statement may be true of specific reading retardation, but the validity of the second part must be questioned. Emotional disorders may not be a primary cause of dyslexia but they are often a secondary effect. Acquired dyslexia is caused by a cerebral lesion, often a disconnection of one part of the brain from another. Developmental dyslexia may sometimes be caused by a failure in the establishment of neural pathways, a non-connection syndrome; and immaturity of neural mechanisms or focal heterotopias of the cerebral cortex may also contribute to dyslexia in some children.

Role of the doctor

Often when parents are concerned about their child's progress they consult their family doctor who may refer the child to a paediatrician for a further opinion. This request for help should not be ignored. Although the doctor has no expertise in educational matters, with the present scarcity of services he can contribute to the management of children with learning difficulties in the following ways:

(a) Examination of the child, if possible in the presence of the parent, may show developmental immaturity in other areas such as coordination.

(b) Vision and hearing can be checked and, if necessary, more detailed testing arranged through community health services.

(c) Emotional disorders and the ensuing stresses resulting from learning difficulties may present in a number of ways. The child may be obviously

anxious or depressed in addition to manifesting a variety of symptoms, including headache, abdominal pain, or enuresis. These conditions need medical interpretation and may sometimes respond to specific treatment. Abnormal behaviour may often result if a child's learning disability is not managed with sensitivity, but both the disability and the behaviour may be symptoms of a failure of cerebral integration. Such abnormal behaviour is amenable to treatment by a team approach involving psychologist, family doctor, teacher, and parents. If the child's learning difficulties persist it is easy for the whole family to be affected and for parents to become increasingly distressed. The opportunity for the parents to talk to someone not directly connected with the provision of education is often beneficial. Discussion with them may indicate how much of the problem is educational and how much behavioural (both in and out of school) and to what extent the child's condition is presented at this time because other family tensions are leading to intolerance or excessive anxiety. Counselling may help the family to accept the child with a learning problem, rather than emphasise what is 'wrong'. The child is as he is; he needs to be accepted as different, but normal and requiring appropriate teaching.

(d) The doctor can also encourage parents to discuss the child's progress at school with the head teacher to work out a joint approach. In the United Kingdom parents do have certain rights relating to their child's assessment at school and these have been strengthened in the provisions of the 1981 Education Act.

(e) The doctor can arrange referral to the appropriate specialist for children who, for example, have handwriting that is sufficiently bad to raise the possibility of a neurological disease, or who need a scarce resource, such as occupational therapy, which is only available at specific centres, or who need psychiatric help if the emotional aspects of dyslexia are severe (such cases are exceptional).

(f) The doctor can encourage parents to seek and promote enjoyable and fulfilling activities for the child, some of which they may be able to share, and to limit their involvement with the child's problems to sensible times rather than, for example, before bedtime.

(g) Educational advice from doctors is generally inappropriate; and although attention can be drawn to the presence of learning difficulties, there is no place for 'certifying' dyslexia. The psychologist and teacher should be the ones to advise education boards on the special needs of these children. The doctor may, however, be asked to act as the child's advocate to the education system, enquiring about

the effects of remedial teaching or interceding on the child's behalf if for example his behaviour at home has deteriorated after the withdrawal of a remedial teacher at school. He should include parents in all stages of assessment procedures and the communication of results to them is of the utmost importance.⁵ He has a significant role to play in interpreting the opinions of experts, particularly those relating to the causes of the learning disabilities, and he may also be the coordinator of medical and paramedical services for the child, cooperating closely with those responsible for educational provision.

The doctor in the school

In the United Kingdom clinical medical officers and family doctors who act as school doctors should regard the medical assessment of children with learning and behaviour problems as a specific area of expertise and should be identifiable as effective team members within the school.¹ Much time is spent screening children for liability to learning problems without monitoring its effectiveness. Short, standardised tests with local norms for abilities such as the level of coordination, are needed to aid in the assessment of children with difficulties.⁶

Research

The doctor can contribute to research on the causes and evolution of learning disorders, both genetic and acquired, with a view to prevention. Further epidemiological studies are needed and more must be learned about the management, the prognosis, and the role of drugs in children with these disorders.

Conclusion

There is no clear cut division between the educational and medical aspects of developmental or learning disorders. The doctor has particular skills to offer, especially to the child aged under 5 years, and must be an active member of the team helping these children. Teams already exist in many parts of the United Kingdom and, with few exceptions, they should be community based.

A number of different medical disciplines will be working together; paediatricians, paediatric neurologists, family doctors, clinical medical officers, and child psychiatrists. The medical component of learning difficulties among preschool children is likely to be particularly important and an initial referral to the appropriate medical specialist may be

necessary. If learning difficulties first become manifest during school years, referral will often be to the educational psychologist by the teacher or clinical medical officer at the school. The community health services have a definite place in the management of these disorders, particularly as advisers to the education authorities. The involvement of parents in community schools is also potentially beneficial and the importance of their contribution needs further consideration. The management of school leavers who still have problems with learning should be given more attention and discussions should be held on who is best able to help them with advice on careers and further education.

No one person can provide all the answers and a team approach, involving both medical and educational members, is desirable. The sum total of the efforts of experts who work in isolation is likely to be confusion, to the detriment of the child's progress. The problems of children with learning difficulties are always complex, bound up with the interaction between their varying attributes and school and

home environments. It is necessary to view this situation as a whole rather than to concentrate solely on any particular aspect of it. The doctor is advantageously placed to do this, in cooperation with educational colleagues.

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