

The identification of children with learning problems in general practice

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SUMMARY. Twenty-four children who were patients in a large general practice in Southern England were seen in a learning problem clinic in the practice during a 14-month period. The method of assessment used took an hour per child but several examples show that it was both practical and effective.

Introduction

GENERAL practitioners are not often asked for help by parents when their children are failing at school. Instead, parents keep their children's problems to themselves, see the teacher, or occasionally ask for a psychological assessment. It is often difficult for parents to transmit satisfactorily their natural and often real anxieties about their children to teachers without getting labelled as worrying or fussing parents. Recent publicity about dyslexia has aggravated the problem and has tended paradoxically to cause even greater friction between parent and teacher. A child of average or above average intelligence may be considered to be dyslexic if he or she has significant and persistent difficulty with reading, writing, and spelling in comparison with his or her abilities in other spheres which is of such a degree as to prevent written work reflecting true ability and knowledge in spite of adequate teaching. The problems of the child failing to read and write at school are compounded by the polarization that has occurred in the attitudes held by those responsible for providing remedial services for children. On the one hand there is denial that dyslexia exists as a condition (Department of Education and Science, 1972), and on the other, that dyslexia is the usual diagnosis and children need special help to overcome it. As usual, the truth lies between the two.

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Aim

I sought to assess 24 children seen by me in the 14-month period from July 1977 to September 1978 and discuss presentation, diagnosis, and treatment.

Method

At the pre-school examination carried out on all children aged four-and-a-half in the practice's care, we always offer to see children again "if there are any problems at school" (Jenkins *et al.*, 1978). In addition, the parents of those children with non-established cerebral dominance and a family history of functional illiteracy are particularly advised that if their child develops problems with the acquisition of reading and writing skills (Finnucci *et al.*, 1976), then one of us would be prepared to see them again (Table 1). The Aston Index* (Newton and Thomson, 1974) is used to carry out an hour long assessment on all children who present with problems.

Results

Of the 24 children seen, five were referred by my partners; four were referred by the school teacher of the child, who knew of my interest in children with learning problems; two were referred by a school medical officer who had seen the children at school; six returned to see me as a result of what had been said at the pre-school

*The Aston Index is a test for screening and diagnosis of language difficulties for children aged five to 14 years. It includes tests designed to measure general underlying ability and attainment: picture recognition, vocabulary scales, Goodenough draw-a-man test, copying geometric designs, and Schonell reading and spelling tests. These tests, except for picture recognition and copying geometric designs, lead to a mental age or attainment age score which can be compared with a child's chronological age, indicating whether he is above or below the average for his age. It also includes performance tests of the child's laterality, ability to copy his name, free writing, visual sequential memory (pictorial), auditory sequential memory (numbers up to six figures forwards and backwards), sound blending, visual sequential memory (symbolic), sound discrimination, grapheme phoneme correspondence (letter shapes and sounds recognition), and a graphomotor test.

Table 1.

	Boys	Girls
Examination of children aged 4½ years seen in two-year period	229	216
Children with family history of functional illiteracy, mixed cerebral dominance	15	1

examination; and the rest were referred by parents who had either heard of my interest in children with learning problems or who had specifically consulted me in the course of my day to day work about their child's difficulties. Each child was seen with one or both parents and the assessment using the Aston Index usually took about an hour.

Nineteen boys and five girls were assessed.

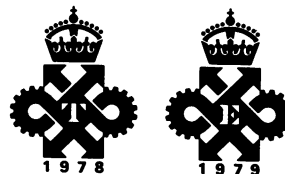
Boys

Nineteen boys, average age at consultation 8.5 years (range 5.5 to 12.9) were seen. Four were reading quite normally. One of these children, however, was obviously far in advance of his chronological age in most attainments but was reading to his exact chronological age and was therefore under-achieving. Five had medical problems that contributed indirectly to their learning problems.

Two children were deaf—both were five-and-a-half years with obvious glue ears. Each had passed a screening hearing test before school entry a year before but had not yet had their school medical examination and could not hear the teacher.

One 11-year-old was very depressed by the scapegoating that went on in his school caused by his unusual appearance and inability to read. His reading age was retarded by three years and his writing age by four years. He appeared to have a specific auditory sequential memory problem. (Sequential memory is the ability to remember visual or auditory stimuli in order and direction, which is an important pre-requisite for the acquisition of reading and spelling skills.) Because of this, he was truanting and required urgent treatment. It proved very difficult to persuade the school authorities that there was a specific reason for his difficulties. Nor did they appear to believe that his depressive illness was anything more serious than a trivial 'school problem' despite the fact that our local school psychology service had seen him and confirmed my findings but could not offer remedial help for four months.

An 11½-year-old with congenital deafness, attending a school for the partially hearing, was seen because his parents were concerned at his inability to read and write. It was apparent that he was suffering from general subnormality probably caused by the same condition which was causing the deafness. Regrettably, it appeared that the parents were not aware of the real reason for his failure; either nobody at the school had



Prescribing Information

Presentations

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Duodenal ulcer, benign gastric ulcer, reflux oesophagitis.

Dosage

Duodenal ulcer: Adults, 200mg tds with meals and 400mg at bedtime (1.0g/day) for at least 4 weeks (for full instructions see Data Sheet). To prevent relapse, 400mg at bedtime or 400mg morning and evening for at least 6 months.

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Cautions

Impaired renal function: reduce dosage (see Data Sheet). Potentiation of oral anticoagulants (see Data Sheet). Prolonged treatment: observe patients periodically. Malignant gastric ulcer may respond symptomatically. Avoid during pregnancy and lactation.

Adverse reactions

Diarrhoea, dizziness, rash, tiredness. Rarely, mild gynaecomastia, reversible liver damage, confusional states (usually in the elderly or very ill), interstitial nephritis.

References

1. Cimetidine in the treatment of active duodenal and prepyloric ulcers. (1976) *Lancet*, **11**, 161.
2. The effect of cimetidine on duodenal ulceration. (1977) Proceedings of the Second International Symposium on Histamine H₂-Receptor Antagonists. *Excerpta Medica*, p.260.
3. Oral cimetidine in severe duodenal ulceration. (1977) *Lancet*, **1**, 4.
4. Cimetidine treatment in the management of chronic duodenal ulcer disease. (1978) *Topics in Gastroenterology*. (In Press).
5. Maintenance treatment of recurrent peptic ulcer by cimetidine. (1978) *Lancet*, **1**, 403.
6. Prophylactic effect of cimetidine in duodenal ulcer disease. (1978) *Brit. med. J.*, **1**, 1095.

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told them the real reason or they were unprepared to accept the diagnosis.

Lastly, intermittent illness in one child, which caused much absence from school, undoubtedly could be deemed significant.

Eight boys had specific problems associated with sequential memory, five having visual sequential memory problems, and three auditory sequential memory problems, one child having both. Two boys were found to have no specific reason that could account for their reading and writing failure. They appeared to have very definite problems with their teacher or school and mentioned specifically difficulties that could be described as personality problems. These had undoubtedly inhibited learning. The most severe of these children was an eight-year-old American boy attending an expensive private day school, who had not yet started to read and write. The most bizarre was an 11-year-old whose reading age matched his chronological age but whose writing age was five and a half years. His mother had taught him to read but not to write and the school had failed to discover the discrepancy.

Girls

Five girls were seen, the average age 8·6 years, range 6·8 to 11·7 years.

One nine-year-old girl was quite normal, reading and writing a comfortable two years ahead of her chronological age. She was, however, having considerable relationship problems at home and in school and the consultation enabled us to identify these and start alleviating them.

Another nine-year-old was found to be generally retarded by more than two years. In addition, she had a specific problem with auditory sequential memory. She was attending normal school and was being subjected to intolerable stress by teacher and class fellows. Correct identification of the problem enabled appropriate steps to be taken to alleviate it.

Three other girls, aged 6·8, eight, and 11·7, all had specific auditory sequential memory problems. The younger two, in terms of vocabulary and draw-a-man tests, were functioning at an intellectually superior level; their reading ages were six months and spelling ages nine months retarded respectively. However, in view of their obvious intellectual superiority, I suspect that their reading ages were in fact more retarded when compared with their mental ages than they appeared at first sight. The 11·7 year-old, however, had a reading age of 9·7 years and a spelling age of 8·7 years.

Discussion

There are about 1,700 children in the practice aged between five and 12 years old. The 24 children seen probably form only a small part of the total number of children in difficulties with reading and writing. Never-

theless 2·5 per cent of the boys presented with learning problems in the course of the 14-month-period. The Aston Index, designed for use by teachers in the school to assess children with language problems can, when used by a family doctor, provide useful information about the child and aid diagnosis. This is of particular importance where the school psychological service has long waiting lists and where children in difficulties can usually only get worse.

Often the most important result of the assessment is to confirm the parents' concerns about their children. So often attempts made by them to communicate their worries to the school are met with failure, the school system either not recognizing that there is a problem—and this is especially true in the under-achieving intellectually superior child—or denying its importance.

The next most important result is the action taken. Referral to the educational psychological service where one functions efficiently is, of course, the step that should be taken in all cases where learning handicap is manifest. However, it depends on what the psychologist believes. Parents report that in some parts of the country over-emphasis on the imagined emotional causes for delay subjects the entire family to dangerous stresses as psychological tinkering takes place in an attempt to uncover a cause. In other cases, the reverse occurs, where an obviously disturbed child is given remedial help but no help for the associated or underlying problems of emotional origin.

In my experience, it is probably best to write initially to the form teacher concerned. Stunned disbelief in interest from a general practitioner is followed by sympathy and understanding, particularly when real guidance can be given to the teacher on how to handle the problem—for instance, when a teacher using phonics exclusively can be asked to use an alternative approach when the child has an auditory sequential memory disorder.

Despite the provision of remedial help, children with specific learning disability (or dyslexia, as it is commonly known) need a great deal of support. Family history is often present and the condition seems to occur much more frequently in boys who are, in addition, under greater stress from their parents than girls to learn. The condition is usually present for life and career guidance is vital. The British Dyslexia Association will give advice on how to obtain help in various parts of the country for assessment and remedial help, but the service is of necessity costly.

The present situation is unsatisfactory. The Warnock Report's recommendations (Committee of Inquiry, 1978) merely confuse the issue as no new money is likely to provide the service recommended. In the meanwhile, it will continue to be the voluntary sector where help is likely to lie for children with this condition.

The role of the family doctor can be crucial if he wishes to involve himself in the work. The Aston Index is an effective (though time-consuming) tool and one

doctor can provide a primary care service of this nature for a practice population of 20,000 people.

The doctor needs to build up contact with schools, the educational psychology service, and other professional referral agencies as well as be able to detect the underlying medical problems when they exist, so that appropriate steps can be taken to alleviate them. Parents also need support, and obtaining practical help for the afflicted child is often very difficult.

However, the involvement in this aspect of child care extends the role of the general practitioner interested in child care into educational medicine as a logical continuation of pre-school surveillance.

The Aston Index, designed for use by school teachers in the classroom, calls for no extra skills from the general practitioner other than ability to put the child at ease and allow the child to feel unthreatened by the examination. It does involve a considerable commitment of time—one hour per child, which many general practitioners would perhaps find unacceptable.

However, the effect of the family doctor's involvement on the family can be dramatic. The reduction in anger, aggression, and sheer puzzlement that parents show when the child is seen and the real reasons uncovered, is gratifying. However, it is only then that the real problems of attempting to obtain remedial help begin and it is here that the family doctor's support is crucial.

References

- Committee of Inquiry into the Education of Handicapped Children (1978). *Special Educational Needs*. Warnock Report. Cmnd 7212. London: HMSO.
- Curtis Jenkins, G. H., Collins, C. & Andrews, S. (1978). Developmental surveillance in general practice. *British Medical Journal*, 1, 1537-1540.
- Department of Education and Science (1972). Report of Advisory Committee on Handicapped Children. London: HMSO.
- Finnucci, M. J., Guthrie, J. T., Childs, A. L., Abbey, H. & Childs, B. (1976). Genetics of specific reading disabilities. *Annals of Human Genetics*, 40, 1-23.
- Newton, M. & Thomson, M. (1974). Towards early diagnosis of dyslexia (primary reading difficulty). Presented at United Kingdom Reading Association Conference. Unpublished.

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