

SPECIFIC DEVELOPMENTAL DISORDERS IN CHILDREN ATTENDING A CHILD-GUIDANCE CLINIC

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SUMMARY

This is a retrospective study of specific developmental disorders in children who attended a child guidance clinic of the department of Psychiatry, PGI over a span of 6 years. A total of twenty-eight such children were identified. Majority (22) had speech or language disorder and 10 had some associated psychiatric problem. There were no significant sex differences. Some clinical correlates are described.

Introduction

Specific delays in development are a group of disorders in which there is delay in development of a specific faculty like speech, reading, arithmetic abilities or motor coordination, in the absence of a general intellectual retardation or an organic etiology to explain the developmental lag. These children are often mistakenly diagnosed as mentally retarded.

There are wide variations in prevalence figures of various specific developmental disorders. For instance, 3-15% of school children have been found to suffer from specific reading retardation (Myklebust & Boshes 1969; Silverman and Metz 1973; Rutter and Yule 1975), whereas incidence of developmental speech delay has been found to be 0.2-0.6% in school population in various studies from United States (Milisen 1971). Rutter et al (1970), in their famous Isle of Wight study, reported 0.8% incidence of developmental speech delay in school age children. The exact prevalence figures of developmental arithmetic retardation is not known, but nearly 6% of children drawn from normal population can be expected to have symptoms of developmental dyscalculia,

one of several causes of retardation in mathematics (Kose 1974). Exact prevalence of specific motor retardation is not known, but it appears to be a relatively common disorder.

Various studies have shown a higher prevalence of different specific development disorders in males, being 2-4 times more common in boys than in girls (Berger et al 1975; Ingram 1972).

Here we present a series of children diagnosed as suffering from specific developmental delays who attended a Child Guidance service during a time span of six years. General and clinical characteristics are described. There is no such study reported from India till date.

Material and Methods

Child Guidance Clinic of the Dept. of Psychiatry PGIMER is a weekly clinic where all the new child cases, referred from various sources, are seen in detail by appointment. Each new case is worked up in detail by a junior resident and then discussed with a consultant who examines the case and gives a diagnostic label according to ICD-9 and a management plan is formu-

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Table 1
Description of Sample (N = 28)

Age	Sex		Education			
	Male	Female	Not studying	Nursery	1st & 2nd Std	3rd-5th Std
Less than 5 years (N = 15)	8	7	12	3	0	0
5-8 years (N = 9)	5	4	1	3	5	0
More than 8 years (N = 4)	2	2	0	0	0	4
Total (N = 28)	15	13	13	6	5	4

lated. All the case records of children who were registered in the clinic during the years 1980-1985 (N = 1409) were screened and those who were diagnosed as suffering from specific Developmental Delay (using ICD-9 criteria) were identified. Analysis of certain sociodemographic and clinical variables was carried out.

Case-records of children who attended child guidance clinic of the department of Psychiatry PGIMER in the years 1980-85 and were diagnosed as suffering from specific developmental delay (IDC-9 criteria) by a consultant, were screened. There were a total of 28 such children whose case files were analysed for various socio-demographic and clinical variables.

Results

A brief description of the sample is given in the Table 1.

Sample consisted of 15 male and 13 female children. The age ranged from 2½ to 11 years and mean age was 5.52 years (S.D. 2.77 years). There was almost equal distribution of both sexes in various age-groups. In age group of 5 to 8 years, only one child was not studying, 3 were in nursery and 5 were students of 1st or 2nd standards. All children above 11 were studying in 3rd, 4th or 5th standards.

Table 2 gives educational status and occupation of the children's father. Fathers of all the children were educated. Regarding occupation, 8 were professionals or semiprofessionals, 9 held a clerical job or a shop, 4 were farmers, 5 were skilled workers and 2 held a semiskilled jobs.

Table 2
Description of Parents

Education	Number	Occupation	Number
Primary	1	Professional	1
Middle	1	Semi-professional	7
Matric	12	Clerical/shop-owner/Farm	13
Inter/Diploma	4	Skilled worker	5
Graduate	8	Semi-skilled worker	2
Masters/Professional	2		

Diagnostic breakup of the sample is described in the table 3. A majority of the sample (78.5%) comprised of developmental speech or language disorders. There was only one child with specific motor retardation. Arithmetic retardation and other learning disabilities were not represented in the sample. There were no sex differences across the various diagnostic subtypes.

An attempt was made to study the relationship between the disorder and intelligence. Intelligence Quotient (IQ) reports

Table 3
Disgnostic Breakdown of Sample

Diagnosis	Male	Female	Total
1. Reading Retardation	1	1	2
2. Speech or Language Disorder	12	10	22
3. Mixed Developmental Disorder	1	2	3
4. Specific motor Retardation	1	0	1
	15	13	28

Table 4
Relation between Diagnosis and Intelligences

Diagnosis	Intelligence Quotient			
	70-84	85-99	100 or more	Not Known
1. Speech or Language Disorder	10	3	4	5
2. Reading Retardation	1	0	1	0
3. Specific motor Retardation	0	0	1	0
4. Mixed Developmental Disorder	2	0	1	0
	13	3	7	5

were available for 23 children. Five children, in whom IQ was not available belonged to the group of speech or language disorder. Out of the other 17 children with this disorder, in 10 cases, I.Q. was in borderline range, in 3 it was between 85-99 and in the rest it was 100 or more. Out of two children with reading retardation, one had IQ in borderline range, whereas other had IQ of 120. Amongst the three children with mixed developmental disorder, two had IQ in borderline range, while the third had an IQ of 102. The child with specific motor retardation had an IQ of 104.

Various psychiatric problems seen in the sample are shown in Table 5. No as-

sociated problems were seen in 18 children, out of whom, sixteen had a speech or language disorder and two had mixed developmental disorder.

Discussion

Figures on prevalence of specific developmental disorders have not been reported from India. However, while comparing with the reported rates of prevalence in literature, the figures of 1.7% (Malhotra & Chaturvedi 1984); and 1.99% (28 cases out of 1409) in the clinic population in this study are relatively low. It is possible that most of the children with specific developmental disorders are not identified at the school or community level because of poor awareness and these children may be continuing as educationally backward or school drop-outs. It is also likely that these children are misdiagnosed as mentally retarded when they reach some health facility. A third possibility of true low prevalence can not be ruled out. It is interesting to note that both sexes were equally represented whereas, in literature higher prevalence is reported in male sex. No satisfactory explanation could be given for this finding.

Majority of children had developmental speech delay, possibly because, speech becomes noticeable easily and early to parents and others. This is further substantiated by the fact that more than half of our sample were of ages less than five years. Other developmental disorders that manifest in school age children like reading and arithmetic retardation are more difficult to identify and hence not brought to the clinic. In this study there were only two cases of specific reading retardation and none of arithmetic retardation. Indicating disregard for their specific handicap, these children are often blamed for poor motivation for study.

Table 5
Relationship between Diagnosis and Associated Problems

Associated Problem	Diagnosis				Develop-Total (N-3)
	Speech or Language Dis-order (N-22)	Reading Retardation (N-2)	Specific (N-1)	Mixed mental order	
Behavioural Problems	2	1	0	0	3
Enuresis/Encopresis	2	0	0	1	3
Thumb-Sucking	1	0	0	0	1
Poor scholastic performance	1	1	0	1	3
Breath-holding spells	1	0	0	0	1
Hyperkinesia	1	0	1	0	2
Epilepsy	0	0	0	1	1
Hearing Deficit	0	1	0	0	1
No Associated Problem	16	0	0	2	18

46.43% (13 out of 28) had IQ in the borderline average. i.e. between 70-64 and most of the children were studying in classes appropriate to their ages. (Table 1).

Majority of the cases i.e. 64.28% (18 out of 28) did not have any associated psychiatric problem (Table 5). In the rest most frequently reported disturbances were behaviour problems, enuresis/encopresis and poor scholastic performance. It is possible that low frequency of associated psychiatric disturbances could be accounted for by the predominance of younger age children in the sample.

Considering the socioeconomic status of parents, it was found that in 50% cases, their fathers had college education i.e. intermediate or above., indicating that children from educated middle class families were most often brought for psychiatric help (Table 2).

This study being retrospective has limited scope. It highlights that the problem may be of a greater magnitude than what is seen in the clinic.

Thus it is emphasized that considerable amount of public education is needed

in order to make the parents, teachers aware of the problems of specific developmental delays so that early identification and intervention can be carried out that will go a long way in preventing the occurrence of secondary psychiatric disturbances as well as minimizing the educational failure and dropping out to some extent. In the West most schools are served by a psychologist for this purpose but in India training of the teachers would be necessary because of the paucity of the professional resource.

Conclusion

Specific developmental disorders are common conditions, but are infrequently brought for treatment, most likely because of lack of public awareness. In a clinic study it is found that children mostly below the age of 8 years; with predominantly speech delay; from middle class families are being identified and brought for psychiatric help. There is need for public education to increase awareness and training of the school teachers for early identification and management so as to minimize the secondary morbidity.

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