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Outcome and prognosis of early childhood psychoses

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Most work on prognosis has been carried out on children with typical or fairly typical early childhood autism. However, such evidence as is available suggests that the findings apply to the wider group of all children with psychosis of early onset.

Outcome

The clinical picture of childhood autism tends to vary with the age of the child and his stage of development. For instance, in early infancy, a characteristic feature is a failure to cuddle, whereas, in the toddler, profound social aloofness and avoidance of gaze are particularly marked. This is the peak period for the more florid symptoms of the disorder, which then slowly but irregularly decline over the next five years, although most older children retain their difficulties in interpersonal relationships, particularly outside the home. Thus, while the family often report that the child is now affectionate, this may not be substantiated in other environments. This is probably because the adults not in regular contact with the child are unaccustomed to interpreting his communications, or making allowance for his behaviour. Also important in this context is the inability of the older autistic children to appreciate the nuances in social relationships, or to understand other people's feelings. Often there is a desire for close friendships, but the lack of social skills and appropriate empathy make these impossible.

While other symptoms may diminish or even

disappear with increasing age, it is not uncommon for stereotyped behaviour and more complex repetitive routines not only to persist, but to expand.

When the child attends school, the educational difficulties become most evident. Lack of interest in learning and lack of initiative are then very marked. Some of the children are inactive and inert, while others show an aimless restlessness.

In spite of modern methods of treatment, the outcome in adolescence and adulthood is mostly poor in terms of intellectual development, over-all adjustment and work potential. Irrespective of whether the sample is drawn from a clinic or is epidemiologically based, the picture of the outcome is roughly the same (Rutter, Greenfeld & Lockyer, 1967; DeMyer *et al.*, 1973; Kanner, 1971; Lotter, 1974). While two out of three autistic children remain severely handicapped, one out of four does moderately well, with some continuing social and relational problems. Only about one child in ten (Kanner, 1971) develops sufficiently in intellect and social adjustment to be able to survive in an unsheltered work situation (Rutter, 1970; DeMyer *et al.*, 1973). Even those few who become independent in adult life usually show continuing difficulties of relationships and oddities of personality.

Factors related to prognosis

Because improvement is not uniform, it is important to identify indicators of likely outcome, in order to help clinicians when counselling parents and planning management. A summary of prognostic factors found in a follow-up study of 59 children was given by Rees and Taylor (1975).

Level of intelligence

The most important prognostic factor is the testable level of intelligence (Rutter, Greenfeld & Lockyer, 1967; Lockyer & Rutter, 1969). For purposes of prognosis the position can be over-simplified, with outcome being envisaged as closely tied to the degree of associated subnormality. For instance, DeMyer and colleagues (1973) have demonstrated that children remain in the same academic or work category to which they were initially assigned, rather than improving with time. However, while the mean IQ remains stable, these workers found that autistic children who were rated as having the best potential at initial assessment showed considerable gains in verbal IQ with the passage of time. As a rough guide, those within the lowest intelligence band (IQ below 50), constituting about 40 per cent of the autistic population, will make a major contribution to those who remain severely handicapped; the next band (with an IQ ranging from 50 to 70), constituting about 30 per cent of the autistic population, contains a high proportion of those who make moderate progress, and the highest band (with an IQ above 70), constituting again about 30 per cent of the autistic population, comprises the majority of those who improve most. In the course of time some movement does occur between bands, but upward change is unusual and tends to be confined to adjacent bands. Such studies offer little support for the idea that all autistic children have latent intelligence, a belief which has prevented even experienced psychologists committing themselves about a psychotic child's intellectual potential (Kolvin, Humphrey & McNay, 1971). Careful psychometric assessment by an experienced child psychologist, therefore, is of major importance when considering prognosis (see chapter 32).

Organic factors

Inter-related with these cognitive factors are organic abnormalities – about one in two autistic children has demonstrable brain damage and the level of IQ is likely to be related to the severity or cumulative evidence of damage (Kolvin, Humphrey & McNay, 1971). For instance, it has been found that one in four autistic children develops fits in adolescence and these are highly related to the level of intelligence (Rutter, 1970) (see chapter 31).

Language and communication

Language and communication are important in assessing prognosis. It is well known that a better outcome is associated with the development of useful speech by the age of five years, but about one in two does not achieve this. The more communicative the child, or the better developed the speech or language at initial assessment, and the more constructive or symbolic the play (which reflects inner language), the better the development of conversational speech later (DeMyer *et al.*, 1973). Mutism indicates a particularly poor prognosis. However, even where speech improves considerably, there are often residual difficulties with speech rhythm, repetitiveness, and abstract concepts (Rutter, Greenfeld & Lockyer, 1967; DeMyer *et al.*, 1973).

Severity

Prognosis is also associated with the severity of the clinical picture (DeMyer *et al.*, 1973) and a slow rate of losing the more florid autistic symptoms (Kol-

vin, 1972). If substantial improvement is to occur it will usually show itself by the age of seven years (Rutter, 1967).

Effects of treatment

The effects of treatment in relation to IQ have been studied by DeMyer and colleagues (1974). While treated children with initial IQs above 50 showed a greater increase in intelligence than untreated autistic children in the same IQ range, those with IQs below 40 showed no differential effect. Furthermore, after treatment, the gains in verbal IQ achieved during treatment tended to be maintained in the autistic children with high initial levels, but stagnated in the middle groups or were even lost in those in the lower IQ groups. Unfortunately, these researchers do not precisely specify the nature of the treatment and hence the value of these important findings cannot be adequately assessed.

Bartak and Rutter (1973) and Rutter and Bartak (1973) investigated the effects on autistic children of different educational approaches. They found improvements over the course of three years in speech and schoolwork skills. The greatest gains were made by children with IQ above 50, although those with IQ below that level did rather better in a school with a structured and organized routine. No information is yet available on the outcome in adult life for the children in this study. Schopler, Brehm, Kinsbourne, and Reichler (1971) also emphasized the importance of structured education.

Lovaas, Koegel, Simmons, and Long (1973) reported that behaviour modification produced improvement in behaviour and skills in autistic children, but regression to initial levels occurred if the programmes were not continued. The authors did not differentiate between children of different IQ levels, nor did the follow-up cover a period longer than four years.

Conclusions

The child with a comparatively good prognosis has an IQ in the normal range, little identifiable evidence of cerebral dysfunction, shows development of useful speech and language in the pre-school years, has mild symptomatology which shows rapid improvement, and is given appropriate schooling.

The major determinants of prognosis are the levels of cognitive and social skills. Environmental factors, such as an appropriate level of stimulation at home and at school, a harmonious atmosphere at home (Lotter, 1974), and a structured educational setting, also play a part, but their effects appear to be limited, and become progressively smaller with increasing severity of handicap.