Early Childhood Autism

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SUMMARY

About 560 White children were suffering from childhood autism in the Republic of South Africa in 1970. Although it is true that there is disagreement about the characteristics, incidence, aetiology, treatment and prognosis of this condition, it is equally true that there are few conditions which have such a disruptive effect on the child and its family, and where there is such a great need to assist them. This article attempts to bring to the notice of those confronted by this problem, the recent advances in this field.

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In the past year or two numerous articles about this condition have appeared in newspapers and magazines. The South African Broadcasting Corporation recently serialised parts of a book written by the mother of an autistic child. It is, therefore, quite likely that the layman, who has enough leisure time available to be exposed to these sources, may know more about this condition than some general practitioners. This thought has prompted the writing of a short account of the condition, drawing heavily on the Report of the Committee of Inquiry into the Treatment, Education and Care of Autistic Children, which was completed in 1971.[1]

DEFINITION

The terminology concerning this condition is very confusing, and until recently no clear distinction was made between the terms autistic, schizophrenic, childhood psychosis, atypical development, and symbiotic psychosis. The Committee decided to use the terms, 'early childhood' or 'infantile' autism. By this is meant a clinically recognisable syndrome, starting before the age of 3 years, and characterised by a self-absorbed and detached behaviour, conduct disturbances, and ritualistic and compulsive phenomena.

CHARACTERISTICS

Kanner (1944)[1] and Creak (1963)[1] have done important work in this regard. Clancy *et al.* (1969)[1] have established 14 'core items'. If there are 7 of these items present it is very likely that the child suffers from autism. The 14 points are, in decreasing order of frequency: great difficulty in mixing and playing with other children; acting deaf with no reaction to speech or noise; strong resistance to learning; lack of fear about realistic dangers; resistance to change in routine; preference to indicate needs by gestures; laughing and giggling for no apparent reason; not cuddly as a baby; marked physical overactivity; no eye contact; unusual attachment to a particular object or objects; spins objects, especially round ones; repetitive and sustained odd-play; and stand-offish manner and communicating very little with other people.

A British working party (Creak 1963)[1] agreed on 9 points, based on behaviour, for the identification of the 'schizophrenic syndrome'. These 9 points have been used extensively in research projects on, *inter alia*, early childhood autism, and are summarised as: gross and sustained impairment of emotional relationships with people; apparent unawareness of child's own personal identity to a degree inappropriate to his age; pathological preoccupation with particular objects or certain of their characteristics without regard to their accepted function; sustained resistance to change in the environment and a striving to maintain or restore sameness; abnormal perceptual experience (in the absence of discernible organic abnormality); acute, excessive, and seemingly illogical anxiety as a frequent phenomenon; speech either lost or never acquired, or showing failure to develop beyond a level appropriate to an earlier age; distortion in mobility patterns; and a background of serious retardation in which islets of normal, or near normal, or exceptional intellectual function or skill may appear.

DIFFERENTIAL DIAGNOSIS

Conditions from which early childhood autism should be differentiated are mental retardation, chronic brain syndrome, deafness and blindness, developmental speech and conduct disorders, regressive reactions of infancy and childhood, minimal brain dysfunction, other psychotic conditions of early childhood, and gross environmental deprivation. The level of the IQ and the absence or presence of organic factors do not alter the criteria for identifying these children.

INCIDENCE

Owing to differences of opinion with regard to diagnostic criteria, the incidence has been difficult to assess. Lotter (1966)[1] made a most careful epidemiological study in Middlesex, England, using a revised version of Creak's 'nine points' to make his diagnosis. He found the incidence to be 4,1 per 10 000 children between the ages 8 - 10 years. No research has been done in the Republic, but in Cape Town and environs the known number of cases under

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the age of 18 years, was 25 in 1966. According to Lotter's figures, there may have been as many as 568 White children with autism in the Republic in 1970.

AETIOLOGY

Far more boys than girls develop autism, some ratios quoted vary from 2,5 : 1, to 4,3 : 1. There is evidence that in families with 2 children the firstborn is more likely to be austistic. In families with more than 2 children the emphasis on the firstborn does not necessarily occur. Kanner (1954)[1] reported that his series of autistic children came from 'intelligent sophisticated stock'. Lotter (1967)[1] found an excess of intelligent parents with autistic children. However, other investigators (Des Lauriers and Carlson)[1] think that this correlation is spurious, mainly because the correct diagnosis is usually made only after extensive and costly evaluation, which only parents in higher income brackets can afford.

Many of these children show severe language disorders. Rutter (1970)[1] reports that 'intellectual retardation is one of the most severe and persistent handicaps' and estimates that roughly 'three-quarters of autistic children show some degree of intellectual retardation in early childhood', and that this persists into adult life.

The above factors are particularly interesting, and since the cause of this condition is unknown, have led to much speculation and theorising. One theory (Kanner)[1] is that these children are endowed with an innate inability to relate, which is aggravated by the personality deviations of the parents and their manner of management. Some investigators (Rimland and Bender)[1] considered hereditary factors important.

It seems that a considerable number of these children also have brain dysfunction; some have overt signs of central nervous system damage, some have abnormal electro-encephalograms, some develop seizures, others are mentally retarded or have minimal brain dysfunction. New York University studies[2] suggest a relationship between rubella in the pregnant mother and autism in the child.

There are authors (Hutt, Rimland, etc.)[1] who believe that abnormalities of the reticular endothelium are present; and others who believe there is a basic defect in perception and integration of sensory stimuli, especially with regard to sound (Rutter).[1] The importance of psychogenic factors has been suggested by several authors, and a great deal of attention has been directed to the mother-child relationship (Bettelheim, etc).[1] Behaviourists are of the opinion that autism is the result of 'learning faults' which have caused 'maladaptive behaviour'. Others (Clancy, Dugdale and Rendle-Short, 1969)[1] regard it as futile to look for a single causative factor and put forward a multifactorial hypothesis.

The assessment of these children is very important, but in many cases this is difficult because of the problem of communication with the child. Typically autistic children do best on some of the performance subtests of IQ, and of particular importance are the Merrill Palmer, Vinelands Social Maturity Scale, and subtests of the Wechsler Intelligence Scale for Children. The Peabody Picture Vocabulary Scale and the Schonell Graded Word Reading Test should also be used. It is important that the psychologist be experienced in dealing with psychotic children, otherwise he may grossly underestimate their potential. Psychometric testing is also important, and Lockyer and Rutter (1969)[1] reported that 'the results of the present study strongly indicate that the IQ is a most useful predictor of the children's future level of intelligence and social maturity, as well as providing a measure of current performance'.

TREATMENT

Treatment depends to a large extent on the aetiological bias of the therapist. It has, on the whole, been disappointing, irrespective of the methods used.

Behaviour therapy has been used quite extensively, especially 'reinforcement theory', using reward and punishment. The therapists have concerned themselves largely with speech training, by which a fair vocabulary may be acquired, or by altering behaviour by the extinction of undesirable aspects, and building socially-acceptable behaviour. Social relationships may be improved by shaping specific social responses, but generalisation has been rather disappointing. It is important that everyone dealing with the child, including the mother, should be a member of the team, who require training and supervision.

Many variants of psychotherapy have been tried, including intense analytical therapy, but it is uncertain how effective this approach is. Milieu therapy at special centres has also proved promising. Chemotherapy has no curative action but may control certain symptoms, like temper tantrums, and can be of considerable assistance to the child and family.

The educational approach seems to be the most rewarding. Parents are actually trained to participate actively, so that the child is exposed to the programme not only at school, but also at home. The main aims are to improve the social and language development, as well as deviant behaviour. If the child is not too severely autistic and is educable, he may attend ordinary or 'special' classes at conventional schools, and receive outpatient therapy at child guidance clinics, or child psychiatry units. If the child's degree of autism is too severe, admission to special units is necessary. If also mentally retarded, the child should attend a day centre or institution for such children.

RESULTS OF TREATMENT

To evaluate the results of treatment is by no means simple, because of different diagnostic criteria, differing approaches to treatment, intelligence, severity of the autism, etc. However, many of these children are later institutionalised, and only a few achieve good social adjustment. Follow-up studies by Kanner's original group (Kanner and Eisenberg, 1955)[1] showed that, of those who could be traced, over 50% were in institutions and

only 3 achieved good social adjustment; and those who could speak at 5 years did much better than those who could not.

The prevention of autism has received little attention, but practices which interfere with intimate, meaningful contact between mother and child should be avoided, and the mother and child should be actively assisted if autism is suspected. This means that general practioners, obstetricians, paediatricians, midwives, and health visitors should know the normal development of a child and the features of this condition.

PRESENT SERVICES

In the Report[1] it is pointed out that there are no government facilities provided especially for these children. Those who are in government institutions for the mentally retarded, are there because there is nowhere else for them to go, and not because the institutions are specially designed for their needs; nor does the Department of Higher Education or the Provincial Administrations or Territory of South West Africa make special educational provision for them. At the time the Report was published there was only one 'school' for such children in the Republic, the Day School for Autistic Children, in Claremont, Cape Town.[3] It was founded January 1970 in what was once a private home. It is run by the Society of Autistic Children, founded in Cape Town in 1967. In February 1970 there were 6 autistic children and 2 teachers. The yearly cost per child in 1970 was in excess of R1 600, but money was contributed by the public, so that it cost the parents R100 per quarter. At present the school has 6 teachers, and 18 children aged 2 - 13 years. The younger children are taught individually, and the older children in groups.

The Society has acquired another property which will probably be zoned as the new school, taking over from the one in Claremont, which was probably the first school of its kind to be established in Africa. 'As a result of the declaration by the Minister of National Education in the Assembly last Friday, that it was his intention to allocate funds for the treatment, education and care of autistic children, the Society Executive decided that facilities for more children should be made available on a day basis. This would be done as soon as possible with plans for a pilot residential hostel to be implemented on the same site.'[4]

FACILITIES RECOMMENDED BY THE COMMITTEE OF INQUIRY INTO THE TREATMENT AND CARE OF AUTISTIC CHILDREN

In order to obtain a reliable diagnosis, the medical, psychiatric and psychological investigations should be made only at certain centres where trained and experienced specialists in all the areas to be explored, are available. (For the Day School for Autistic Children in Claremont this assessment is done at the psychiatric division of the Red Cross War Memorial Children's Hospital, Rondebosch.) Children with autism should be regarded as handicapped children, who should have the opportunity of receiving special education in a special school under the auspices of the Department of National Education.

Applications to start subsidised special schools for these children should be given sympathetic consideration. Mentally retarded children with autism should have adequate accommodation, staff, treatment and care in institutions for the mentally retarded. The children should be enrolled at ordinary schools when they are sufficiently improved. These special schools should initially limit their intake to primary and nursery school age-groups, and there should not be more than 30 in any one school. The Committee made recommendations about the physical facilities of such a school and an attached hostel. As far as the staff is concerned, it is recommended that there should be 1 teacher to every 3 children and should include psychologists, child psychiatrists and nursery assistants. Some form of education should continue during the holidays to prevent a possible relapse, and a travelling teacher should visit the homes of autistic children in the country.

Although autism is not very common, there cannot be many conditions which cause similar disturbances in the growth of the child's personality, or which have such a disruptive effect on the child's family. It is important, therefore, that recent advances in this field be brought to as large a professional group as possible.

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REFERENCES

1. Committee of Inquiry into the Treatment, Education and Care of Autistic Children (1971): *Report*. *Pretoria*: Government Printer.
2. *Scientific American*, December 1972.
3. Golding, M., Principal of the School for Autistic Children: Personal communication.
4. *The Argus*, 18 June 1973, p. 2.