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EDUCATION AND REHABILITATION OF THE MENTALLY RETARDED IN INDIA

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Since time immemorial man has attached very great importance to the functioning of the human mind. Both ancient and modern societies assign a privileged position to the scholar, the poet and the scientist.

A society which attaches so much importance to mental ability naturally looks upon mental retardation as a disastrous misfortune. It is only in recent times that man has begun to adopt a rational attitude towards mental retardation. Experience has shown that even the mentally retarded can in many cases be educated and trained and integrated into the community as contributing members.

The primary object of this paper is to present to the reader the essence of modern evidence which seems to indicate that there is hope for most of the moderately mentally retarded provided they have an opportunity for education and training. An attempt will also be made to enunciate some broad principles which should guide the development of services for the mentally retarded.

Dr. Amesur has been a member of many committees in drawing up the blue prints of the E.N.T. and Audiology Departments of various hospitals, both at the National and local levels. He started social welfare work in 1913 by being Founder Secretary-Treasurer of the Chhaproo Vidya Mandal for the Needy. He has published several articles, 41 on medical subjects and 4 on social welfare.

Introduction.—For an understanding of the type of services needed for the mentally retarded it is necessary to understand what is mental retardation. Unfortunately, it is by no means easy to define mental retardation or deficiency. A fairly large number of definitions have been suggested by workers in the field. We might however quote here the British definition which is as follows:—

"A condition of arrested or incomplete development of the mind, existing before the age of eighteen years arising from inherent causes or induced by disease or injury."

The British Mental Deficiency Act classifies the mentally retarded as follows:—

(1) *Idiots.*—Persons in whose case there exists mentally defectiveness of a degree, that they are unable to guard themselves against common physical dangers.

(2) *Imbeciles.*—Persons in whose case there exists mental defectiveness, which though not amounting to idiocy, is yet so pronounced, that they are incapable of managing themselves or their affairs or in the case of children of being taught to do so.

(3) *Feeble-Minded.*—Persons in whose case there exists mental defectiveness which though not amounting to imbecility, is yet so pronounced that they require care, supervision and control for their own protection or for the protection of others or in the case of children, involve disability of mind of such a nature and extent as to make them for purposes of section 57 of the Education Act of 1944, incapable of receiving education at school.

(4) *Moral Defectives.*—Persons in whose case there exists mental defectiveness coupled with strongly vicious or criminal propensities and who require, care, supervision and control for the protection of others.

Since definitions of mental deficiency vary from country to country, the National Advisory Council for the Education of the'

Handicapped has just asked its sub-committee on the education of mentally deficient children to evolve a definition best suited for this country. This committee is also charged with the task of making a survey of the existing services and suggesting measures for the improvement of the existing services and for the development of new ones.

Incidence.—As in most of the countries no dependable estimate of mentally retarded persons is available. This is due largely to the extreme difficulty in identifying mental defects. Nevertheless, during the Second Plan period the Government of India attempted to carry out random sample surveys in Bombay and Delhi. According to the Bombay survey about 0.6% of the population is mentally retarded. According to another survey being undertaken with assistance from the Government of India by the Indian Council for Mental Hygiene, it is estimated that about one percent of the population is mentally retarded.

The census figures for 1961 seem to indicate that the country's population has gone up to 438 millions. This means that there should be at least 4.38 million mentally retarded persons who will require educational and employment services.

Aetiology.—Very little is known today about the causes of mental defects. Nevertheless, various workers have been attempting to explore this fascinating field and some knowledge has been gathered.

Various aetiological factors have been grouped together in which mental retardation plays an important part. For proper understanding, these are put into three broad groups. Factors operating in: (a) Pre-natal (h) Natal/paranatal (c) Post natal periods. (a) Pre-natal: These are hereditary factors of which genetic ones are of paramount importance. Intelligence is multifactorial, i.e. many genes are involved. While their importance cannot be minimised, they cannot be accepted as a sole cause. There is always a reaction between inherited and environmental factors, which determine when, how and the extent of maladjustment, if any. The child's personal relations in the family group early in infancy or in childhood have an extraordinary influence on the whole future life of the child and contribute materially to its breakdown or to the inevitability of its breakdown. Poor social conditions, bad nutrition, insanitary surroundings, poor parental guidance are usually associated with low economical factors and with sub-normal intelligence. There is a negative co-relation between size of the family and intelligence. Children of later pregnancy also show a higher percentage of mentally defectives. While it is accepted that quite a number of feebleminded are born of parents with evidence of mental dullness, insanity, nervous disease or of those with psychopathic tendencies, it should be remembered that not all retarded are children of mentally defectives.

Metabolic factors due to Genes.—Number of metabolic disorders are described which have mental defect among their effects. These are presumed to be a single rare gene. The theory underlying their causation is that the presence of a recessive gene causes absence of deficiency of a particular enzyme; the normal enzymatic activity is therefore interfered with. Such interference of activity is exhibited on the metabolic processes associated with and involving all three major dietic factors, e.g. Proteins, Carbohydrates and Lipids. Some of the important ones are: —

(a) Phenyl-Pyruvic disease. Interference with the metabolism of phenyl-alanine—a break down product of protein metabolism.

(b) Galactosomia. A defect in carbohydrate metabolism specifically affecting galactose.

(c) Tay-Sach's group affects lipid metabolism.

(d) Gargoylism. Of complex nature involving more than one system.

These metabolic disorders open out a new line of thought in as much as eradication of metabolic defects leads to cure of mental defects. A new and hopeful approach is thus created for tackling metabolic mental disorders of genetic origin.

Infective in origin.—Of the prenatal period we recognise three main ones: (a) Rubella. Infection of the mother about the time of conception, is very likely to cause foetal damage; (b) Toxoplasmosis; (c) Congenital syphilis. These are accepted ones, Encephalomyelitis of bacterial, viral or of unknown origin, occurring in the embryo or they can cause mental retardation of a variable degree after birth. This can be temporary or permanent, stationary or progressive. There may be direct action or nerve tissue or the effect may be an indirect one by interfering with the circulation of cerebro spinal fluid.

Trauma.—Before, during or after birth, Trauma can be the cause of mental retardation of a variable degree. In this group are also included the after effects of administration of chemicals specially Nitrous oxide during the process of birth. Radiation to the pregnant mother—long since forgotten, was responsible for some of these conditions. There is likelihood of increasing use of atomic energy in future. Hence this reference.

Endocrine influence.—Birth injuries may arrrest certain endocrine glands in the skull, Apart from this the only known hormone, for which a cause and effect relationship has been established, so far as mental retardation is concerned, is the hormone of thyroid.

Miscellaneous group.—Epilepsy. A convulsive disorder, leads to mental deterioration of a progressive type. There are also a number of disorders which result from degenerative processes in the skull. Other disorders are caused by some other pathological process, malignant infiltration, etc. which lead to manifest changes in the confiugeration of the skill, by which they are easily identified. These may be associated with cerebral palsy or with some other cerebral disorder. Often no adequate cause could be found.

Monogolism.—It has been ascribed to partly genetic, partly hormonal and partly metabolic factors. It is usually recorded in mothers of over 30 years of age. Its incidence has been estimated to be 1 in 600. In mono zygotic twins, both are naturally mongols. In dizygotic, it is no more frequent to be mongols than could be expected by chance. In the post natal period any of the cerebral infective processes can result in damage. But the most distressing are those that result from vaccination, usually after small-pox.

It will thus be seen that the causation in a large percentage of cases remains unknown. Almost 90 percent are pre-natal in origin, with varying ;genetic influence singly or in combination.

Prevention:—It is generally believed that an inherent mental defect cannot be remedied. But improvement is often possible not only by intensive educational therapy but also by altering the environment.

Since so little is known about" the aetiology of mental defect, it is by no means easy to suggest preventive measures. Some measures would however appear to be clearly

indicated. As a first step it is important to avoid infections during pregnancy. Consanguineous marriages also would appear to be a source of danger. Sterilisation is indicated where the parents suffer from hereditary mental defects.

Perhaps the most important preventive measure particularly in cases where retardation is not inherent is to provide the child with a healthy environment in which he can grow naturally and with a complete sense of security.

Diagnosis.— Although in many cases gross mental defect becomes fairly apparent by the time the child is of school going age, it is not always easy to make an accurate diagnosis. Therapy will depend on correct diagnosis.

Child guidance clinics play a very important role in the diagnosis and treatment of mental retardation as well as emotional maladjustment. It is the task of these clinics to make a thorough psychological examination of the child and also to study the environmental factors which might be responsible for his difficulties. It is only after a complete and all embracing examination that a decision can be reached.

Unfortunately the number of child guidance clinics is very small. At present there are only about 31 child guidance clinics in the country. 5 of them are located in the city of Bombay with a population of nearly 41 lakhs.

Many of the clinics in the country are not well equipped. It is necessary that these clinics should have modern diagnostic tools and a team of experts like a psychiatrist and psychiatric social worker, an educationist and so on so that the child can be studied from different aspects.

The establishment of more well-staffed and well-equipped child guidance clinics is a crying need.

Education.—Education of mentally retarded children has received very little attention in this country. This is apparent from the fact that there are hardly a dozen schools in the country with a total enrolment of not more than about 800.

The first school was started by Smt. Jai H. Vakil in 1944 with only two pupils at Bombay in her own home. This school which was later shifted to a special building constructed for the purpose has 163 pupils on the roll.

The School is administered by the Society for the Care and Treatment of Children in Need of Special Care which was formed by Smt. Vakil in 1949. The School attempts to give simple academic education coupled with training in a few crafts. The object is to help the pupils towards as much independence as their limited mental abilities would permit.

This is the only institution which trains teachers of mentally retarded children in the country. It offers a one-year course and awards diplomas on successful candidates.

The need for more educational facilities for mentally retarded children is too obvious to be emphasized. The Sub-Committee of the National Advisory Council for the Education of the Handicapped which is at present reviewing the situation might be able to suggest some useful measures. Meanwhile, it is important to bear in mind the fact that India is a land of 550,000 villages. There are only about 3,500 towns.

The establishment of special schools in rural areas might not be immediately feasible. In view of this it will be necessary to consider alternative measures like the

establishment or special classes in ordinary schools and the training of teachers to meet the needs of border-line cases by giving more individual attention in the ordinary class.

Some of these measures were recently recommended by the International Conference convened at Geneva last year by UNESCO and the International Bureau of Education. They have made a comprehensive recommendation to the member States on the education and rehabilitation of mentally retarded persons. It will be well for this country to bear this recommendation in mind while framing its educational policy in regard to mentally deficient children.

Some good schemes have already been formulated. Dr. K. R. Masani, Chairman of the Indian Council for Mental Hygiene has prepared a comprehensive scheme for the consideration of the various states. This would comprise at least one large home for mentally defective children, for their care, for their protection, for their training in crafts, for 200 pupils at an approximate cost of Rs. 100 per child per month.

The Chairman, the State Aid Society for Children, (Maharashtra), Shri B. R. Bhatt, has suggested a colony for (a) 1,500 males and (b) 1,500 females, in cottages of fifty each at a non-recurring cost of 28.5 lakhs and an annual recurring cost of 3.12 lakhs.

Training and Employment.—At present there are no training centres for mentally deficient children in India. The need for such centres is enhanced by the fact that most mentally retarded persons cannot receive a great deal of academic education. It is only through practical work that they can become useful and contributing members.

In the absence of information about the size of the problem it is not easy to indicate how many training centres will be needed. But if the experience of other countries is to be taken as a guide the problem is of unprecedented magnitude. This can be seen from the following statement made by President Eisenhower while inaugurating the National Retarded Children's week in 1956:—

> "Three percent of the population of U.S.A. came under the category of retarded; this works out 30 in a population of a thousand; of these thirty, twenty five are considered educable. Very nearly seventy five percent of these educable, with necessary training and education can become self-supporting members of society and be able to manage their own affairs. Four of these thirty are trainable and can become self-supporting in a protected environment".

Training is of little value without employment. It is necessary that voluntary agencies and the National Employment Service should try to place mentally deficient persons in simple occupations which they can practice. Experience in other countries has shown that this can be done.

Plans for the future.—Although for the first time the Central Government had made some provision in the Second Plan for providing services for the mentally deficient, no scheme was actually undertaken. During the Third Plan period however a beginning is proposed to be made with the establishment of a school for mentally deficient children in New Delhi.

The National Council has also suggested that surveys of mental deficiency should be carried out in the various states.

With these small beginnings it might be possible to build up more comprehensive services in the Fourth and subsequent plans.

Conclusion.—Despite the lack of information about the size of mentally deficient

population, the present indications are that the problem is enormous. The primary need therefore is the rapid expansion of services. Concurrently, an attempt should be made to assess the size of the problem with a little more accuracy.

Education of the public is the comer stone of any system of services for mentally deficient children. Unless the community becomes aware of the potentialities of the mentally deficient and sheds all prejudice, the chances of integrating the mentally handicapped person into his community which is after all the aim of rehabilitation, can hardly be achieved.

The effective implementation of programmes for mentally deficient persons requires an effective executive body. That Government is not always able to implement these programmes is shown by the fact that no scheme could be undertaken during the Second Plan. It is desirable therefore that the Central Government should set up an autonomous body to undertake these programmes. A welcome development is that the Government of India have just announced that in future they will contribute 75% of the expenditure on the development schemes of voluntary agencies. We hope that eventually the Government may agree to pay 90 percent of the expenditure as advocated by the author.

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