MENTAL RETARDATION

> "Mental retardation is a purely social problem... In nearly all human fields the mentally retarded are more often like other people than they are different. There are more fields where the mentally retarded act exactly like normal people than where they do not." (1)

These words may help to explain why less attention has been paid in the developing countries to the mentally retarded, the largest body of handicapped people in any society, than to other disabilities such as blindness or deafness. In rural communities of developing countries a fair degress of mental retardation can easily pass unremarked, causing little inconvenience to the person involved and not disqualifying him from participation in his social group. Only as life becomes more complicated are the shortcomings of most of the retarded revealed; only as societies develop technical sophistication do the limited responses of the intellectually handicapped matter (2). Mrs. Barbara Castle in a speech to the Manpower Conference in London in January 1970 put this process in the English context:

> "We could be running into a situation where part of our labour force is in danger of being left stranded by the increasing sophistication of industry."

Over the years, in what are now the more developed countries, attitudes towards the mentally retarded have varied from apprehension to sympathetic concern. Not untypical of half a century ago is the fear: "The unfit multiply and threaten the race with economic and biological disorder" (3), which may be contrasted with a statement by a speaker at the 1964 Copenhagen Conference of the International Society for the Rehabilitation of the Disabled:

> "If one seeks a measure of a people's civilization, the standard of living, fetish of our age, cannot be used as a first principle. The best measure is the standard of social care for all the citizens and perhaps in particular, the manner whereby the community cares for those who, least of all, can maintain their rights and make their claims valid, the mentally handicapped."(4)

Sir George Thompson, looking into The Foreseeable Future in 1955, anticipated Mrs. Castle when he expressed concern about the social integration rather than the protection of the duller members of the community:

> "We come back to the question of what our descendents will do with the stupider people in their new world. Engineers, artists, teachers, scientists, administrators, even salesmen have a place and a good one, but these posts are not for the stupid man. He cannot plan the day's work of a complicated factory, or take a class of boys learning electronics. Perhaps truck-driving may account for a fair number, for it looks as if the advantage of sending goods in the same vehicle from door to door may

> outweigh the extra cost of the larger number of drivers needed, but this source of employment alone will not go far. The proportion of boys in Britain judged intelligent enough to go to a Grammar School is about 20 per cent; add to these a few, probably a very few, who may have a special ability as artists or craftsmen without ranking high in school, and one is still left with a substantial majority. Will our descendents have to preserve inefficient ways of doing things in order to keep employment for the less gifted intellectually? A wiser course would be to use some of these men and women to humanize a civilization grown too mechanical. There are plenty of jobs - tending the aged is one - where kindness and patience are worth more than brains. A rich state could well subsidise such work ... Providing jobs for the less intelligent half of the community will be one of the headaches of future politicians." (5)

One of the problems of the developing countries is that they do not yet recognise this particular problem as the inevitable concomitant of technological advance. The key to the situation lies in the fact that as societies become more complex they make more intellectual demands on their members and the threshold of "retardation" rises. The subsistence farmer or the peasant housewife can function adequately within very modest levels of intellectual competence until the modern world impinges on them, as it must inevitably do. While there is nothing to read there is no embarrassment or inconvenience in not being able to learn how. Once development begins to gain momentum and reach into the remoter areas, the education and health authorities have to accept increasing responsibility for the identification, assessment, training and protection of the less able members of their populations.

Definition of mental handicap

The legislation following the 1944 Education Act in Britain defined retardation in terms of educational competence, a child whose standard of work fell below that of children 20% younger than he being considered educationally subnormal. This followed a period of some years during which all children with a determined I.Q. of 70 or less had been categorised as mentally defective. The Plowden Report (6) recommends that the phrase "educationally subnormal" should be replaced by "slow learners", so avoiding the pejorative implications of "subnormality". Whatever the nomenclature, the children need to be recognisable if they are to be helped to realise their potential, but the range of causes and effects is very great and does not make for tidy definition. The term "educationally subnormal" has been dismissed as "an aetiological dustbin" (7), while reference has also been made to "refined diagnostic procedures aimed at fitting children into the professionalised categories" (8). With these strictures in mind it is possible to build a table showing in some detail the characteristics of mentally retarded persons in a series of broad categories (Table 5). The categories must be regarded as flexible and those deemed to fall generally into any grouping assisted individually in the most effective way. One particular danger of categorization is that the division between "educable" and "trainable" may become too rigid. It should also be borne in mind constantly that individuals may improve or deteriorate, usually within a fairly narrow range.

TABLE 5

DEVELOPMENTAL CHARACTERISTICS OF THE MENTALLY RETARDED

Degrees of Mental Retardation	Pre-School Age 0 - 5 Maturation and Development	School Age 6 - 20 Training and Education	Adult 21 and over Social and Vocational Adequacy
PROFOUND OR VERY SEVERE I.Q. Below 20	Gross retardation; minimal capacity for functioning in sensorimotor areas; need nursing care.	Some motor development present; may respond to minimal or limited training in self-help.	Some motor and speech development; may achieve very limited self-care; needs nursing care.
SEVERE I.Q. 20-35	Poor and delayed motor development; speech is minimal; generally unable to profit from training in self-help; little or no communication skills.	Can talk or learn to communicate; can be trained in elemental health habits; profits from systematic habit training, usually walks barring specific disability.	May contribute partially to self-maintenance under complete supervision; can develop self-protection skills to a minimal useful level in controlled environment.
MODERATE I.Q. 35-50	Can talk or learn to communicate; poor social awareness: fair but delayed motor development; profits from training in self-help; can be managed with moderate supervision.	Can profit from training in social skills (elementary health and safety habits) and occupational skills (simple manual skills); unlikely to progress in functional reading or computation; may learn to travel alone in familiar places.	May achieve self-maintenance in unskilled or semi-skilled work under sheltered conditions; needs supervision and guidance when under mild social or economic stress; travels alone in familiar places.
MILD I.Q. 50-70	Can develop social and communication skills; minimal retardation in sensorimotor areas; often not distinguished from normal until later age.	Can learn academic skills up to approximately sixth grade level by late teens. Can be guided toward social conformity.	Can usually achieve social and vocational skills adequate to minimum self-support but may need guidance and assistance when under unusual social or economic stress.
BORDERLINE I.Q. 70-80			

Adapted from Directory of Services for the Mentally Retarded in Saskatchewan 1968-69, prepared by the staff of the Alvin Buckwold Mental Retardation Unit.

Incidences

The magnitude of the problem of mental retardation in the developing countries is neither accurately known nor well appreciated. In Zambia, for example,

> "No one has any idea how many educationally sub-normal children, or children in need of remedial teaching there are in this country, nor is it possible yet to find out, since we have neither reliable tests nor the services through which to administer and analyse them."(9)

The cases brough to the psychiatrist are almost certainly only a fraction of the cases existing in the community:

> "These cases are usually brought because either they have come to the attention of the authorities (i.e. abandoned children), or because of a relatively new factor, the concern of parents for the performance of their children in school."(10)

This second motivation would be essentially an urban phenomenon, but in many developing countries only a minimum of children even in urban areas yet have the opportunity of being seen by qualified psychiatrists. Failing the practicability of conducting planned surveys (11), general estimates can be arrived at based on data available from the more developed countries. Some idea of the size of the problem can be reached by considering the British and European situation. Less able children form roughly 40% of the school population in Britain; the Isle of Wight survey indicates that 16% of all children need help for a longer or shorter period (12); some 3% of all children are retarded to some measurable degree (13); at least one child in every 1800 cannot benefit from formal education but may be regarded as trainable in special centres (14). (Of "trainable" children about one third suffer from Down's syndrome - mongolism, which usually means the presence of multiple handicap.) The general pattern is that of every 30 mentally retarded persons, 25 may be considered slightly retarded or "educable", four are semi-educable or "trainable", one only need remain totally dependent throughout his life (15).

One interesting side-light on incidences is that in Britain since 1950 the number of children judged to be retarded has risen by 250 per cent. This may be interpreted, at least in part, as signifying that the concept of mental handicap is closely tied to the demands which schools make on children (16). It can also be taken to indicate that demand will rise to fill the facilities available.

Among the few indications of incidence available for the developing countries there is an estimate made in 1966 by the Singapore Association for Retarded Children which suggests 10,000 retarded children in that country. 1,000 children were at that time on the Association's register, of whom about 160 were in the three training centres and 600 on the waiting list. The following year a voluntary registration of handicapped persons undertaken by I.L.O. resulted in 1,150 mentally handicapped individuals being registered (17). In Hong Kong (with about twice the population of Singapore) an estimated 10,000 retarded children could benefit from special schools, and a further 90,000 slow learners are believed to exist, as well as some 10,000 maladjusted children (18).

The distribution of retarded children within any society follows a pattern that is not unexpected if social competence is the governing factor. By and large, mild and moderate mental handicap increases in frequency with low social status, size of family, and with distance from urban centres. The weighting of cause and effect, however, remains unclear. Subsistence farmers with large families in remote areas may produce slow-learning children because they themselves are dull, but the contribution of family circumstances and environment in accentuating retardation must also be considered. Innate intelligence is extremely difficult to measure, as will be considered later, but, "There is, as far as we know at present, little evidence for cultural, racial or national differences" (19). Innate equality, however, can be negated by environmental factors. One particular aspect may be considered:

> "A new vicious circle arises from recent research on the consequences of early malnutrition. Cultural retardation breeds malnutrition. Does malnutrition breed cultural retardation?" (20)

The narrow borderline between mental retardation and mental illness is also difficult to establish. Dyslectic and autistic children are diagnosed in increasing numbers in the more developed countries and many are judged to have I.Q. ratings of at least normal levels. Estimates of incidence of these handicaps in developing countries have considerable implications for future social services, as the following reference reveals:

> "There are more autistic children than there are blind or totally deaf children. Among school-age children, there are approximately 4 to 5 with marked autistic symptoms in every 10,000. Boys are affected more often than girls. The ratio is in the region of 3:1."(21)

In this study dyslectic, autistic, emotionally disturbed, maladjusted and mentally ill children can be mentioned only briefly because of the lack of information with respect to the situation in the developing countries, where these children undoubtedly exist, but provision for their identification and assistance is minimal.

Identification and assessment

Mentally handicapped and retarded children in the developing countries rarely come to the attention of the few specialists who can help them. The very high rates of wastage from primary schools (up to 50% after the first year) must conceal many slow learners and retarded children as well as those suffering from other handicaps and those whose parents regard the school as a crèche where their children may be deposited until of a size to be useful in the fields or the compund. The number of retarded and handicapped girls, especially, is hidden in many countries by the tradition of not submitting girls for entry to schools. In the towns of the developing countries a few Child Guidance Clinics and Welfare Clinics have been established, but their services are sought by relatively few parents yet, and then from a generally limited social grouping.

Even when a child reaches the specialist, assessment of the degree of retardation or handicap is difficult in the extreme because of the lack of reliable measuring instruments. In the most general terms the following categories may be listed:

I.Q.	
up to 55	severely retarded (of these, I.Q. 25/30-50/55 are considered "trainable")
50/55/-70/75	"educable" retarded
75/85-100	slow learners - "remedial" children.

The flexibility of these categories must be emphasised, in the light of the remarkable success of undertakings such as the National Hostels and Training Centre project at Slough, England, where young men and women, aged between 16 and 26 years, with an average I.Q. of 35 (and none above 50) learned successfully to care for themselves and undertake simple work processes in sheltered conditions; 14 of the 30 trainees eventually secured full-time normal employment (22).

Authorities are consistent in stressing that assessment can be reliable only if the tests used are designed for the particular area from which the children come. The dangers of a "baldly stated I.Q." following inadequate assessment should be recognised (23), while it should not be overlooked, that tests standerdised on normal children assume that a child has had adequate and appropriate stimulation and experinece to help him to develop mentally and physically. "Such experience may be lacking in the life of a handicapped child" (24). The difficulty of designing "culture fair" tests ("culture free" tests now being recognised as impossible to construct) is increasingly apparent (25), and raises the particular problems of the developing countries - those of adapting tests to the locality and of overcoming the difficulties of language. This points to the need to use multiple diagnosis going beyond an assessment of general intellectual ability along (26); another consideration is the need to keep tests up to date because of the changing general levels of attainment across time ("zero error") (27). Children should not have to labour under "the tyranny of the I.Q." (28). Useful lessons may be drawn from the wide range of tests, medical, educational, psychological, drawing, play, intelligence and environmental, which are administered in Hungary to a child thought to be suffering from mental deficiency before an assessment is considered to be complete (29). Finally, it must be recognised that individuals may cross arbitrary barriers from "retarded" to "non-retarded" as the result of remedial training; this emphasises the need for frequent reassessment.

It is clear that assessment tools in the developing countries have a long way to go to meet these criteria, although some progress has been made in West and East Africa with verbal and non-verbal intelligence tests (such as the Lule non-verbal intelligence tests produced at Makerere) (30), and in India by the National Council of Educational Research and Training (31). Even when tests are developed it is likely that teachers, rather than specialist psychologists, will have to administer them for some years until sufficient specialists become available. This implies that the degree of efficiency of administration and interpretation is likely to be of only modest dimensions.

Causes of mental handicap

While mental handicap is frequently congenital, retardation often results from an unpropitious environment. The British experience seems to

indicate that the degree of risk for a child varies most significantly with its birth order and the social class of its parents, rather than with any medical factor. Other "risk" indications include the age of the mother, whether she smokes, prematurity, low birth-weight, maternal hypertension, and being born male (32). As far as can be judged the pattern in the developing countries with regard to mental handicap is similar to that for other handicaps, that is, in comparison with the more developed countries, more handicap can be ascribed to disease, malnutrition and ignorance, and less to genetic factors. And, of course, in the developing countries relatively few severely handicapped children survive early infancy. About 33% of brain damaged children seen in a paediatric clinic in Uganda had been so from birth, but in another 33% the brain damage clearly followed a catastrophic illness (33). Intermarriage within small communities may account for much of the mild mental handicap in rural areas. Among the diseases, cerebral malaria incurs a distressingly high rate of subsequent brain damage (34), while untreated meningitis can lead to encephalitis and consequent retardation, and the unborn child can be damaged by the mother's syphilis, rubella or toxaemia (35). Although not necessarily mentally handicapped, epileptic children frequently show low I.Q.'s because of frequent absence from school or emotional disturbance.

Despite some doubts in the past, almost certainly one of the major contributory causes to retardation in developing countries is malnutrition, both of the pregnant mother and the child. Interference with interuterine foetal nutrition leads to an increase in mental retardation (36). Good nutrition is particularly important in the first few years of growth, since the brain reaches 80% of its adult weight by the age of three years (37). Inadequate nutrition in these early years pute at risk some 300 million children in the world, leaving them in danger of impaired brain growth. It is still difficult to specify the relationship between nutrition and intellectual development but certain inborn errors of metabolism are frequently accompanied by mental retardation (38), and there is a growing body of clinical and experimental evidence to show that inadequate nutrition can result in brain damage (39). Details of a project in Guatemala point "to the possibility that severe malnutrition within the same environment can produce changes in mental development"(40).

Protein-calorie malnutrition (PCM) is frequently indicated as the most damaging form of malnutrition, since it is likely to affect 60% to 70% of all preschool children in the developing countries, while the severe nutritional illnesses of kwashiorkor and maramus probably affect a significant proportion of the underfed children in these countries. Less common is under-nutrition due to a lack of carbohydrate; this leads to the consumption of body-fat, with a poisonous by-product which damages the brain. Acute iodine deficiency in some areas leads to cretinism (41). A number of authorities have pointed to the association between the rapid weaning practices in many developing countries and the incidence of kwashiorkor. In particular, an unsuitable protein-deficient diet following weaning from an extended period of breast-feeding can often result in kwashiorkor (42). Together, the abrupt separation and unsuitable diet can result in a considerable degree of mental trauma. At the very least, malnutrition contributes to retardation by reducing the will to learn. The following effects of malnutrition on education may be listed:

apathy;

low concentration;

low achievement in school;

absence of learning motivation;

shortening of school attendance due to endemic diseases, etc.;

absentecism;

difficulties in relations within school groups(43).

The socio-economic environment can also prejudice mental development. A survey in Copenhagen in 1905 may still be directly relevant to the situation pertaining today in many developing countries:

> "The survey leaves no doubt that sickness, physical disability and bad living conditions were largely responsible for the retarded educational and mental development of these children, and raises the question whether mental disability does not play a subordinate role to physical disability." (44)

Authoritarian family structures can lead to children being passive, docile and submissive, at the expense of healthy curiosity and a desire to learn (45). Maternal deprivation and, especially in the case of the Caribbean countries, the lack of a permanent father-figure, are contributory factors to retardation (46). The "granny syndrome" is confirmed by a number of investigators in the West Indies - the pejorative effect on a child, particularly a male child, of being left almost exclusively to the grandmother to nurture. Among other environment factors affecting mental development, these may be cited the example from Western Nigeria of poisoning from the oral or topical administration of a traditional herbal remedy (agbo ile tutu) which frequently results in brain damage (47). Finally, emotional stress, "brain fag" and psychological disorder probably play a larger part than is known at present because of the lack of research.

One aspect of mental handicap which must be borne in mind is that, unlike some forms of mental illness, it is virtually irreversible, although some damaging effects of diet and environment may be alleviated and so help a backward child to approach more nearly to his normal peers. For the truly mentally handicapped child the only solution is the provision of educational facilities to enable him to realise what potential he has, recognising that this will be more or less limited, as Table 6 indicates.

Problems of mental retardation

The major sources of problems lie in personal, social and educational factors, compounded by the familiar attitude which lumps all retardates together, unable or unwilling to recognise that each mentally handicapped child is an individual, that gradations of handicap are continuous away from the norm, and oblivious of the fact that the greatest problem for the great majority of retarded children is the frustration of knowing that they are retarded. They feel that they are different from normal children and they know full well why they are attending a special class, unit or school. Many of these children can be driven into isolation by the constant subjection to ridicule during their life which may promote a degree of sensitivity such that they avoid any possibility of criticism of "just not meeting people" (48). For the more severely handicapped there is the serious social stigma which they attract in most countries:

TABLE 6

WHAT CAN BE HOPED FOR A CHILD'S DEVELOPMENT

	Physical Growth	Emotional Growth	Social Growth	Intellectual Growth
Normal Child	Moves with good rhythmic co-ordination. Uses hands with skill. Is able to take care of all bodily needs with complete independence.	Self-control under stress. Accepts disappointments. Reacts appropriately to situations that stir up emotions.	Gets along pleasantly with family, friends, co-workers. Understands and communicates with others. Uses leisure time wisely.	Good control of the three R's. Understands the importance of the living and thinking of other people all over the world. Can manage own affairs. Can earn a living in competitive society.
Educable retarded child	Same as normal child but may have poorer co-ordination and may be a little careless about appearance unless well trained, with good example to follow.	Should learn same emotional control as normal child, but will often require help to achieve it. Needs much help to accept limitations as these children know they fall short of success as society dictates.	Should learn to get along with people. Requires vigorous and patient teaching to learn this. A good example helps. May have speech problems. Must be taught to use leisure time wisely.	Should achieve fair skills in three R's. Many will have learning problems and may read well but have trouble with arithmetic, etc. Needs "practical" arithmetic, spelling and prevocational skills such are use of tools and following directions.
Trainable retarded child	Should become independent in self-care. Develops good body mechanics. Should learn to practice good personal hygiene.	Should learn self-control in work and play situations.	Should learn to communicate purposefully and profitably, respect the rights and property of others, consider oneself a part of a group with a common purpose.	Should learn those skills within the limits of mental capacity to permi the child to work and play safely, purposefully and profitably, under supervision.
Custodial	Will always require help with basic bodily needs and be completely dependent.			

Adapted from The Mentally Handicapped Child

> "Even in the large group of all handicapped people, mentally disabled are exposed to the greatest prejudice and those with other kinds of handicap do not want to be identified with them." (49)

The child does not bear his burden alone. There are, too, the repercussions on the family of the mentally handicapped child.

> "A child's severe symptoms can make even healthy, stable families anxious and defensive . . . His illness is a severe blow to the parents' self-esteem, and their feeling of guilt over having produced such a child is accentuated by the hostility and anger the child provokes . . . Even the most mature parents worry about how to handle an emotionally disturbed child without harming him further." (50)

In the case of the most severely handicapped child the parental shock may manifest itself either as rejection or overprotection. Yet it is from the parents that the most effective help can come. In the more developed countries advances in the care of the mentally handicapped have been initiated, stimulated and pursued in no small measure by the efforts of parents who have come together to form voluntary associations and pressure groups. Similar trends are now evident in a number of the developing countries of the Commonwealth, although much of the leadership here still comes from the medical profession and social welfare societies. Educational provision, however, the third of the three major problem areas for the mentally handicapped, is generally agreed to be inadequate in the richer countries (51), and almost non-existent, when compared with the need, in the developing countries.

Education

The aims of special education for the mentally handicapped are no different from general educational aims of all children, namely, through the provision of opportunities to acquire skills and knowledge, to lead the child towards the fullest realisation of his potential. For the wide range of the retarded and handicapped, a similarly wide range of provision is needed, ranging from short-term remedial teaching of the basically normal child who is retarded because of minor health or environmental factors to permanent institutional care of the most severely mentally handicapped. The goals for each individual need to be set (and continually reviewed if "goals" are not to end as "barriers" beyond which the child is discouraged from venturing). For many of the more severely retarded the goals may best be formulated in terms of self-confidence, social competence and the acquisition of a range of skills rather than in terms of "educational" objectives, although these latter should not be underestimated. Such an approach is more likely to lead to a successful transfer to adult life and acceptance by the community than is concentration on an academic syllabus presented in a manner which can only reinforce failure. One example of a new initiative is the introduction of a flexible programme for Junior Vocational pupils in Alberta, Canada, designed to develop a meaningful course for students who have serious learning handicaps "who become accustomed to failure", and who need "a second chance to find success" (52). Moderately and severely retarded children are capable of achieving some intellectual accomplisment (53), but the major concern should be to extend each child as far as possible in whichever area his potential seems to be:

> "Today we know, from an increasing number of studies, that when positive demands and challenges are made to a person, he will almost always respond positively, provided he gets support and help. When a person is called stupid and expected to act stupid, he eventually falls into a stupid role, and acts and even becomes stupid." (54)

Such a wide range of children indicates the need for an equally wide and flexible range of provision, hardly any of which is yet available in the developing countries.

Special educational provision for mentally handicapped children may be made available in integrated classes, special classes within ordinary schools, special classes or units associated with ordinary schools, or in special schools (day or boarding). In recent years the trend has increased towards the maximum possible integration of handicapped children into ordinary classes, and, in view of the paucity of present provision and the relative costs involved of integration compared with the creation of special schools, the developing countries must cortainly follow the trend. Fewer than half the developing countries of the Commonwealth have yet found it possible to provide any special educational facilities for mentally handicapped children, so that in effect all these countries are in the position of being able to plan this part of their educational service from scratch (55). The more developed countries can provide a number of examples of differing approaches, although impartial evaluation has not often been undertaken which would make the task of programme construction easier and more likely to be effective. With regard to provision in special classes there are useful reports of practice in New Zealand and Canada (56), and from the "opportunity classes" and "general activities" classes in Australia (57). Among special schools, the experience of a bush school for slow learners in Rotorua, New Zealand (58), of systematic teaching in British training centres (59), of home instruction by peripatetic teachers in rural areas (60), of mobile remedial teaching classrooms in Canada (61), all have something to offer to the developing countries in terms of technique if not of detailed content. Initially, however, the developing countries may well concentrate on the integrated education of the less severely handicapped, since in this way the maximum benefit is likely to accrue in return for the very limited funds which will be available.

A powerful case has been made for integrated education as far as possible even of severely retarded children, believing this to be for the benefit of the children themselves and their teachers, and also likely to lead to a healthier public attitude towards mental handicap:

> "Because of prevailing beliefs, retarded children are treated in certain ways that intensify their weakness and as a result they perform more inadequately, a result which is taken as inherant in their defect instead of as related to their experiential background. Once we free ourselves from these traditional preconceptions, we can concentrate on minimizing, overcoming, or indeed preventing the development of many of these performance limitations . . . The remain several problem areas. Classes on a trainable level have in general been kept in isolation in separate buildings. This kept the teachers away from the mainstream of educational thinking and deprived them of

> the stimulation that would come from relationships with teachers of other types of children . . . An increasing number of severely retarded young people are now included in sheltered workshops. Furthermore the increase in numbers of the mildly retarded who are being employed in industry and commerce has contributed much to a change in attitude toward the severely retarded as well." (62)

Experiments in the integration of retarded children are currently in operation in a wide range of countries. The Stevenage "Opportunity Class" in England is made up of 18 nursery-age children with physical and mental handicaps who play successfully with a group of normal children (63). At the Gatehouse School in the City of London one handicapped child is enrolled in each class; all are completely integrated into the school life, with the result of increased tolerance on the part of other children and increased achievement on the part of the handicapped (64). At the Warrnambool East Primary School in Victoria, Australia, a special unit has been incorporated into the school to cater for the eleven children between the ages of 7 and 12 years with I.Qs in the 50-70 range (65). This project has resulted in some satisfaction and some indicators of previously unappreciated anomalies. The Principal records, in respect of the retarded children, improved social behaviour, increased interest and willingness to learn, and an enthusiastic attitude which was not present earlier (66). On the other hand concern has been expressed about the arbitrary division between the "special school level" child, to whom the visiting consultant gives assistance, alongside whom there may be sitting another pupil of similar age and attainments, who, being declared to fall above "special school level", is not on the consultant's visiting list and is officially ineligible for help:

> "Are the educational needs of these two children necessarily different? Do we need to maintain a dichotomy between "special school-level" children and other children requiring special help? Do we in fact need more facilities like the one at Warrnambool, but open to any child needing extra help, rather than segregated special schools for the labelled ones?" (67)

The case for flexibility and the avoidance of permanent classification seems proved. In this case the maximum amount of integrated provision seems desirable on educational, as well as financial grounds:

> "Mental retardation services should become increasingly integrated in expanded programmes of maternal and child health and in general pre-school and school education." (68)

On the other hand, warning notes have been sounded about excessive enthusiasm for integration; undoubted achievements are obtained in special residential schools and it is frequently difficult of providing properly for mentally retarded children in ordinary schools (69).

Information available from developing Commonwealth countries indicates that integration and remedial and special classes or units exist in very few, among them Cyprus (91 pupils in special classes in 8 schools), Malaysia (14 remedial classes), Malta (integration into ordinary schools

of "the slightly educationally subnormal"), Zambia (4 special classes), Antigua ("mentally handicapped children attend ordinary schools") and Saint Helena ("children work and are helped in normal schools") (70). It must be assumed that many other retarded children enter the educational systems of other developing countries, remaining there unnoticed for shorter or longer periods before dropping out to add to the statistics of wastage.

Special schools, day, weekly boarding or fully residential, represent the traditional provision for mentally retarded children. For the most severely afflicted, and in particular circumstances peculiar to a number of developing countries (sparse population, poor communications, low grade teaching staffs in rural schools) special boarding schools will continue to be the only effective way of meeting the need. The high cost of boarding schools, however, will delay the possibility of the provision equating with the need for a considerable time. Eleven of the Commonwealth developing countries have at least one special school or training centre for the mentally handicapped (Cyprus, Ghana, India, Jamaica, Kenya, Malaysia, Malta, Singapore, Trinidad and Tobago, British Honduras and Hong Kong), while in other countries, including Fiji and Uganda, such institutions are planned.

(a) The Jacaranda School, Nairobi, Kenya (71)

In June 1968 the St. Nicholas School for mentally handicapped children and the Aga Khan Special School for ESN Children amalgamated to form the Jacaranda School. The existing premises of the St. Nicholas School were extended and rebuilt to cater for 30 boarders and at least 30 day pupils. The school does not receive Government grants; fees are high for those children whose parents can pay, but gifts and donations make it possible to take in other children as well. The mixture of Asian, African and European children makes the work of the teachers that much more complicated. Of the seven staff all are qualified as teachers but only three have special qualifications to teach the mentally handicapped. A small Government teacher-training unit was set up on the same site as the school, but latest reports indicate that this has now been discontinued. Some vocational training is provided for the older children, including typing, but the prospects of employment are extremely limited and sheltered workshops are planned as the only realistic solution to the problem of the school-leaver.

(b) School for the Mentally Handicapped, Kingston, Jamaica (72)

Founded in 1958 by the Jamaica Association for Mentally Handicapped Children the school now houses 87 children in five classes, one for 15 pupils who are slow learners, another for 20 educable pupils, and three classes for 52 pupils who are considered able to respond to more advanced training. A new school is planned near Kingston to accommodate 100 more children, including 64 boarders. The existing school suffers from the disadvantages inherant in schools promoted by private groups, lack of money resulting in inadequate materials and facilities, being "small and poorly equipped."

One possible result of this type of situation should be anticipated: poor facilities militate against high standards, and if the impression given to the general public is either that the handicapped merit inferior provision or that they cannot achieve very much when schools are provided, then the development of adequate educational provision may be delayed still further.

The problem of the content and approach to education and training for mentally handicapped children does not permit of one answer. Mildly handicapped children, accurately diagnosed and assessed, will often respond sufficiently to remedial teaching to enable them to continue with reasonable success in ordinary classes. For the majority of those more severely handicapped, however, a different strategy is required. Before these children are taken into schools or classes in the developing countries an overall plan should have been sketched to make provision for them as far as their final vocational training and employment. For the handicapped, even more than for the normal child, the consequences of frustrated education may be worse than the consequences of no formal education at all.

In many special classes and schools the curriculum tends to be designed to approach as closely as possible to that of the ordinary schools, except that it may be phased over a longer time. In Yugoslavia, for example, for pupils with I.Qs as low as 50 the special school curriculum is usually just a shortened version of the regular school curriculum (73) In Singapore, an experimental class has been stated with seven ES children following the normal primary school subject syllabus. A major consideration is raised here, as to whether educational content which is deemed to be essential for the normal child should be given as far as possible to the handicapped child if his social handicap is not to be aggravated (74). "The real issue of the 1970s" may be to investigate:

> "What techniques can be worked out to help the less able to learn the same things as the more able pupils learn more readily?" (75)

If this issue is not resolved the handicapped may be trained solely for obedience and conformity.

The retarded child may often be helped to develop by means associated with the normal curriculum. For example, art may provide a language used by the retarded child for "communication, reverie and conceptualization", which implies the art programme for the mentally retarded should be integrated more closely with the academic programme than is usually the case (76). Through art the curiosity of these children can be aroused and their ability to observe relationships and perspective improved, while their social skills and personal relationships often benefit as well. Others believe in the value of physical education in helping retarded children to achieve some measure of maturity in social relations (77). One study confirms the poor opinion these children tend to have of themselves, and one of the observations echoes the pleas of many others:

> "Of the 27 children tested only one gave no evidence of maladjustment (in addition to retardation) . . . We agree that a child in a general activities class is not a normal child, but the criteria of abnormality is usually an intellectual one, whereas one of the things that this study has revealed is that there is need to consider other criteria of abnormality." (78)

In Toronto, Canada, children of I.Qs between 50 and 80 who have failed to keep pace with the normal curriculum, even with the assistance of "opportunity classes", may be enrolled in Vocational Schools, where half the day is spent in direct vocational training, the other half in formal lessons (79). It is claimed that these children are helped to acquire a

realistic self image (80), although it may be doubted whether a recognition of their irreversible inadequacies and limited future prospects helps towards a balanced personality unless sympathetically conveyed.

One of the main shortcomings of the educational provision for mentally handicapped children in most countries is that it is concluded at an arbitrarily determined age. Many of those directly involved with these young people feel strongly that, since it is acknowledged that these pupils need a longer time in which to complete a course, the legislation should be designed to allow for young people to remain in the schools at least until the minimum age at which they can be taken over by the social welfare authorities. To require them to leave school at a fixed age does not accord with current thinking.

Once they approach the end of their school career it is important that these children should be able to find informal contacts in their community through clubs and other groups. The Gateway Clubs and those promoted by the Rathbone Society in Britain are notable achievements in this direction. In the developing countries, particularly, special radio and television programmes directed towards the mentally handicapped and their parents could play a most valuable role in the absence of formal educational and training provision.

The situation in the developing countries at present is hardly encouraging. For example, the results of the McGregor Committee's visits to the four special classes then operating in Zambia, show a total enrolment of 54 pupils - this in a population of 4 millions (81). Assuming 50% of the population to be under the age of 21, this implies at least 200,000 children and young people in need of special educational treatment, and at least 1,250 severely mentally handicapped children in need of special care (assuming a slightly higher incidence but also a higher mortality than in the more developed countries). 54 pupils can hardly be judged as tackling even the periphery of the problem. 17 of these children were in a class which was "rigidly organised" and lacked practical activity, taught by a qualified but non-specialist teacher, 9 other children formed a more active class in a second school under another qualified but non-specialist teacher who sought advice from the Committee on equipment and techniques, 12 children in a third school were not truly retarded but needed effective teaching of English, and only 16 pupils in the fourth school were genuinely benefiting from special education. No secondary education was available for those mildly retarded who completed the primary course successfully, and employment prospects were not bright. Despite the devoted work of voluntary societies, teachers and a few government departments, it must be concluded that educational provision for the mentally handicapped in the developing countries needs to be planned from the foundations.

Teachers of the mentally handicapped

Professional training facilities for specialists wishing to work with mentally handicapped children are virtually non-existent in developing Commonwealth countries. Some provision is made at Highridge Training College in Kenya and a one-year in-service course for teachers of slow learners is available in Hong Kong; the University of West Indies plans a Department of Education of the Handicapped for its Mona campus in Jamaica; some short-term in-service facilities are provided in one or two countries (such as a summer vacation course in Cyprus). With these exceptions, teachers of mentally handicapped and retarded children must

travel to one of the more developed countries in order to find specialist training. In small numbers this is happening, and teachers from the developing countries have been awarded bursaries and scholarships to train in Australia, Britain, and New Zealand (82). Vacation courses conducted by teachers from the more developed countries have also been organised in countries such as Cyprus. For the most part, however, mentally handicapped and retarded children are taught by enthusiastic non-specialists. In the ordinary schools, where the less academically inclined pupils drift to the lowest group, they frequently find themselves taught by the poorest staff. As has recently been indicated in England, where academic achievement is the criteria by which the school wishes to be judged, then the least able children tend to be grouped with the least able teachers (83). This situation was familiar more than thirty years ago:

> "Headmasters are too prone to consider not which of the assistants is best fitted for the backward class but who can best be spared from teaching the most promising pupils. Yet it is obvious that the teacher of the dull and backward needs special qualifications. There is a widespread notion that for the backward as for the mentally defective a person of placid temperament and motherly ways is best. But such a teacher rarely succeeds in bringing out all that is latent in the slower pupils, or in stimulating the sluggish to the utmost of their powers. What is wanted is a bright adaptable person, physically active, mentally vivacious, firm, patient, sympathetic, inspired, but with strong common sense." (84)

The recent change in England whereby responsibility for severely handicapped children has been transferred from the Health to the Education authorities has resulted in a reappraisal of the types of teacher needed for these children. The controversy has been revived, for example, as to whether teachers should qualify to enter specialist training only after some years' qualified experience in ordinary schools, or whether young men and women should be able to choose to specialise in the course of their initial training. In the case of the developing countries it would seem very desirable to permit this specialisation as a direct continuation of the initial training course. In this way the more able young teachers might be induce to enter the field of special education.

As for visual handicap and hearing impairment, all teachers during their basic training should be made aware of the symptoms of mental handicap or difficulties in learning. Research shows that there are few teachers who will not have to deal at some time with children who have learning difficulties or problems of adjustment (and how much more is this true of the isolated rural teacher in the developing country), so that all should receive some assistance in the recognition of mental retardation or handicap (85).

Proposals in respect of the mentally handicapped and retarded

> "Some 100 years ago only very bright children were sent to schools. The intellecturally less gifted child stayed at home, worked on the farm or in the workshop, or became a soldier if he had enough physical strength

and aggressiveness. Anyhow, he found his place in society and was just as happy as a well-educated person." (86)

While there may be some doubt about the degree of happiness, the statement is probably true in effect. It cannot, however, be applied to the developing countries today, for, however remote the area, contact with modern life has begun to be established, aspirations raised and societies changed. The transistor radio in the last decade has brought the siren voice of the town into the most distant hamlet. The slow learning child's failure at school (assuming he has found a place) reinforces his poor self-image, the more severely retarded child may now survive longer because of medical care, but may be the cause of severe social tensions. The problem of the mentally handicapped now exists and it will grow more acute.

The first essentials in meeting the problem are a campaign of public enlightenment and a clear acceptance in principle of responsibility for care and training by the education authorities, in support of the parents and village community. If the handicap is not so severe as to make the child incapable of undertaking his own normal routine of toileting, eating and washing, the major problem is to reassure the parents of their lack of blame and the community of lack of danger from the child. If the community still lives by the physical strength of its members in the fields or the compounds then the majority of its mentally handicapped members can be absorbed and their labour put to productive use.

It would be simple to recommend a programme for the care of the mentally handicapped in the developing countries; early assessment, educational and training services, work-experience while still at school, a flexible school-leaving age following a longer course than for the normal child, school psychological services, a mental health service, child guidance clinics, clubs, continuation classes, and so on. It must be recognised, however, that in developing countries striving to train high-grade and middle-level man-power, making prodigious efforts to lessen the rate of growth of the gap between themselves and the rich countries, the claims of the mentally handicapped will be among the weakest. Unlike the intelligent blind, deaf or physically handicapped they cannot be trained for skilled grades. To many people the building of a wall round the mental hospital in Accra before the O.A.U. conference in 1965 was symbolic of the official attitude; hide them and forget them. These patients, indeed, included the mentally ill as well as the severely mentally handicapped, but the principle stands. More than the other handicapped members of society the mentally handicapped will probably have to rely very considerably on voluntary organisations for their major support in the immediate future.

This pessimistic prognosis does not imply that effort is pointless. Enlightened authorities in a few countries are involving themselves with the problem. The clubs in Hong Kong and integrated classes in Malaysia and Malta, the training centres in Singapore, all represent progress. Much more research is needed and could be undertaken by the universities, especially research into reliable and valid assessment techniques and measuring devices for use in the developing countries. Volunteers, possibly expatriate but preferably from the locality, could play a most valuable role as teacher aides and in taking the pressure off parents in those places where the extended family does not offer full help. An on-going programme of public enlightenment, which in some areas may need to be little more than

re-establishing traditional attitudes, could be promoted without undue expenditure. Despite the low priority which will be afforded to the mentally handicapped by many developing countries, much can still be done by deploying the available resources to the best effect, probably through voluntary organisations, towards the end of ensuring social acceptance and social adjustment for the mentally handicapped.

The recommendations to governments of the Caribbean area of the First Caribbean Mental Retardation Conference (Jamaica, September 1970), reproduced as Appendix A to this chapter, indicate the general approach to educational provision which might usefully be adopted for other developing areas, while the Declaration of General and Special Rights of the Mentally Retarded, adopted on 24 October 1968 by the Fourth Congress of the International League of Societies for the Mentally Handicapped, and reproduced as Appendix B to this chapter, represents the basic principles and ultimate aims for all developing countries.

It may not be possible for these aims to be realised in the developing countries for many years (few would claim that they have been realised in the more developed countries) but while they exist as guidelines and goals the general strategy can be planned and the first steps taken to establish a comprehensive programme for the mentally retarded, within the overall provision for the handicapped.

APPENDIX A

FIRST CARIBBEAN MENTAL RETARDATION CONFERENCE

RECOMMENDATIONS TO GOVERNMENTS

(1) The problem of mental retardation is a national responsibility.

(2) We feel that the prevailing pre-school environment contributes to milder degrees of mental retardation, which cannot be adequately dealt with by the existing educational system. To avoid the unnecessary wastage of human resources and consequent drain on the economy, governments should take steps in preventive measures in this problem. This would involve:

(a) Providing pre-school education, day care centres, nursery education and parent instruction in providing a stimulating environment;

(b) We feel that one important step would be the introduction of conceptual teaching methods. Where crèches and day nurseries exist, we strongly urge the introduction of simple modern methods of child play and stimulation of child development.

(3) There should be provision in the educational system for psychological advice and guidance for children with learning problems in order to ascertain as early as possible cases which need special help.

(4) There should be provision in the school system of special classes or resource classes for the mildly retarded.

(5) Information about diagnosis and handling of mental retardation should be included in the training of nurses, social workers, teachers, medical students, and nursery school teachers.

(6) It is strongly felt that at least one teacher training college which has a special school for the retarded in the vicinity should offer an additional optional course in mental retardation teaching. Use could be made of the local school for demonstration and training.

(7) The recognition of the need for inclusion in the university curricula of courses in special education and psychology is strongly urged.

APPENDIX B

FOURTH CONGRESS OF THE INTERNATIONAL LEAGUE OF SOCIETIES FOR THE MENTALLY HANDICAPPED

DECLARATION OF GENERAL AND SPECIAL RIGHTS

Whereas the universal declaration of human rights, adopted by the United Nations, proclaims that all of the human family, without distinction of any kind, have equal and inalienable rights of human dignity and freedom;

Whereas the declaration of the rights of the child, adopted by the United Nations, proclaims the rights of the physically, mentally or socially handicapped child to special treatment, education and care required by his particular condition;

Now therefore the International League of Societies for the Mentally Handicapped expresses the general and special rights of the mentally retarded as follows:

Article I

The mentally retarded person has the same basic rights as other citizens of the same country and same age.

Article II

The mentally retarded person has a right to proper medical care and physical restoration and to such education, training habilitation and guidance as will enable him to develop his ability and potential to the fullest possible extent, no matter how severe his degree of disability. No mentally handicapped person should be deprived of such services by reason of the costs involved.

Article III

The mentally retarded person has a right to economic security and to a decent standard of living. He has a right to productive work or to other meaningful occupation.

Article IV

The mentally retarded person has a right to live with his own family or with foster parents; to participate in all aspects of community life, and to be provided with appropriate leisure time activities. If care in an institution becomes necessary it should be in surroundings and under circumstances as close to normal living as possible.

Article V

The mentally retarded person has a right to a qualified guardian when this is required to protect his personal well-being and interest. No person rendering direct services to the mentally retarded should also serve as his guardian.

Article VI

The mentally retarded person has a right to protection from exploitation, abuse and degrading treatment. If accused, he has a right to a fair trial with full recognition being given to his degree of responsibility.

Article VII

Some mentally retarded persons may be unable due to the severity of their handicap, to exercise for themselves all of their rights in a meaningful way. For others, modification of some or all of these rights is appropriate. The procedure used for modification or denial of rights must contain proper legal safeguards against every form of abuse, must be based on an evaluation of the social capability of the mentally retarded person by qualified experts and must be subject to periodic reviews and to the right of appeal to higher authorities.

ABOVE ALL - THE MENTALLY RETARDED PERSON HAS THE RIGHT TO RESPECT.

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