The Handicap of Deafness*

By Ian G. Robin (London)

Today we remember James Yearsley, who founded the Metropolitan Ear Institution in 1838 (129 years ago), which developed into the Metropolitan Ear, Nose and Throat Hospital, the first of its kind in the world. It was not until 13 years later (1851) that the first Ear, Nose and Throat Specialist to a Teaching Hospital in London was appointed: Joseph Toynbee, to St. Mary's Hospital.

James Yearsley was a remarkable man, with vision and administrative ability. As an aurist, he stressed the effects of nose and throat conditions on the ear. He was also a co-founder of the Medical Directory.

At the Metropolitan Hospital there have been many famous members of the Staff down the ages, to one well-known to many of us, Robert Scott Stevenson. He is one of the main reasons why I have the privilege of being here today. After being sent by my "Chief" at Guy's (Mr. Mollison, whose death we mourned recently, and to whom so many of us here owe so much) to sit at the feet of Phyllis Tookey Kerridge at the Royal Ear Hospital, I became more interested in the problems of Deafness. I visited Mr. Franklin's Clinic in Vincent Square and saw the wonderful work of training profoundly deaf infants by Miss Sylvia Martin and Teachers of the Deaf. I mentioned to Scott Stevenson, who was Chairman of the National Institute for the Deaf (as it then was) that the name in Gower Street looked like "National Institute for the Dead!" Characteristically, he immediately said "You must come on the Council and see what work there is to be done!"—and in no time, I found myself there; and in a few years, off he goes to Gibraltar after making me Vice-Chairman for the next 4 years. I then had my eyes opened and realized that, as an otologist, I was unaware of the tremendous education and welfare problems, many of which were being tackled by persons and societies of whom I had no knowledge, and with whom I had no contact.

Today I would like to outline briefly the problems that deafness brings, *why* they occur, and *how* they affect the person, and the measures that can be taken to combat them. There is nothing new in what I have to say: in many cases I am preaching to the converted.

Number of Deaf

The size of the problem needs mentioning, to get a proper focus. In Britain there are about 8 million persons with some hearing disability—

* The Yearsley Lecture on 3 March 1967

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

1 in 6 persons! But of these, not more than $2\frac{1}{2}$ millions have any real handicap. About 115,000 are deaf to all speech; 790,000 need hearing aids. With children, 1 in every 1,000 is severely deaf, and at least 1 per 1,000 partially deaf—some authorities put the figure as high as 7 per 1,000 of school children in need of some form of help.

The *handicap* of deafness depends on many factors, and thus there are many facets of the picture I am drawing. The chief factors are three in number: the age of onset, the degree of deafness, and the types of conditions.

Age of Onset

I am afraid that I had been a so-called otologist for some years before I realized the difference between the "born deaf" and the "deafened". I am glad to say that, now, most young otologists realize this. The sufferer knows it—there are clubs, leagues and societies where members are (though less commonly *now*) restricted to one or the other.

The effect of deafness on the individual is, broadly speaking, in inverse ratio to the age at which it occurs. It is well known now that unless a child starts to *hear* before the age of 2, it will not learn language, or be able to talk. It will only have the "reflex" hearing present at birth (which is sub-cortical) and will not be able to train the auditory centre when myelination does take place, and thereby acquire, by imitation, "comprehensive hearing". The title "deaf and dumb" always upsets me—"deaf-mute" is bad enough: but many workers with the born totally deaf prefer the "dumb" component as being more expressive and demanding of our understanding. Without hearing, learning to communicate is impossible without a very great deal of tuition by understanding, patient and trained persons—parents, teachers, welfare workers and others. With deaf children there is a lack of knowledge of words and language, and (as Fisch says) "a lack of means of storing knowledge by not having words to help the coding of complex aggregates of information. This lack would limit intellectual ability". In other words, it leads to "central deafness".

One is often asked "At what age can help be given to the deaf?" and also "At what age can an hearing aid help the deaf?" The answers are, of course, "At any age, depending on the deafness." I can cite two persons helped, one aged 6 months and the other 96 years old. My oldest patient to date is 103!

The time of onset is the important factor in determining firstly the handicap of communication, and secondly the psychological problems accompanying this. Deafness acquired before speech and language have been learnt means, as already mentioned, that there is no reservoir or memory of sounds and their meaning. If you have a memory of sounds, it helps enormously.

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

The Handicap of Deafness

The Degree of Deafness

The degree of deafness is naturally of great importance. There are various descriptions of levels of hearing loss. In practice it is useful to divide the categories into two main ones only, severe and partial, and then sub-divide these.

1. *Severe deafness:* no useful hearing.
   (*a*) Congenital, born-deaf, or deaf before speech is acquired.
   (*b*) Acquired; hearing becomes non-functioning.
2. *Partial deafness:* hearing defective, but functioning with or without a hearing aid.

The term "hard of hearing" is an expression used by the acquired partially deaf who are loath, or shy, to own up to, or be labelled as, suffering from any deafness.

The otologist tends to deal only with the partially deaf: up till now, few have either the interest, time or training to deal with the totally or severely deaf, other than diagnosing the condition. The severely deaf have relied on help from truly dedicated persons, often with a religious calling, ever since l'Abbé de l'Epée, in 1760, started the first School for the Deaf. In England it was Dr. Watson in 1792. These persons include the Welfare Officers for the Deaf (previously called "Missioners"), Teachers of the Deaf, and a few otologists attached to schools, clinics and mental institutions (of whom Kerr Love was an outstanding early example). The more the future generations of otologists, medical officers of health and school medical officers co-operate with these persons, the more will the severely deaf be brought into the community.

The best description of the practical levels of deafness is that of Dr. Hallowel Davies. He considers the degree of loss as obstacles to be overcome, and gives them audiometric levels:

1. "Low" hurdle, at 30 db. average, in the speech range (500–3,000 c.p.s.). With less loss than this, a person was not considered in need of a hearing aid. Actually, now, with "ear-level" aids, some persons find help at times with less loss than 30 db., and with unilateral loss, even if the combined loss is less.
2. "High" hurdle, at 90 db., when loss was considered as total. Persons need hearing aids between these two "fences". Actually, it is now certain that fewer persons are totally deaf: recent improvements in hearing aids give help above 90 db. level.

   In between, a third fence can be put up at 40 db.: the "educational" hurdle. Here a child needs special help of more than better positioning in class and appreciation by others for the need for clear speech. He needs either personal or group hearing aids and extra tuition (so-called "auditory training").

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

But the db. levels are unreliable guides because we can have persons with exactly the same audiograms, but with very different handicaps. This is chiefly due to the onset time factor and the amount of training received. It is also due to the third main factor influencing the handicap: the type or nature of loss. Patients often ask "How deaf am I? What is my percentage loss?" But it is possible to show three different audiograms all with 50 per cent. loss, and in practice they hear differently in different circumstances.

Types of Deafness

The types of deafness fall into two main categories, conductive and perceptive (or sensori-neural); there is, of course, the mixed type as well.

Conductive Deafness

Broadly speaking, this causes a loss throughout the whole frequency range for air conduction, with good bone conduction. So long as sounds, and especially speech, are loud enough, the meaning is heard and recognized. Amplification causes no distortion; hearing aids are therefore not only well tolerated but transform "night into day", and bring the deaf person out of a world of silence.

When I first visited some Schools for the Deaf about 30 years ago, nearly half the children had bilateral "radical mastoids" from measles, etc. Better hearing aids enabled them, and the dwindling number of present-day children like them, to go to ordinary schools. This leaves more places for the far less fortunate children with severe perceptive loss. But even the latter, as I will mention later on, can with early training go to ordinary schools or to a Partially-Deaf Unit.

Perceptive Deafness

This must be divided into several categories: I will mention three. All of them have a relative increase of high tone loss compared with the low, and bone conduction is reduced.

The first grouping is based on the severity of pure tone audiometric loss for frequencies between 500 and 4,000 cycles per second. Instances of sub-groups are the "V" notch at 4,000 (or C5), the gradual slope downwards from 2,000 or 3,000 and the abrupt loss at these levels. The most severe degree, as in "Sub-total" deafness, is the loss for all sounds above 500 cycles per second, and of less than 70–90 db. loudness. The handicap of losing these frequencies is often, and paradoxically, in inverse ratio to the age of onset; the older the person, the more adverse effect of not hearing recognizable patterns of sound. A young person can adapt to the loss, if trained or helped. The serious effect of high tone deafness is chiefly due to the intelligibility of speech being greatly influenced by the consonants,

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

which have higher and fainter tones than the powerful lower tone vowels. This is somewhat similar with vision.

1. – o – . – A – E . – – E . – – E E –.

(Only the vowels, and not very easy to read.)

2. G – D. S – V –. T H –. Q U – – N.

(Only the consonants, and much easier to read.)

If the high frequencies are lost, then speech is more and more difficult to recognize. The difficulty of hearing a whisper is very marked. We all know how difficult it is to differentiate between a five and a nine on a bad telephone line or with slurred speech, with the voice dropped at the end of the sentence. One can demonstrate on a recording what speech sounds like if you have lost hearing above certain frequencies, i.e. 4,000, 2,000, 1,000 and 500 cycles per second.

Most otologists, however, have seen the rare person, often doing a responsible job, like Domestic Supervisor in a Hospital, or a person applying to go to a University, who shows no sign, by lack of hearing or change of voice, that there is no hearing at all above 2,000 or even 1,000 cycles per second. As a result of high tone deafness, all voices tend to sound alike. Thus there is failure to pick out one voice in general conversation. This can be shown by a recording of two voices, heard with different degrees of deafness.

The second category of perceptive deafness is that of non-recruiting and recruiting types. With recruitment, amplification leads to certain cochlear hair cells responding to loud sounds which did not do so to fainter ones; the level of tolcrance therefore fluctuates enormously with different sounds, especially speech ones, and if in quiet or noisy surroundings.

All persons with perceptive deafness hear worse in noisy places; those with recruitment are especially affected. Most people over 55 hate cocktail parties because they "cannot hear". This is partly because of the difficulty just heard on the recording, and partly to recruitment. Half my colleagues at one hospital hate its new dining-room with its formica-top tables, clattering knives and forks, and the babble of voices of nurses, radiographers, clerks—the whole hospital except the porters and domestic staff. Intolerance leads to distortion, which is an important factor influencing the recognition of speech patterns. The suitability for—and the reaction to—a hearing aid greatly depends on the recruitment factor. Shouting makes matters worse; turning up the volume of the hearing aid or radio does also. With hearing aids, the boosting of the high frequencies is often a mistake. It is relatively slow, clear and not too loud speech which deaf persons need.

The third category of perceptive deafness has already been mentioned

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

briefly: that of peripheral and central. The former mechanism detects sounds: the latter interprets their meaning. It is important to differentiate between hearing and listening. So many of us can go to "auditory sleep" in a lecture, or ask in vain for the marmalade at breakfast, or be told "You only hear when you want to". One has to listen to hear, and hear to listen. "Comprehensive hearing" is what is so important: the understanding of the meaning of learnt patterns of sounds—otherwise "It is all Greek to me" is a phrase truly applied.

It is the confusion of distorted sounds, as well as the lack of communication, which makes partially deaf persons so handicapped. They make mistakes which lead to ridicule or annoyance. Deafness is still a music-hall joke. There is no outward sign to distinguish the disability from rudeness, stupidity or even mental retardation. The expression "deaf not daft" is well-known. A vicious circle is soon formed, with the deaf person shunning company, becoming isolated, depressed and perhaps even paranoic.

Several additional conditions can make enormous difference to the handicap of deafness. I will mention four only.

Firstly, there is blindness. To be born deaf and blind—or become so—what tragedy! What battles are necessary to win through and not be a "vegetable". Helen Keller said (and I quote): "The problems of deafness are deeper and more complex, if not more important than those of blindness. Deafness is a much worse misfortune, for it means the loss of the most vital stimulus—the sound of the voice—that brings language, sets thought astir and keeps us in the intellectual company of man." The blind person who becomes increasingly deaf—even with wax—gets serious loss of orientation, and is far worse off than a seeing person similarly deaf.

There is also the other aspect of these combined handicaps: the deaf persons who rely on lip-reading, but then gradually or quickly lose their sight. A terrible blow!

The second additional condition is mental retardation. This is so in children such as with cerebral palsy, etc., and in adults. We may all know of such patients as young adults struck by tuberculous meningitis and becoming totally deaf. The reaction may be very severe, with the person becoming very depressed and even suicidal. Intensive care with mental and physical rehabilitation is essential. The number of deaf persons in mental institutions in Britain is considerable, and their condition calls for great understanding and help. The relation of deafness to mental impairment and vice versa needs intensive inquiry. I will mention this again later.

The third additional condition may surprise you, but I feel it necessary to include it. This is old age! I have stressed the handicap in young persons, and it is more recognized than it was. But, as with mental retardation,

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

insufficient recognition has been given to the geriatric problem. Statistical surveys and reports on "The Aged in the Welfare State" and on "Deafness and Public Responsibility" show that a tremendous number (in 1942, nearly two-thirds) of old people with difficulty in hearing had never had any ear examination, or had not had one for more than five years. It is also seen that a higher proportion of old people living in institutions have hearing difficulties than those living at home. The handicap from presbyacusis, or old age deafness, is due to the combination of peripheral loss of high tones, the central loss of integrating powers and, thirdly, the slowing down of reaction times. Fast speech becomes more and more difficult to hear, even if it is clear and not too loud.

The fourth condition is a relatively minor one in comparison, but very trying to *some* with acquired deafness. This is severe *tinnitus*. It can cause more distress than the deafness. "I would not mind being deaf, if only the noises would stop" is a frequent complaint.

I now come to the practical side of the handicap. I can do no better than quote here part of the exposition by Arthur Story, a former headmaster of a School for the Blind and Deaf, and the first Secretary of the National Institute for the Deaf. He said "The effect of deafness upon intelligence, the social attitude and the higher spiritual development of the sufferer, is far more a handicap in life than is blindness . . . Deafness goes deeper and affects the mainsprings of every activity. It completely shuts the sufferer off from every ordinary provision for education, social and religious exercise, and imposes a serious barrier in the way of industrial opportunity." I will touch on how the handicap of deafness impinges on the educational, economic and social life of the person. The various factors and categories already mentioned allow us to realize the handicap in each of these three phases, and some of the ways to help overcome them.

Educational Handicap

Education of a child with sub-total deafness, with hearing from 100 or even 500 cycles per second downwards, and then only with tremendous amplification, entails difficulties that are staggering, as demonstrated by the recording we have heard. On the other hand, it is important to realize a great difference between congenital and acquired deafness. As Edith Whetnall and Professor Fry point out in their excellent book *The Deaf Child*, in acquired deafness the intensity of sound has to be increased and the distortion, if present, overcome by auditory rehabilitation and lip-reading. In born-deaf children the position is different: increasing the intensity does not enable the child to overcome the difficulty at once—not until there has been adequate training to acquire comprehensive hearing. Distortion is not a handicap, however, because the child has never learnt other speech patterns.

With the deaf child, in addition to having to learn and memorize

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

words, then sentences, and then language, there is the difficulty with voice production: the lack of "feed-back" to the cochlea, for monitoring or "self-verification" means that the deaf person has no means of knowing how loud to pitch the voice. This applies to adults as well as children. Faulty voice production is one of the reasons why the severely deaf may be isolated: the hearing public cannot understand his speech and therefore tends to avoid him. Up till recently, some schools for the deaf have rather neglected this aspect. Aided hearing and lip-reading may allow the deaf person to understand what is being said, but poor speech may make actual conversation impossible. On the other hand, persons who are used to hearing deaf people speak are "tuned in" to recognize the speech patterns, and thus have less difficulty.

It must be appreciated that all children's progress is not alike. The earlier education is started, the better, but some will be slower than others, and some may never reach a high standard. This may well lead to despondency in the parents, with reciprocal effect on the child.

A point about a deaf child's education which is not always realized by otologists and some parents, but is by Teachers and Welfare Officers, is that learning to read is usually much more difficult: when the spoken word is not heard, the written one is not recognized. This means that special books have to be produced, with simple words and sentences: tremendous patience and hard work are necessary to get the average severely deaf child to read and write fluently.

The good results of early training by keen parents and teachers can be further helped by modern measures such as improved hearing aids (more powerful, fuller range, and more selective; individual and group) and with boom microphone. Hearing Aid manufactures, both commercial firms in this country and abroad, and the Government Departments in Britain (through the Post Office and the Medical Research Council) with the Medresco, have made great strides in this field. Not only are the aids better electro-acoustically, but also aesthetically; not only can they be pinned on the infant's nappies, but the adolescent girl can acquire an ear-level model. As pointed out by Edith Whetnall, hearing aids should be used for a long period of time with every deaf child to stimulate hearing. This must be combined—especially later at school—with energetic lip-reading and speech training. Modern methods here include the "Vu-graph", which allows blackboard presentation while still lip-reading the speaker.

If sub-total deafness is present, there may be a continued "battle" of indecision as to whether the hearing aid is worth wearing; some children and young adults will not be persuaded to wear one.

If no hearing at all is found after prolonged trial, the other measures of communication lip-reading, signing and finger-spelling will have to be relied on. There now seems less disagreement among those helping the

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

severely deaf concerning whether to be "oral" or signing. Surely all measures should be used to the best individual advancement in the ways of communication.

In addition to the physical handicap there are, as already mentioned, psychological and psychiatric problems which are bound to occur. We all remember the film "Mandy", where the deaf child runs across the road in front of a lorry which she does not hear. A great physical hazard. But in addition there is the psychological one, well shown when the lorry driver is very cross with Mandy and scolds her; she does not understand what he says, and runs in hysterics to her mother, who is unable to console her, nor explain things properly to her, from lack of adequate contact. Deafness and difficulties of communication may lead to aggressiveness, intellectual inertia, loss of interest, and personality changes (for example, in sexual interest). There may be relegation to a lower place in the family circle, and subsequent isolation; or the reverse, with too much attention paid, and jealousy aroused in brothers and sisters. Deafness may thus lead to psychological trouble; but the reverse can also happen, where the psychotic and maladjusted children have hearing problems but are not deaf, as with autistic and schizophrenic conditions.

On the other hand the born-deaf child does not suffer from, nor miss, the inability to hear some sounds he has never heard, which can be so upsetting to older persons acquiring severe deafness. These are the many small sounds of everyday life which we do not really appreciate until we lose them; wind in the trees, birds singing, tap water running, and a thousand others. There is no real handicap if one has never smelt a rose nor seen a sunset—only missed experiences.

The Economic Handicap

The next handicap group is the economic or employment one. This is, of course, linked with the educational one. The problems of employment are in two separate categories; one is to get a job, and the other is to hold down a job or change to a new one when deafness is acquired. Both problems could be dwelt on for a long time, but brevity is necessary in this survey. The school-leaver must be helped to find as good a job as possible; head teachers, Youth Employment Officers and trained Welfare Officers of the Deaf are of great help in this sphere, and more and more firms are taking in deaf school-leavers. If he or she has been adequately trained, there is hardly any profession or trade that is not open. Gone are the days when the deaf had to be a bootmaker, seamstress or laundry-girl. All sorts of more interesting and lucrative jobs are open, such as modelling or computer work.

The deafened also have a great economic as well as psychological battle. There are three stages to be considered. Firstly, the need for Rehabilitation of the partially deaf person; this can help considerably.

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

Thus an otosclerotic with paracusis is better in a noisy office or factory, while the person with perceptive loss is better when moved to quiet surroundings. Secondly, there is the handicap that the wearing of a hearing aid may lead to; the limitations, the distortions and the inconveniences for the chairman of committees, business director, factory foreman, saleswoman, musician, school-teacher and many others. These people tend to be reluctant to admit any handicap; they try to hide their deafness because there is no visible evidence of this. They tend to laugh at jokes they have not heard, hoping this will not be realized. The schoolmaster thinks he "can get away with it" and the boys are not aware of his deafness; but of course they do become so, quite early on. The deaf person does better to "own up" and not be shy of wearing a hearing aid. Life may be made tolerable with a good hearing aid and clearer speech by their contacts. The articulation, especially of a deaf person's associates, may be helped by explanation to them, or a new set of dentures. The practice of most otologists would be halved if persons in this country spoke more clearly! So many of us talk with a hand over our mouth or a pipe in it! We need a campaign for "Better Speech in Britain!" I will stress again that we should not talk too quickly, not drop our voices at the end of sentences, and always try to face the listener. We should also try to attract the listener's attention before saying something important, and not start with the important context words. These partially deaf persons are also helped by learning some lip-reading; the combination of hearing with the aid and lip-reading gives greater assistance than either separately.

Two points are worth mentioning about hearing aids. Firstly, some users find that they can only concentrate on one person speaking in general conversation. Secondly, some persons notice a change of tone in a new aid when supplied with a re-issue of the same model, and are not always so happy.

Worse still is the third stage, when hearing aids are useless; the air pilot, the telephone operator and all those already mentioned who get worse. In war conditions, the guerilla fighter with even slight high tone deafness who does not hear a twig snapping or a jungle bird screeching may lose his life. Many severely deafened service-men, after demobilization, feel lonely in a "dead" world. With these severely deafened persons, new jobs must be found: the deafened must not give in—never, never, never! I would like to remind you of Beethoven who carried on in spite of his depression and agonies.

The main line of help is, *then*, the acquisition of or improvement in lip-reading. We have all met some deaf persons whose ability to lip-read is quite incredible; but it does mean that the speaker's mouth must be visible, and in a good light. We hearing people do not always remember this.

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

The Handicap of Deafness

The psychological effect of sudden severe perceptive deafness can be very grave—even the threat of it may make some extremely anxious. We may all know of examples—a doctor or clergyman suddenly struck deaf—a shattering experience. Rehabilitation is essential, and always possible to some degree. For example, a doctor may become a research bacteriologist or a professional reviewer. The elderly person, however, may find the struggle too much, and become a grave social problem.

The Social Handicap

This leads me to the social handicap, which varies enormously. It depends on factors already mentioned, and on the temperament of the person. Another point which I have not mentioned must be made here. With severe or total deafness, there is certainly the difficulty of communication but, as stressed by Dr. Pierre Gorman, the real difficulty is for the "man in the street" to know what form of communication to adopt when meeting a deaf person. Otologists—when seeing a severely deaf patient—need to establish some form of "rapport" with him. The same, of course, applies with the legal profession and the police. But, as so few hearing people know the deaf alphabet, it is up to the deaf to learn speech, as well as being able to lip-read well.

The born-deaf and those with deafness acquired early in life have a different social handicap than those acquiring it later. The former group have—or should have—adjusted themselves in a secure social life. They have enormous problems which they must learn to overcome with the help of their training, their contacts with family relations, their work and facilities I will mention shortly. One aspect recently mentioned so poignantly by Edmund Critchley is that of the bringing up of hearing children if both parents are deaf; they usually make good parents but difficulties increase when the children reach teenage, and parental control may no longer be adequate. (It is difficult enough for hearing parents!)

With persons acquiring severe deafness, it is the readjustment and the failure to readjust that are so upsetting. The reasons are physical and psychological: the isolation from failure of communication leads to depression from living in silence: the ridicule suffered from making mistakes when having to guess at the meaning of words: the impatience engendered in relatives and contacts, and the tendency to poor articulation: the idleness due to loss of ability and to inertia. Deaf persons are shy about asking for something to be repeated, where normal persons are not.

As with the economic problems, so can many of the social ones be solved or helped by the use of hearing aids and the sensible "facing-up" by the deaf persons and their friends to the circumstances.

Some drawbacks can be overcome by ingenuity: the doorbell can be replaced by a light: the baby crying can also trigger off a visual warning:

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

the telephone can have a "booster"; and the television or radio have individual amplifiers. Other drawbacks must be accepted and not considered as handicaps. Many examples spring to mind for all of us: they are mainly the disability to hear speech clearly, as I have already stressed. The bridge player confuses two with three spades, the shopper five with nine shillings. I am always surprised how many persons confuse "cheese biscuits" with "three-fifty". (I once had a patient who confused my test words "Christmas feeling" with "Christine Keeler"!) The difficulty is worse with strange voices and "patois" and, as already stressed, in noise. In hospitals we may have difficulty with some foreign houseman or nurse, especially with masks on. "Cocaine" has been confused with "Procaine", and "normal" with "formal" saline—with serious consequences. The answer is that, at all times and especially with deaf persons, speech must be clear, relatively slow and not too loud. One vicar can be heard throughout his whole church; another is not audible in the third pew. The same applies to the stage. This, of course, raises the very important point of good acoustics in schools, halls, theatres, churches, etc., and of good sound relay systems; there is tremendous benefit to everyone, but especially to the partially deaf. There is room for improvement in these fields in Britain today.

A few adults are very upset by unilateral deafness when of sudden onset. This usually only progresses from an inconvenience to a handicap when dining out and sitting next to a charming lady on your deaf side! One deaf ear is useful as long as the other works well; it is the best way of not hearing loud traffic, aeroplanes or your spouse snoring at night! In fact, I am becoming convinced that, in this noisy world of ours, the answer to early acoustic trauma and pre-senile presbyacusis from the Concord's supersonic bangs is for all boys of 12 to plug their right ear—and all girls their left ear—with wax, and keep it there until they are about 45!

We thus see that help is given to the deaf, after the medical profession has done its best, medically and surgically, and after all scientific electro-acoustic assistance has been employed, by the deaf themselves facing up to their handicap and using the facilities available through the various bodies that exist in Britain today: The Royal National Institute for the Deaf, The National Deaf Children's Society, The Royal Association for the Deaf and Dumb, The British Association of the Hard of Hearing, and other kindred societies. Though with a common goal, these tended in the past (but not now) to work with little co-operation. The N.D.C.S. broke away from N.I.D. (as it was then) as an enthusiastic group of parents, and has done increasingly wonderful work, chiefly in the educational field, and recently in helping to foster more funds for medical research. Today I wish to amplify briefly the work of the Royal National Institute for the Deaf.

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

The Handicap of Deafness

The Work of the "R.N.I.D."

I must omit the 56 years of service to the deaf, and come straight to its activities today. It has made great strides recently, with Air Vice-Marshal E. D. D. Dickson as its very active Chairman. It maintains a Welfare Department and Advice Bureau; a Test and Research Laboratory; (where hearing aids submitted by Manufacturers are scrutinized, and where audiometers are calibrated); one of the most comprehensive special libraries in the world; an excellent Magazine—*Hearing*—the only comprehensive monthly national one on deafness (with the very recent addition of a technical supplement on Audiology, quarterly—called *Sound*); a school for maladjusted children ("Larchmoor", to be honoured by a visit in 3 days' time by Her Majesty the Queen); hostels for adolescents; homes for the deaf and deaf-blind and lip-reading classes. It also makes available play précis scripts for Television, so that following the dialogue is easier; it buys Television sets for deaf persons from the Fund raised by appeals you may all have seen and heard on Television; and it watches carefully over any possible exploitation of the deaf, or unthinking discrimination against them. It advises on where to find suitable clubs and special church services. Lastly, it has recently founded a Training College for Welfare Officers of the Deaf.

For the future, there are many things more that need to be done, such as the training of more teachers of the deaf, the provision of more facilities to treat and rehabilitate the mentally-ill deaf patient, and lastly but by no means least, the improvement in the ways and means to prevent the scourge of deafness ever occurring.

Conclusion

I conclude by finishing the quoting of Mr. Story's exposition of the handicap of deafness:

"The only amelioration of the terrible penalties of deafness is that afforded by special education in childhood, special training and care in adolescence, and special help and attention throughout adult life. The welfare of the deaf from the start to the end of life is, therefore, the concern of specialists—either teachers, or missioners, or after-care workers. And, given this necessary assistance, the deaf become the most economically remunerative of all the classes known as 'special'. It is, therefore, a matter of much importance to the community that these deaf people should be adequately assisted to realize themselves in life, instead of being allowed to become burdens upon society merely from the lack of the helping hand at the proper time."

86 Harley Street,
London W.1.

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press

https://doi.org/10.1017/S0022215100068249 Published online by Cambridge University Press