

## A Study of 250 Patients Referred to a Department of Psychiatry for the Deaf

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**Summary:** 250 patients referred to a department of psychiatry for the deaf were selected by random sampling and studied. The results underline the need for specialised services for deaf patients of all types, not only those who communicate solely by manual methods. Patients are referred to this department suffering from mental illness and communication disorders, as well as from problems related to their deafness. Some of the difficulties of managing a supra-regional service are discussed.

Hearing impairment of any degree and with onset at any age can have far-reaching psychological and sociological implications. Moreover, these effects differ markedly. For example, severe deafness in adult life of acute or sub-acute onset can be an extremely traumatic experience, requiring adjustments in many areas of life, whereas profound deafness from birth or early age will affect the child's whole development. The former constitutes a sensory deprivation, the latter a sensory deficit, and they cannot be equated.

Although the hearing aid has been of immense benefit to many hearing impaired children, there are some who have no useful residual hearing for speech, even with amplification. Children with profound deafness, which dates from birth or early age, cannot develop speech and language normally through hearing, and invariably have poor speech and limited verbal language. Not surprisingly, they have to rely upon manual methods of communication, i.e. sign language and finger spelling (Denmark, 1973).

People with profound prelingual deafness are at a serious disadvantage when communication is necessary; therefore, specialised psychiatric services, with workers skilled in manual methods, are necessary for both assessment and treatment (Denmark & Eldridge, 1969).

Psychiatric services for the deaf began in the United Kingdom in 1964 when, following an investigation into the deaf population of two mental hospitals in the North of England (Denmark, 1966), a regular out-patient clinic was established at Manchester University. In 1968, a further monthly out-patient clinic was started at the Royal National Nose, Throat and Ear Hospital, London, and an in-patient unit was opened at Whittingham Hospital, Preston (Denmark & Warren, 1972). To date, over 1500 patients have been referred to the department;

this paper presents the findings of a study of 250 of these patients.

### Method

Two-hundred-and-fifty patients were selected for study by random sampling. The following features were investigated: (1) age, (2) sex, (3) marital status, (4) place of residence, (5) referring agency, (6) reason for referral, (7) cause of deafness, (8) types of deafness, (9) method of communication, and (10) diagnosis.

Of the 250 patients sampled, 124 were subsequently admitted. They too were studied according to age, sex, marital status, place of residence, admission status, length of stay, type of domicile prior to admission and after discharge, and diagnosis. Space does not permit reporting of details of all the findings, but these are available upon request from the author.

### Results

#### 250 referrals

*Age and sex:* Of the 250 referrals, 169 were male and 81 female; 97 were single, 38 married, 5 divorced, 7 widowed and 3 separated. Ages ranged from four to 72 years. The majority were children, adolescents and young adults, 22.4% being between the ages of 16 and 20 years, and 79.6% being under 40 years of age. Fifty-four patients were referred on more than one occasion.

*Residence:* Patients were referred from every Regional Health Authority in England (225), Scotland (11), Wales (9) and Northern Ireland (4). One patient was referred from Eire.

*Source of referral:* Inquiries regarding our services are received from a variety of sources, but we request a medical referral whenever possible. In 159 instances (63.6%), the referral was initiated by a social worker for the deaf; 57 patients were referred by other consultants—in mental illness (both adults and children), mental handicap, medicine, paediatrics, otology, and audiology. Only two patients initiated referral themselves, and in only three cases did general practitioners initiate referral to the service.

*Reason for referral:* The reasons for referral were varied. The majority (197 i.e. 78.8%) were referred for opinion as

to whether or not the individual was suffering from mental illness. Some had been charged with criminal offences (Table VIII). The second most common reason for referral was for assessment of individuals, mainly children, suffering from communication disorders.

*Type of deafness:* Deafness can be classified in a number of ways. Table I depicts the types of deafness, classified according to age of onset and degree of deafness. Profound deafness is defined in this study as deafness of a degree to preclude the understanding of speech, even with an aid or aids to hearing. Some patients had no effective means of communication; most of these were both deaf and mentally impaired, while six had no impairment of hearing, but had communication disorders of other aetiology.

TABLE I  
Type of deafness

Onset in childhood	Prelingual profound	186	} 234
	Prelingual partial	38	
	Post-lingual profound	10	
Onset in adult life	Profound	8	} 10
	Partial	2	
Not deaf			6
Total			250

*Cause of deafness:* Table II shows the cause of deafness.

TABLE II  
Cause of deafness

Congenital	Hereditary	Unspecified	21	} 34
		Pendred's syndrome	5	
		Usher's syndrome	5	
		Waardenburg's syndrome	3	
	Syphilis	1	} 50	
Rubella	13			
Rhesus incompatibility	2			
Perinatal	Prematurity	1	} 3	
	Anoxia	2		
Postnatal		Hereditary (Refsum disease)	1	} 36
		Otitis media	2	
		Measles	1	
		Meningitis	29	
		Cerebral tumour	1	
		Trauma	1	
		Presbycusis	1	
Not known			155	
Not deaf			6	
Total			250	

*Method of communication:* Table III shows the method of communication employed, though this does not necessarily imply that the subject has facility in that method. For example, some of those referred had no speech or lip-reading ability and no facility in sign language or finger spelling, yet they were able to communicate at a basic level by gesture. Such patients were included under 'manual' communication. Likewise, some patients attempted to communicate by speech which was unintelligible. They were included under 'oral'.

TABLE III  
Method of communication

Manual methods	124	
Deaf/Blind manual alphabet	2	
Oral	38	
Combined oral and manual methods	39	
Non-communicating	Adult 25 Child 25	46
Elective mutism		1
Total		250

*Diagnosis:* Table IV shows the diagnosis. The majority of patients were suffering from mental illness, but a significant number were referred with problems related directly to deafness. These are tabled separately (Table IVa). The third largest group were referred for assessment or treatment of communication disorders (Table IVb). Two patients had organic disease only; one of whom presented with abdominal pain; he had been treated for depression elsewhere and was regarded as being hypochondriacal, but was found to have a peptic ulcer. The second patient was referred as a case of psychogenic deafness and hysterical ataxia, but was suffering from Refsum's Disease.

TABLE IV  
Diagnosis

Mental Illness	Neurosis and personality disorder	26	} 104
	Schizophrenia	56	
	Affective disorder	14	
	Schizo-affective disorder	1	
	Organic state	4	
	Miscellaneous	3	
Developmental disorders of communication		48	
Problems related to deafness		58	
Miscellaneous		8	
No psychiatric abnormality		9	
Organic disease		2	
No final diagnosis		21	
Total		250	

*124 admissions*

Of the 250 patients referred, 124 (approximately 50%) were subsequently admitted for investigation and/or treatment; 42 patients were admitted on more than one occasion. No patient was admitted under the age of 11

TABLE IVa  
Diagnosis

<i>Problems related to deafness</i>	
Behaviour and adjustment problems	53
Depression due to acquired deafness	3
Alcoholism resulting from acquired deafness	1
Tinnitus	1
<b>Total</b>	<b>58</b>

TABLE IVb  
*Developmental disorders of communication*

	<i>Profoundly deaf</i>	<i>Severely deaf</i>	<i>Partially hearing</i>	<i>Not deaf</i>	<i>Total</i>
Spasticity and mental handicap	3	-	-	-	3
Mental handicap	14	1	2	1	18
Mental handicap and educational deprivation	7	1	1	-	9
Autism	4	-	2	1	7
Central language disorder	2	-	2	2	6
Other	-	1	2	2	5
<b>Total</b>	<b>30</b>	<b>3</b>	<b>9</b>	<b>6</b>	<b>48</b>

years. 72% of admissions remained in hospital for less than five months; eight remained in hospital for over twelve months.

Table V shows the admission status.

Table VI shows the place of residence from where patients were admitted and to where they were discharged.

## Discussion

### *Patient population*

Initially, the services were aimed at adult prelingually profoundly deaf people, who use manual methods of communication and who are mentally ill. Most patients have, as expected, been profoundly deaf but some have partial hearing; most have been prelingually deaf, but others have become deaf in later life. Four patients were both deaf and blind.

TABLE V  
Status

Informal	Section 5 Mental Health Act, 1959	109
Formal	Section 29 Mental Health Act, 1959	-
	Section 25 Mental Health Act, 1959	4
	Section 26 Mental Health Act, 1959	2
	Criminal Justices Act 4	1 } 2
	Powers of Criminal Courts Act 3	
	Section 60 Mental Health Act, 1959	6
	Section 65 Mental Health Act, 1959	1 } 7
<b>Total</b>		<b>124</b>

TABLE VI

*Place of residence from where patients were admitted and to where they were discharged*

	<i>Admitted from</i>	<i>Discharged to</i>
Home	76	87
Rehabilitation unit for the deaf	-	1
Psychiatric hospital	23	5
Hospital for the mentally handicapped	5	4
Special hospital	5	-
Hostel for the deaf	5	17
Hostel for the mentally handicapped	3	4
Hostel for the physically handicapped	1	-
Hostel unspecified	3	4
School for the deaf	1	1
Prison	1	-
Childrens home	1	1
<b>Total</b>	<b>124</b>	<b>124</b>

The problems of patients referred to the department are diverse; the majority fall into three main categories: (i) those suffering from mental illness, (ii) those with problems regarded as directly related to their deafness and (iii) those with communication disorders.

The assessment and treatment of mental illness when patients have serious communication difficulties can be extremely difficult and time-consuming, even when workers have facility in manual methods of communication (Denmark & Eldridge, 1969). It is of fundamental importance, therefore, that workers concerned have facility in manual methods of communication, as well as insight into the psychological and sociological aspects of different types of deafness. The fact that over 78% of patients were referred for opinion as to whether or not they were suffering from mental illness, or whether their problems were related to their deafness, reflects the immense difficulties presented when psychiatric workers do not have facility in manual methods of communication, and are therefore unable to communicate effectively with those who suffer from prelingual profound deafness.

The second largest group were those with problems related to deafness; of these, the large majority presented with problems of behaviour and adjustment. The communication difficulties of prelingually profoundly deaf children can have serious consequences in terms of cognitive and orrectic development, especially if parents do not receive the appropriate counselling and guidance to enable them to communicate effectively with their child in the early formative years (Denmark *et al*, 1979). Many deaf children are excluded from schools for the deaf because of their disturbed

behaviour, and school leavers and young deaf adults also often present with similar problems. A decision was made to accept this type of young deaf person for assessment and treatment, but this meant that extra facilities have had to be provided and extra staff appointed. In addition to the usual workers, the department employs two social workers for the deaf, two teachers, and an art therapist. The management of these young people in a hospital setting requires staff with personal qualities of a high order. The referral of young people with behaviour and adjustment problems probably accounts for the relatively large numbers of younger patients referred to the service.

The acute or subacute onset of bilateral severe or profound deafness can be an extremely depressing experience. Three of the patients referred suffered from depression and one patient became alcoholic directly as a result of acquired deafness.

The third largest group of patients were those who were referred specifically for the assessment or treatment of communication disorders; the majority were children suffering from developmental disorders of communication (Table IVb). The causes of developmental disorders of communication include: mental impairment, deafness, infantile autism, specific language disorder, and expressive motor disorders. The majority of patients with communication disorders referred were deaf patients with additional handicaps, but some had communication disorders of other aetiology. Prelingual profound deafness precludes the development of verbal language through hearing. When a prelingually profoundly deaf child has an intellectual handicap of a degree to preclude literacy, then unless that child is given the opportunity to acquire sign language skills, he will remain a non-communicating child (Denmark, 1978). We believe that workers with skills in sign language have an important part to play in the assessment of patients who have no verbal language.

In 33 instances, deaf people who had been referred for psychiatric assessment had been charged with criminal offences (Table VII). The high incidence of referrals of forensic cases of a sexual nature appeared in many instances to be a reflection of their poor knowledge of sexual matters and of their limited opportunity for contact with the opposite sex, with consequent frustration.

#### Source of referral

In times of stress or need, deaf people turn to those with whom they can communicate most effectively. Over 63% of referrals to this service were initiated by social workers for the deaf, who are trained in

TABLE VII  
Forensic psychiatry offences

Crimes against the person		Male	Female	Male & Female
Involving assault	Grievous bodily harm	4	-	7
	Assault	-	1	
	Murder	2	-	
Sexual crimes	Rape	1	-	18
	Attempted rape	1	-	
	Exposure	2	-	
	Indecent assault	6	-	
	Buggery and gross indecency	1	-	
Crimes involving property				
	Deception	2(1×7)	-	14
	Taking and driving away	1	-	
	Driving without a licence etc.	1	-	
	Burglary	2	-	
	Theft	4	-	
	Shoplifting	-	2	
	Criminal damage	1	1	
Other	Breach of the peace	1	-	1
Total				33

manual methods of communication. It is important, therefore, that they receive the necessary training in matters relating to mental illness, so that they can fulfil their very important roles.

#### Psychiatric services

The wide variety of problems presented, and the fact that patients are referred from all areas of the United Kingdom and beyond underline once more the need for special psychiatric services for the deaf.

Unfortunately, many patients cannot, because of the distance involved, be treated as out-patients or day-patients, and therefore have to be admitted. Similarly, difficulties arise in follow-up, and the high re-referral and re-admission rate is probably a reflection of this. Travelling for patients to out-patient clinics, and for relatives and friends visiting in-patients, is often extremely expensive. In some instances, those involved can be reimbursed, but most have to bear the cost themselves.

The benefits of such a service are difficult to evaluate, but the facts that few patients admitted from other hospitals had to return to the parent hospital, and that none of the five patients admitted from special hospitals had to return there, are a reflection of the usefulness of such a service (Table VI).

At present, there are two residential psychiatric units for deaf patients in the United Kingdom—one at Whittingham Hospital, Preston, and one at

Springfield Hospital, London. In Glasgow, there are two psychiatrists who have facility in manual methods of communication, and deaf patients requiring hospitalisation are admitted under their care.

Our residential unit has only 24 beds (12 male and 12 female) and has a national catchment area. Consequently, there is often a long waiting time for admission, and long-term patients cannot be accepted; patients are accepted for up to twelve

months only.

There are no facilities in the UK for deaf patients who require long-term hospital care, and many still remain in psychiatric hospitals and hospitals for the mentally impaired, living in total isolation because staff are unable to communicate with them effectively.

At present, there are no psychiatrists in this country in training to work in this very important field.

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