THE DEAF AND PARTIALLY HEARING IN MENTAL HANDICAP HOSPITALS: THE DISADVANTAGED MINORITY?

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The presence of hearing impairment in a mentally handicapped person does not produce a simple additive effect of hearing handicap on top of mental handicap. Rather the effect is one of reciprocal limitations. A hearing impaired individual would have a more difficult time learning because of hearing loss, which would increase retardation. Increased retardation would further diminish use of auditory input and cause further retardation (Stewart, 1978).

The diagnosis and assessment of hearing impairment in an individual is essential in order to alleviate the condition if possible and to pinpoint the cause and extent of any language deficit.

Since the mentally handicapped are often found to be speech deficient, there is a danger that a deaf resident, without speech, may be mistakenly thought to be mentally retarded, or more mentally retarded, than he really is (Denmark, 1978).

In an institutional setting the deaf and partially hearing often represent a 'hidden' minority group within the hospital population. These residents may be absorbed into the hospital community and little priority given to this aspect of their handicap even though impaired hearing has serious consequences for everyday living and long term resident management affecting assessment, treatment and rehabilitation.

Tempowski, Felstead and Simon (1974) have suggested that one in three of the deaf mentally handicapped presently in hospital do not require permanent care, and that services for the mentally handicapped deaf person must be improved in order to reduce the numbers of these placed inappropriately in mental handicap hospitals.

The present study arose from data obtained during a survey of the 1124 residents in a hospital group for the mentally handicapped. This survey produced information on 95 deaf or partially hearing persons. These residents became the subject of a more detailed research study of their respective skills in communication and social competence. The study also investigated services presently available to them in terms of training and rehabilitation, in order to assess whether present provision met their needs (Kropka, 1979).

This paper will examine the results of a comparison between the hearing impaired groups and a control group of the non-hearing impaired mentally handicapped on a rating scale of social competence.

Training and rehabilitation facilities will also be examined in terms of provision for the hearing and hearing impaired population and results discussed in terms of the comparison measure mentioned.

METHOD

The Social Training Achievement Record (STAR) (Williams, 1980) was chosen as the means by which social competence skills would be rated. It had been developed for use in this hospital group as a criterion-referenced rating scale for rehabilitation training, and staff were already familiar in its use. The names and location of the deaf (n=46) and partially hearing (n=49) residents were already known. A control group of the non hearing impaired mentally handicapped (n=50) was chosen randomly using the residents case numbers. The mean ages and standard deviations in age distribution were calculated and were found to be not significantly different ($F=1.19$, p is n.s.). The mean ages for the deaf, partially hearing and the control group were 50.26, 57.71, and 50.0 years respectively.

The nursing staff working on the wards rated abilities of the subjects using the STAR form. The researcher assessed the education skills section using appropriate test materials in a test situation.

Information on training and rehabilitation facilities was obtained from social training and education services and OT/IT Units.

RESULTS

The 16 STAR sections were combined in clusters of related skills under seven headings. Table 1 shows these clusters and their components.

TABLE 1

Composition of Clusters of Related Skills from Star Sections.

CLUSTER	STAR SECTION COMPOSING CLUSTER
Personal.	Co-operation; toilet training; dressing; feeding; personal hygiene.
Physical.	Motor skills.
Communication.	Expressive skills. Receptive skills.
Social.	Social interaction; independence; use of public amenities.
Domestic.	Domestic skills; cooking; use of equipment.
Work.	Work.
Education.	Basic discrimination skills; education.

The mean percentage score and standard deviation for each experimental group on each cluster was calculated. The data were then statistically analysed. The method employed involved the use of normal significance tests between means for large samples. In fact as Table 2 indicates, no significant differences were found between any of the comparisons made of the three groups at the 0.05 level.

TABLE 2

Summary of data analysis of comparisons between means using normal significance tests.

COMPARISON	STAR CLUSTER	Z - SCORE	SIGNIFICANT/ NOT SIGNIFICANT (p .05)
Comparison of the partially hearing group with the control group	Personal	0.68	n.s.
	Physical	0.07	n.s.
	Communication	0.27	n.s.
	Social	1.19	n.s.
	Domestic	0.55	n.s.
	Work	0.40	n.s.
	Education	1.63	n.s.
Comparison of the deaf group with the control group	Personal	1.10	n.s.
	Physical	0.19	n.s.
	Communication	0.86	n.s.
	Social	0.59	n.s.
	Domestic	0.20	n.s.
	Work	0.14	n.s.
	Education	0.86	n.s.
Comparison of the partially hearing group with the deaf group	Personal	0.63	n.s.
	Physical	0.13	n.s.
	Communication	1.16	n.s.
	Social	0.63	n.s.
	Domestic	0.43	n.s.
	Work	0.23	n.s.
	Education	0.66	n.s.

The training facilities available for the hearing impaired mentally handicapped in comparison with the control group were studied. Present provision was examined in terms of adequacy. From a variety of educational and recreational facilities available three major training areas were investigated. These were social training, further education and OT/IT.

The umbrella term of social training includes self-help and social skills training. Further education includes training in literacy, numeracy and academic and educational skills.

Table 3 shows the percentage of hearing impaired persons attending such training compared to the non hearing impaired control group in the hospital.

TABLE 3

The percentages of the hearing impaired group and the control group attending 3 specific training units.

TYPE OF TRAINING	PERCENTAGE OF HEARING IMPAIRED PERSONS ATTENDING (N=95)	PERCENTAGE OF NON HEARING IMPAIRED PERSONS ATTENDING (N=50)
SOCIAL TRAINING	1	6
FURTHER EDUCATION	1	6
OT/IT	19	18

There is obviously significantly less training offered in the areas of social training and further education for the hearing impaired population, but not as regards OT/IT.

DISCUSSION

Preliminary research into the hearing impaired minority has indicated that they are a disadvantaged group in terms of provision of social training and further education.

This finding is particularly interesting in the light of comparisons made between the hearing impaired and a control group of the non hearing impaired mentally handicapped on a rating scale of social competence, which indicated no significant differences between these two populations.

It is hypothesised that communication deficits are a major causal factor in excluding the hearing impaired mentally handicapped from such training groups.

Though no significant differences were found in communication skills between this population and the control group this is felt to be, in part, due to limits within the measure as opposed to a lack of true differences.

Support for the communication deficit hypothesis comes from the area of communication training. 17 persons are currently in training, five of whom (29%) are hearing impaired. Time-tabled instruction in British Sign Language is currently available for six residents. Candidates are chosen by staff working most closely with them in conjunction with training team objectives. British Sign Language training was originally intended for the hearing but non-communicating residents. However, three of the six currently under instruction are hearing impaired and were suggested by staff as being in need of a viable means of communication.

The present research has indicated that the hearing impaired mentally handicapped are a disadvantaged minority group and that there is a need to improve services for them.

The initial moves towards this end have already been made in terms of facilities to be provided in a new unit for the assessment of sensory handicaps within this hospital group.

Future research planned includes investigation of the hypothesis suggested by this preliminary work that staff underestimate the hearing impaired mentally handicapped person and will include the development of an assessment battery tailored to this population, particularly with regard to communication. Such an assessment battery is seen as essential towards guiding the rehabilitation of the hearing impaired mentally handicapped person.

CONCLUSIONS

An investigation of the 95 deaf and partially hearing residents within a mental handicap hospital, showed them to be a disadvantaged minority in terms of rehabilitation facilities.

No significant differences were found between the deaf, the partially hearing, and a random control group of the non-hearing impaired mentally handicapped on a rating scale measure of social competence.

However, significantly fewer of the hearing impaired were receiving social training and further education programmes.

No significant differences were found in the numbers attending OT/IT Departments.

Communication deficits are hypothesised to a major causal factor in excluding the hearing impaired mentally handicapped from existing training schemes.

Further work planned in this hospital group includes the development of assessment procedures specifically designed for the hearing impaired mentally handicapped population which will guide provision of rehabilitation services.

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