A SURVEY OF AUDIOLOGIC SERVICES IN RESIDENTIAL AND DAY SCHOOLS FOR THE DEAF AND HARD OF HEARING

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INTRODUCTION

Prior to 1962, the role of audiology in schools for the deaf was a controversial issue. In 1962, under the auspices of the Vocational Rehabiaitation Administration, the Joint Committee on Audiology and Education of the Deaf (JCAED) was formed. The purpose of this committee was to enhance communication between speech and hearing professionals and educators of the deaf. Further, it was to provide more effective services for deaf individuals.

A survey conducted by JCAED (Ventry, 1965) raised several questions concerning the adequacy of audiologic services available in schools for the deaf. Three of the more salient conclusions derived by this survey were:

1. A need for greater utilization of audiologic personnel in the educational programs for the deaf.
2. A need for deaf programs to take greater advantage of audiologic services available at speech and hearing centers.
3. A need for maximum audiologic services to be provided for, and utilized by, deaf children and adults.

Siegenthaler and Owsley (1968) reported that 35% of all residential schools for the deaf had staff audiologists. A more recent report of JCAED (Fricke and Murray, 1969) concluded that emphasis is being placed on identification of children with hearing loss rather than on education and continued re-evaluation of deaf and hard-of-hearing students. A further conclusion of the 1969 reports was the need for improved delivery systems to provide speech and hearing services to hearing-impaired children.

Subsequent to these surveys, Northern et al., (1972) conducted a further survey to ascertain if the previous recommendations had caused any changes in hearing services for residential school programs. They concluded that "the goal of maximum audiological services for deaf students is closer now than in 1965, but certainly has not yet been achieved." Three recommendations were made:

1. Solidify the duties and responsibilities of the school audiologist.
2. Establish a well-defined hearing aid program.
3. Development of a positive attitude toward the school hearing service program.

The material which is presently available does little, if anything, to delineate specific (rather than general) strengths and weaknesses of

audiologic services. Therefore, this survey sought to provide more detailed information on the strengths and weaknesses of hearing services which are now provided.

THE SURVEY

A questionnaire was devised and sent to 108 state residential and day schools identified in the directory issue of the American Annals of the Deaf (1969). Responses were obtained from 53 programs. Of these 53 respondants, 23% did not employ an audiologist. The two most frequent reasons were: a) inadequate funds to hire an audiologist and b) duplicated services available in the community. Only 3.6% of the sample population felt that audiologists were not interested in working in this type of program or that the present staff was adequate to meet needs. (See Appendix for complete questionnaire.)

Seventy-seven percent of the respondants employed an audiologist: 62% of these were full-time positions. Sixty-two percent of the audiologists were ASHA certified (including two reported to be in their clinical fellowship years).

The following were the areas in which the audioligists provided services:

Screening Audiometry	47%
Complete Audiologic Evaluations	75%
Hearing Aid Evaluations	70%
Hearing Aid Orientation	62%
Care, Maintenance, & Calibration of Equipt.	62%
Speechreading	19%
Auditory Training	21%
Other	24%

Research and counseling were the two functions most often listed under the category of "other." It is interesting that the (re)habilitative areas of speechreading and auditory training had the lowest percentage of participants.

In general, the three strengths most frequently mentioned were:

1. More reliable audiologic evaluations because the audiologist has ready access to the child in both clinical and classroom situations.
2. The audiologist is able to keep close tabs on hearing aids (old and new) and in general, follow-up students thoroughly.
3. Convenience of audiologic services close at hand.

The three most frequently noted weaknesses were:

1. Lack of support services (i.e. in-service to teaching staff.
2. Inadequate care/maintenance of auditory training equipment and hearing aids.
3. Communication breakdowns between the hearing clinic, school, and home.

There appeared to be a definite consensus as to the way(s) audiology has not met its responsibility to the education of the deaf and hard of hearing. A lack of knowledge of the educational implications of deafness was most frequently mentioned. In conjunction with this, it was often mentioned that the audiologist did a poor job interpreting these educational implications to parents. The second most frequently noted, was that training programs have stressed clinical audiology and audiologists are weak in rehabilitative areas, including basic constructs of auditory training.

A consensus again appeared in relation to the contributions an audiologist should make to programs for the deaf and hard of hearing. It was felt that audiologists should provide more in-service training for the teaching staff in the areas of: interpretation of audiogram; development of individualized auditory training programs; care, maintenance and calibration of both hearing aids and all types of auditory training units. The second most frequently mentioned contribution was that the audiologist serve as a consultant and counselor to the parents. In relation to this point, it was often stated that the audiologist should aid in the establishment of appropriate levels of expectation on the part of the parents.

DISCUSSION and RECOMMENDATIONS

In general, it was found that the range and depth of audiologic services was quite good, as far as diagnostic services were concerned. This finding is contrary to those reported by JCAED (Ventry, 1965) and Siegenthaler and Owsley (1968). The findings of JCAED (Fricke and Murray, 1969) are in closer agreement, at least on one point, with the results of this survey. The one point of agreement is that it is obvious that the emphasis is being placed on identification of children with hearing losses rather than on the education of such children.

The most interesting, and perhaps the most incriminating finding, was the fact that hearing aid orientation, speechreading, and auditory training services were low in relation to full audiologic and hearing aid evaluation activities. Not more than 22% of the audiologists participating in the survey were involved in the (re)habilitative areas of speechreading and/or auditory training.

In reviewing the past literature, it was noted that the majority of recommendations which were made relative to the improvement of hearing services emphasized the need for greater utilization of audiologic services by educational programs for the deaf. Unfortunately, few recommendations have been postulated which could serve to enhance and strengthen the contributions an audiologist might make to programs for the deaf and hard of hearing. Therefore, the majority of audiologists have remained content with the conduction of test batteries which allow for site of lesion location (cochlear, retrocochlear). This is not to say that such testing is not important; however, in some instances such identification is merely an academic exercise. What is needed is a prognosis as to how this particular child will adjust to amplification; what

type of amplification will be most beneficial; what components should be considered when developing an individualized program of management; and finally, what are realistic levels of expectation for this individual, relative to auditory communication.

In view of the past findings and the results of the present survey, the following recommendations are made to audiologic personnel, both in the field and particularly those in training:

1. That the audiologist become more knowledgable in the educational implications of deafness, particularly in the area of development and acquisition of language.
2. That the audiologist become more proficient in the guidance and counseling of educators and parents relative to realistic expectation levels of auditory communication potential for specific individuals.
3. That the audiologist become more knowledgable and proficient in (re)habilitative areas such as speechreading, auditory training, care and maintenance of individual hearing aids and auditory training units, and so on. This should include not only theoretical constructs, but also, practical, applicable management and therapy techniques.

It appears, then, that educational facilities for the deaf and hard of hearing are well on the way to maximal utilization of audiologic services presently available. It further appears obvious that it is now the audiologist's responsibility to become more proficient/better equipped to deal with and in educational and (re)habilitative areas.

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APPENDIX

Questionnaire sent to 108 residential and day schools for the deaf and hard of hearing.

1. Do you employ an audiologist on your staff? ☐ Yes ☐ No

2. If an audiologist is employed, is it a
   - ☐ Full time
   - ☐ Part time
   - ☐ Consulting position

3. Is the audiologist ASHA certified? ☐ Yes ☐ No

4. If you do not employ an audiologist, please indicate why you do not:
   - ☐ Inadequate funds to hire an audiologist
   - ☐ Duplicates services available in the community
   - ☐ Audiologists are usually not interested in working in this type of program
   - ☐ Present staff adequate to meet needs
   - ☐ Other (Specify)

5. If you employ an audiologist or are planning to employ an audiologist, in which areas does/will this person function?
   - ☐ Screening audiometry
   - ☐ Complete audiologic evaluations
   - ☐ Hearing aid evaluations
   - ☐ Hearing aid orientation
   - ☐ Care, maintenance, calibration of equipment
   - ☐ Speechreading
   - ☐ Other (Specify)

6. Describe briefly the strengths and weaknesses of the audiological services you provide/receive:
   Strengths:
   A
   B
   C
   Weaknesses:
   A
   B
   C

7. In what important way(s) has audiology **not** met its responsibility to the education of the deaf and hard of hearing?

8. What, if any contributions (excluding diagnostic testing) can/should an audiologist make to a program for the deaf and hard of hearing?