

Clinical Reports

The following papers are not reviewed by the manuscript editors but are published with only minor editing as submitted. They contain information which we feel has valuable clinical implications. Ed.

Some Often Neglected Principles of Hearing Conservation Programming

(This report is an abstract of a paper presented at the 1973 CSHA / SHAA Annual Convention).

If hearing conservation programming is to be effective and efficient, a program is incomplete without comprehensive interdisciplinary co-operation and longitudinal follow-up of each identified case. Professionals can no longer continue to work in isolation but must all assume responsibility by using a co-ordinated approach toward aural rehabilitation. It is recommended that a team co-ordinator be appointed to monitor the total program. This assumes the appointee has the competency, time and resources to assure efficiency and effectiveness. Because hearing loss is significant to the learning process and large numbers are suffering from hearing loss, there is a need to have

hearing conservation programming available to every child, no matter how small or remote the area of residence.

The effectiveness and efficiency of any program will be in direct proportion to the personnel doing the work, which reflects training, experience and personnel flexibility. The objective of any hearing conservation programme is the discovery of persons who have impaired hearing. The first step is to identify, through screening, definable degrees of hearing loss of the largest number of children or adults possible. Identification testing involves division of a population into two distinct groups. Those having essentially normal hearing, and those who are in need of further study. During the screening examination, no attempt should be made to determine how much impairment a given person may have. This is accomplished at a later time through diagnostic testing with an appropriate tester, clinical audiometer, standardized environment and other necessary clinical instrumenta-

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tion. There continue to be many problems in maintaining equipment calibration, maintaining adequate environmental conditions and maintaining adequate standards for personnel conducting the testing.

The criterion for failure needs to be carefully established. It is now evident that previously accepted levels classifying educationally significant hearing loss are outmoded because of a preponderance of research indicates that very mild hearing loss is educationally significant. This fact must be recognized by all professionals intervening with communication disorders. There is a need for closer inter-disciplinary management of all children demonstrating mild conductive and sensory-neural hearing loss. If prevention is truly a goal, it is necessary to identify children with hearing loss well before school entrance. It is recommended that Public Health Clinics screen children minimally twice before school entrance. Ideally, screening could be implemented between the ages of six months and eighteen months, and between twenty-four months and thirty-six months.

Upon school entrance, hearing conservation programming should continue identification procedures periodically through all grade levels. It is unsatisfactory to screen only at school entrance and perhaps at one other grade level. It is more imperative than ever to screen at the upper grade levels if one considers apparent recent success of medical chemo-

therapeutic treatment of oto-sclerosis.

A review of the literature indicates the recommendations made by the Conference on Identification Audiometry can be regarded as effective for hearing conservation programming. Unfortunately, there continues to be a dearth of valid hard-core data available on prevalence and incidence of hearing loss in Canada because of discrepancies in test equipment calibration, test environment, test criteria, multiplicity of hearing tests employed, qualifications of testers and sub-standard data collection and reporting procedures. There is a definite need for development and enforcement of standards covering all phases of hearing conservation programming and delivery of service.

In the future, it appears that the audiologists will utilize impedance audiometry more extensively in screening programmes. Preliminary investigation reveals an excellent potential for not only the identification of conductive lesions but also for the identification of sensory-neural lesions. For extensive current use, it appears that equipment cost factors and adequate training for screening technicians will limit extensive utilization. Equipment manufacturers have indicated they hope to produce an economical impedance bridge with provision for strip-chart recording in the near future.

Supportive personnel such as aides, assistants and technicians can be successfully integrated into

hearing conservation programming if their roles are clearly defined and their work carefully supervised.

It has been suggested that conventional identification audiometry may be replaced by impedance measurement. It is advisable to evaluate comparative studies before eliminating effective current procedures such as those described by the Conference on Identification Audiometry. It may be discovered that a combination of such procedures and methodologies will prove most effective.

One of the most prevalent current fallacies is based upon the premise that parents are the best identifiers of children with hearing loss, followed by teachers, nurses and friends. The assumption follows that there is no need for additional standardized auditory measurement, which would not only identify pathology but serve as the foundation for effective learning intervention, delineating specific remedial procedures. If this fallacy continues, we are restricting the potential of children with hearing loss. It is necessary to have comprehensive standardized hearing conservation programs encompassing identification audiometry, history, audiometric testing, medical examination and rehabilitation programming, all monitored longitudinally through an inter-disciplinary team. If one facet is omitted, we omit children with problems who could be successfully rehabilitated.