
LETTER TO THE EDITOR

Audiology and the Geriatric Education Centers

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The U.S. Department of Health and Human Services is funding a nationwide network of interdisciplinary Geriatric Education Centers (GECs) which train professionals in the principles of geriatric care. A major aim of the GEC is to improve the interdisciplinary approach to gerontologic health care by providing educational and clinical opportunities for health professionals to learn from each other and work together on common issues. While most of the GECs established across the country include the disciplines of medicine, nursing, social work, and physical/occupational therapy, very few have incorporated speech-language pathology or audiology into their geriatric training programs. The purpose of this paper is to acquaint academicians, researchers, and clinicians with the GEC programs and to encourage further expansion of the GECs across the country to include rehabilitative audiology concerns.

We are entering an era when significant demands are being placed on society by the increasing number of older persons and a time when health care professionals must be prepared to meet the challenge of caring for an aging society (Butler, Fulmer, Dycht-wald, & Newbold, 1987). America's 28.6 million elderly people comprise 12% of the population and one sixth of all adults over age 21. The absolute number of elderly persons, and the growth in the number and proportion of older adults, is "striking in its dimensions and significant in its portents" (Association of American Medical Colleges, 1983, p. 108).

The dimensions of the challenge are as follows: The proportion of the population over 65 is increasing at a more rapid rate than is that of the younger age group such that, by the year 2030, the number of people over 65 years will equal the number under 5 years and, by the year 2080, the number of people over 80 years will far exceed the number of people under 5 years (Lobeck, 1987). One of every five people in the country will be at least 65 years of age by the year 2030. The fastest growing segment of the population currently is the over-85 age group. Their number has grown five times as fast as that of the rest of the country's population.

The elderly tend to suffer from chronic disease such that over 80% report at least one identifiable chronic condition (Williams, 1986). The most common of the chronic

conditions are some form of arthritis, hypertension, and impaired hearing (National Center for Health Statistics, 1981). Self-reported hearing impairment is the third most prevalent of the chronic conditions, while self-reported visual impairment is the sixth most prevalent condition among the non-institutionalized elderly population (National Center for Health Statistics, 1981). In fact, help for the elderly hearing handicapped has been assigned an important priority among the "non-killers" due to its contribution to the disability burden (Naunton, 1986).

Each of these chronic disabilities poses barriers to carrying out the activities of daily living. Those individuals over 80 years and living in nursing homes are at the greatest disadvantage (Williams, 1986). A basic goal of geriatric care should be to improve functional capacity rather than merely provide a diagnosis. The emphasis is thus on rehabilitation.

THE GOVERNMENT'S RESPONSE

Geriatric education has high priority for medical and health-related professionals and is increasingly cited as a matter of national importance by health care authorities. Preparing all health care professionals to meet the challenge posed by the rapidly growing elderly population is of particular importance because the problems of elderly adults are multifaceted, making geriatric care a team enterprise (Butler et al., 1987). Cooperation between and among disciplines participating in the regimen of care for the elderly may come about through re-education of health care professionals.

In response to the problem of a growing shortage of geriatric health care professionals, the Bureau of Health Professionals of the U.S. Department of Health and Human Services has funded a nationwide network of 31 multidisciplinary regional Geriatric Education Centers (GECs). The mandate to the GECs is to serve as regional geriatric education resources for community health care professionals and faculty at universities as well as medical centers. Each of the GECs has established its own approach to the training of professionals in their region. In short, each center serves as a laboratory to test different approaches to geriatric education (Karuza, 1986). In addition, there is little overlap among the GECs in the disciplines which are represented. The disciplines of medicine, nursing, dentistry, pharmacy, and social work are represented in the majority of GECs. However, audiology, podiatry, health education, optometry, and respiratory therapy are represented in three or fewer GECs across the country. Finally, some centers have adopted a regional model and some, a statewide model; some have developed a formal (certificate bearing) program and others use an in-depth two-week seminar approach (Karuza, 1986). Irrespective of the differences among the GECs, the goal across GECs is to create a ripple effect in geriatric training as professionals who attend the GECs pass on their new interdisciplinary perspective to their colleagues (Karuza, 1986).

THE HUNTER/MOUNT SINAI GERIATRIC EDUCATION CENTER

Rose Dobrof, DSW, and Robert Butler, MD, co-directors of the Hunter/Mt. Sinai GEC, strongly advocate the multidisciplinary approach to health care for the elderly. For the 1986-1987 Hunter/Mt. Sinai GEC, they recruited faculty from medicine, nursing, social work, nutrition, physical therapy, speech-language pathology, and audiology. Podiatry and community health services were included in the fall of 1987.

The programmatic objectives of the Hunter/Mt. Sinai GEC include preparing educators and practitioners in these fields to offer formal coursework and training programs about aging and its impact on professional practice. One of the anticipated outcomes was a strengthening of ties between academic institutions and provider agencies so that future educational programming can be more responsive to manpower and continuing education needs in the field of gerontology.

In an effort to realize each of its goals, the Hunter/Mt. Sinai GEC has developed a program that is discipline specific and interdisciplinary. Professionals representing each discipline (these individuals are referred to as associates) are required to complete 50 hours of geriatric education, 21 hours specific to the associate's own discipline, 21 hours in interdisciplinary learning events (e.g., functional assessment of the geriatric patient and gero-design for living), and 8 hours of pedagogical training. The discipline-specific education consists of a series of seminars in each discipline led by a GEC faculty member. Associates are expected to attend the complete series of discipline-specific lectures which, in the case of audiology, updates practitioners about research on the identification, evaluation, and management of hearing-impaired elderly adults. (See Table 1 for an example.) Interdisciplinary educational events are held throughout the year on a wide variety of topics (e.g., functional assessment, gero-design, vision and aging, pharmacology, and geropsychiatry). Associates select the workshops, site visits, colloquia, or seminars which interest them and meet their educational needs. The pedagogical workshops are designed to teach skills for developing and evaluating educational programs in geriatrics.

Table 1
Sample Discipline-Specific Course in Audiology

Lecture 1: Overview of the GEC; Demography of aging; ageism; physical, psychological and social correlates of the aging process.
Lecture 2: Identification of the hearing-impaired elderly: Role of audiologist, primary care physician, and caregivers.
Lecture 3: Update on diagnostic procedures and findings with the elderly: Implications for rehabilitation.
Lecture 4: Aging and rehabilitation; the measurement of hearing aid satisfaction.
Lecture 5: The role of the audiologist and speech-language pathologist in multi-disciplinary assessments.

AUDIOLOGY EDUCATION IN THE HUNTER/MT. SINAI GEC

The discipline of audiology became a part of the GEC when the Center entered its second year of the funding cycle. Its relevance to other disciplines, especially medicine, is increasingly being acknowledged. For example, it is apparent from Table 2 that the ability of elderly individuals to communicate with health professionals and knowledge of age-related changes in the auditory system are integral to the fulfillment of the majority of the objectives of a geriatric medical education rated most highly by a panel of geriatricians and gerontologists (Robbins, Fink, Kosecoff, Vivell, & Beck, 1979). The

Hunter/Mt. Sinai GEC faculty, in acknowledgement of the contribution of hearing to the quality of life of older persons and the importance of hearing loss in differential diagnosis of older adults with cognitive, metabolic, neurologic, and affective disorders, have proposed that a session on sensory losses be included in a core curriculum in geriatrics which might be offered at institutions across the country. Finally, a review course for the Geriatric Medical Examination which is co-sponsored by Mt. Sinai Hospital and the American Geriatrics Society will include an overview of hearing loss in the elderly.

Table 2
Objectives for Geriatric Medical Education

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1. Obtain through interview an accurate medical history of the elderly patient to include such psychosocial history as morale and family/social interaction as well as ability to perform daily activities.
 2. Demonstrate appropriate communication and interpersonal skills when interacting with the elderly.
 3. Perform and record complete physical examinations on the elderly with specific attention to, for example, normal physical signs of aging, functional assessment, and mental status testing.
 4. Counsel the elderly patient about preventive medicine (e.g., health screening and patient education).
 5. Provide humanistic care to the elderly.
 6. Distinguish normal from pathologic aging (e.g., with respect to cognitive function, personal adjustment, and illness behavior).
 7. Describe health care provider's biases and beliefs about aging and the aged.
 8. As part of the assessment, order special clinical tests such as clinical laboratory tests, radiologic assessment, and diagnostic procedures.
 9. Maintain comprehensive and up-to-date medical records reflecting multiple medical and psychosocial problems.
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Note. From Robbins, Fink, Kosecoff, Vivell, & Beck (1979).

From the perspective of the audiology associates, the inclusion of audiology into the GEC has been a professionally fulfilling experience. These associates have noted (a) a commitment to abolishing ageism on the part of the professionals associated with the GEC, (b) a recognition of a place for audiology in multidisciplinary management of the elderly, (c) a receptivity of non-communication specialists to the role of hearing in effectively meeting health care needs of the elderly, and (d) opportunities to interact on a regular basis with colleagues from other disciplines regarding aging and hearing loss.

DISCUSSION

The faculty associated with the Hunter/ Mt. Sinai GEC are committed to promoting geriatric education within the curricula of all health, allied health, and human services professions. Fifty-five per cent of adults with hearing loss severe enough to introduce a

barrier to communication are 65 years or older and the majority of hearing aid users in the United States are over 60 years of age (Goldstein, 1984). Despite this prevalence of hearing loss, the elderly represent only 31% of audiologists' caseload (Hyman, 1987). In contrast, the prevalence of hearing loss in children under 5 years is one per cent, yet this young age group represents 25% of audiologists' caseload (Hyman, 1987). The discrepancy between prevalence of hearing disorders and utilization of audiologic services may reflect a lack of interest on the part of clinicians in developing a caseload of older adults. A potential for ageism may be exacerbated by a feeling of ill-preparedness academically and clinically to evaluate and manage hearing-impaired elderly adults. The growth in the over-65 population will continue to affect the distribution of audiology caseloads through the 1990s and clinicians must be competent to evaluate and manage this burgeoning population.

While a course in pediatric audiology is required in the majority of graduate programs in audiology across the country, few if any programs require a course in geriatric audiology or communication problems of the elderly. This omission from the curriculum suggests that educators are not aware of the overlapping issues and common skills required to evaluate and rehabilitate children and adults (Lobeck, 1987). The similarities between pediatrics and geriatrics do not end with the fact that they deal with the ends of the age continuum (Lobeck, 1987). Table 3 highlights the overlap in management of individuals at both ends of the spectrum, necessitating clinical practice and academic training in geriatrics as well as pediatrics. As the number of older persons will soon be as great as the number of younger persons, especially the very young and the very old, it is inevitable that the rehabilitation of the old will be practiced as widely as the habilitation of the very young (Lobeck, 1987). This inevitable burgeoning of the

Table 3
Similarities Between Pediatrics and Geriatrics

1. Social and economic changes were the stimulus for the origin of pediatrics and the impetus for the development of geriatrics.
2. The expression of disease is masked in both young and old; significant symptoms and signs may be absent despite the presence of major disease.
3. The geriatrician and the pediatrician face the same imperative: They must strive to improve function in the face of chronic disability.
4. Pediatrics and geriatrics have intense interest in the role of the family. Family responsibility for the chronically disabled is a major issue in both disciplines.
5. The folklore surrounding child rearing is of equivalent intensity to that of aging.
6. Incomplete histories, involvement of many social agencies, difficulty in communication of plans of management, and need for techniques of assuring compliance with management plans are everyday occurrences in pediatrics and geriatrics.
7. The team approach to health care is an established part of pediatric practice as it should be in geriatric practice.

Note. From Lobeck (1987).

elderly population requires a major change in attitudes toward the elderly by clinicians and educators. Only by addressing the needs of elderly clients in general, and their communicative needs in particular, can we guarantee the profession of audiology its own health and longevity (Butler et al., 1987).

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