Including Occupational Therapy in Low Vision Rehabilitation

An estimated 3 million Americans are currently living with low vision, a number that is expected to increase to 6 million by the year 2030 (Orr, 1992). The majority of these persons are older and generally otherwise healthy adults struggling to maintain their independence and remain in their own homes (Orr, 1992). They are not blind and most will never completely lose their vision, but their lives are often severely compromised by their inability to clearly see visual detail such as printed words, colors, and facial features. Although occupational therapists have been involved in the rehabilitation of persons with vision loss since the inception of the profession in 1917, we have never played an extensive role in low vision rehabilitation.

However, just because our profession has not been involved in providing low vision rehabilitation services does not mean that persons with low vision have gone unserved. The needs of persons with vision loss have been met by other health care professionals practicing in the community-based programs, schools, state vocational services, and Veterans Administration (VA) medical center programs that make up the nationwide blindness system (Orr, 1992). The professionals providing these services include optometrists, rehabilitation teachers, and orientation and mobility specialists. They are well educated and trained, and they provide comprehensive services. Although a limited number of occupational therapists have always been employed within the blindness system, the majority of therapists practicing in this country have had only minimal contact with, or awareness of, the services available for persons with vision loss. One reason for this minimal awareness is that, with the exceptions of the services provided through the VA system, low vision rehabilitation services are provided in community-based programs, schools, and state vocational services outside the health care delivery system where the majority of occupational therapists practice. The traditional structure of the blindness system, which espouses a consumer-driven, community-based educational model rather than a medical model, largely precluded the involvement of health care providers such as occupational therapists and physical therapists. But the traditional blindness system is now being challenged to expand and modify its structure to incorporate the medical model of the health care delivery system and, with it, the services of occupational therapy.

Inclusion of Occupational Therapy in the Field of Low Vision Rehabilitation

Occupational therapy’s entry into the field of low vision rehabilitation at this time is due largely to the efforts of Donald C. Fletcher, O.D., a Canadian-born ophthalmologist, now practicing in the United States. Dr. Fletcher is a retinal specialist who chose to change his specialty to low vision rehabilitation when he found that he was unable to help his clients who had sustained permanent, irreversible vision loss despite the best efforts of medical experts in his field. In 1990, the Health Care Financing Administration (HCFA), at the urging of Dr. Fletcher, broadened its definition of physical impairment to include low vision as a condition that merited rehabilitation (Code of Federal Regulations, 1994). The expansion of the definition of physical impairment to include low vision meant that, for the first time, physicians were able to refer clients for occupational therapy services with the single condition of visual impairment, and occupational therapists were able to provide services to these persons with coverage through Medicare Part B. Dr. Fletcher lobbied for this change because he believed that occupational therapists had the unique training and skills to effectively work with persons with vision loss and because he was frustrated by his inability to refer his older clients to occupational therapists because there was no coverage for their

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services. Although Dr. Fletcher did not enlist the aid of the American Occupational Therapy Association in his dealings with HCFA and the change in HCFA guidelines went largely unnoticed by our profession in 1990, we are the direct beneficiaries of his efforts. We have now been given the opportunity to expand our services and to work with a population whose needs we were previously unable to comprehensively address.

The addition of occupational therapists to the list of health care professionals who provide low vision rehabilitation services has several important advantages for the consumer. Perhaps foremost among them is that low vision services can be more widely disseminated through the health care delivery system. Because low vision services are traditionally funded through a combination of grants from federal, state, and private agencies, the number of community-based programs is greatly limited, particularly in rural areas of the country (Orr, 1992). In contrast, most communities, even those in rural areas, have access to at least one regional medical facility with outpatient occupational therapy and physical therapy services or home health care services. Inclusion of occupational therapists and physical therapists in low vision rehabilitation will dramatically increase the availability of service delivery in areas where it is most needed. The impact will be most profound on service delivery to elderly persons with low vision.

Two thirds of persons with vision loss are more than 65 years of age (Fletcher, Shindell, Hindman, & Scaffrath, 1991). However, funding for the delivery of low vision rehabilitation services to this age group has been limited. In 1978, a special amendment (Public Law 95-602) to the federal Rehabilitation Act of 1973 designated rehabilitation for independent living skills training for elderly persons with visual impairment through Title VII, Part C (Orr, 1992). However, funding was not provided for Title VII, Part C until 1986, and then funding was available to only half of the states in the country, with each state receiving only approximately $200,000. (Herndon & Landry, 1993; Orr, 1992). A survey of state blind rehabilitation units (Crews, Frey, & Peterson, 1987) showed that although state agencies have been creative in providing services with these funds to elderly persons, many report that "they were consistently short of funds and staff to address older and multiply impaired blind populations" (p. 308). Herndon and Landry estimated that current funding allocation allows service delivery to only 13,500 older persons. Occupational therapists, by providing services through Medicare and the health care system, will enable more elderly persons with low vision to receive services.

Another advantage of adding occupational therapy to the provider list for low vision rehabilitation is our profession's diverse training in disability and aging. Orr, in her book, Vision and Aging: Crossroads for Service Delivery (1992), stated that one of the primary difficulties in providing services to elderly persons with vision impairment is that services are divided between two primary systems: the blindness system, whose services are targeted specifically for persons with blindness, and the generic aging system, whose services target all older persons. Two thirds of older adults have more than one chronic condition that can decrease independence (Blake, 1984); consequently, persons with visual impairments often will require services from both systems. According to Orr:

Most service providers in the field of aging have no professional preparation in the area of vision loss; many of those in the field of blindness have a limited knowledge base in the issues of aging and vision loss. Few professionals have expertise in both blindness and aging. A service provider may ask, "To which system do blind and visually impaired elderly persons belong?" Those in the aging system may believe that blind persons can best be served by professionals trained to work with blind and visually impaired people and thereby should be referred to an agency for blind persons. But the service provider in a rehabilitation agency for blind persons may believe that older visually impaired clients belong to the aging network because they need so many services related to aging. Under these circumstances, the older visually impaired person is not necessarily denied services by either service delivery system. But neither system, by tradition, has viewed the older person who is visually impaired as one of its target client groups (1992, p. 18-19).

Occupational therapists, with our broad training in the physical, cognitive, sensory, and psychological aspects of disability and aging, may be the natural choice of professionals to bridge the gap between the two systems and effectively work with older persons whose limitations in daily living are a result of a combination of deficits. Dr. Fletcher recognized this capability in our profession and cited it as the reason for his strong advocacy for inclusion of occupational therapy in low vision rehabilitation (Ruben, 1990).

Development of a Frame of Reference for Occupational Therapy Practice

If we are to accept the challenge of expanding our services to low vision rehabilitation, we must be fully prepared to work effectively with this population. Although visual impairment is addressed along with other sensory impairments in undergraduate occupational therapy curriculums, few professional programs include specific, comprehensive instruction in ocular pathology, functional visual evaluation, or low vision treatment techniques. In addition, there is a paucity of published information on occupational therapy intervention in low vision to which therapists can refer. Currently, the occupational therapy literature on low vision rehabilitation is limited largely to the sporadic publication of brief chapters in textbooks or short articles in newsletters and journals (Bennett, 1989, 1991, 1992; Maloney, 1987; Reiley, 1988). Indeed, the primary impetus for the development of this special issue on low vision rehabilitation was to begin to publish information in the occupational therapy literature for clinicians to read and digest.

For now, therapists interested in working with persons with low vision must rely on the publications and teaching of related fields to educate them on evaluation and treatment of this population. The American Foundation for the Blind and the Lighthouse for the Blind publish a wide variety of books and provide continuing education courses for professionals in this field. However, if occupational therapy is to make a unique and lasting contribution to this area, we must develop our own frame of reference for addressing the needs of persons with low vision. That frame of reference must be compatible with our other theories regarding adaptation to...
disease and environment, and it must go beyond merely advocating the use of adaptive devices and techniques.

To be compatible with our other theories, our frame of reference for low vision must focus in part on how the central nervous system is best able to adapt to a loss in one of its major information gathering systems. Ayres, in her landmark book, Sensory Integration and Learning Disorders, wrote that “the overall function of the brain is to filter, organize and integrate sensory information to make an adaptive response to the environment” (1972, p. 21). Vision, because it is our most far-reaching sensory information gathering system, plays a powerful role in enabling persons to adapt to their environment. A change in vision affects not only the ability to read but also the ability to move safely in the environment, to make decisions, and to communicate with others. To truly assist the persons we work with to make the best use of their residual visual abilities, we must understand how the central nervous system responds to use remaining visual input to adapt to the environment. We must study the work of persons publishing vision research in the neurosciences, such Ronald Schuchard (1995), who has contributed an article to this issue. Dr. Schuchard is one of the pioneers in the development of the scanning laser ophthalmoscope (Schuchard & Fletcher, 1994) and the researcher who developed the concept that the visual system develops a new pseudo fovea or preferred retinal locus (PRL) to view visual detail when the fovea is destroyed by disease (Schuchard & Fletcher, 1994). I believe that eventually a theory that addresses how the optical system and the central nervous system interact to enable a person to use vision to adapt to the environment will emerge as the scientific foundation for our treatment in this field.

Our frame of reference must not stop with the integration of sensory information but must also encompass the biopsychosocial needs of these persons. Low vision affects all aspects of a person’s life, from completion of basic self-care to work, leisure, communication with others, and community involvement. To fully address the needs of the person with low vision, we must understand the dysfunction in occupational performance that results from the change in visual performance and develop paradigms for treatment of all aspects of the person’s life. We must also be able to objectively and accurately measure the effects of our treatment on the person’s functional performance. Because occupational therapy is new to this area, it will take time for a fully comprehensive frame of reference to be developed, but it must be a continual priority for those who chose to work in this field.

In This Issue
The articles in this special issue reflect the variety of treatment aspects that must be considered when working with persons with low vision. Several of the articles focus on obtaining accurate evaluation of the person’s visual function, which is critical if we are to approach the treatment of low vision by maximizing the person’s ability to use his or her remaining vision. We are fortunate to have Lea Hviidrtren (1995), an internationally recognized authority in pediatric low vision evaluation, and August Colenbrander and Donald C. Fletcher (1995), pioneers in the development of low vision rehabilitation within ophthalmology, contribute articles to this special issue on aspects of visual evaluation. We are fortunate as well to have Jessica Tamper and Deborah J. Lapolice (1995) provide insight into the major components of a functional visual evaluation and Sally Rosenthal (1995) provide us with a greater understanding of the personal challenges faced by persons with vision loss. We are also fortunate to have a contribution by T. Ann Williams (1995), who cautions us that vision loss is not restricted just to retinal pathology but can accompany brain injury as well.

The contribution of articles in this issue by authors who are not occupational therapists reminds us that our efforts to provide low vision rehabilitation services must involve collaboration with other disciplines. However, we must also develop our own style of intervention and determine the unique contribution that occupational therapists can make to this field. We have not yet established an in-depth knowledge of our treatment—that unique style of intervention that will ideally be a blend of science and technique. Low vision rehabilitation offers occupational therapists an opportunity to exercise our wide range of talents, from activity analysis to psychological adjustment assistance. It requires us to draw from all aspects of our training, including the neurosciences. It provides us with an opportunity to assist the blindness system in meeting the needs of older persons with severe visual impairment.

Some occupational therapists will only want to gain enough information to be able to address low vision when it accompanies another condition in their clients; others will want to work exclusively in the field. I hope that however we choose to participate, our contribution to the field of low vision rehabilitation over the ensuing years will merit the opportunity we have been given. ▲

References


