Do Occupational Therapists Have a Primary Role in Low Vision Rehabilitation?

The patient with low vision is defined as a person with an eye disorder whose visual performance is decreased as a consequence of reduced acuity, abnormal visual field, reduced contrast sensitivity, or other ocular dysfunctions that prevent performance to full capacity. It may be hereditary, congenital, or acquired (Faye, 1984). Low vision describes a serious visual loss that cannot be corrected by medical or surgical intervention or by spectacles. It is a persistent, irreversible deficit that interferes with daily living but rarely leads to total blindness (Weinrab, Freeman, & Selzinka, 1990).

The majority of persons with low vision are left with visual problems that cannot be cured and must handle the prospect of living with permanent, if not progressive, vision loss (Fletcher, Shindell, Hindman, & Schafnab, 1991).

Many of the limitations in independent living experienced by persons with low vision can be improved through vision enhancement, training in the efficient use of remaining vision, task and environmental modification, appropriate substitution of other senses, and management of emotional issues. However, persons with visual dysfunction continue to be underserved by vision-related rehabilitation programs in general as well as by occupational therapists in particular. There are a number of reasons that visual disabilities are underserved, ranging from the lack of identification of visual problems in patients to the lack of specialized vision-related rehabilitation programs for all who need such services (Bailey, 1992; Marx, Werner, Cohen-Mansfield, & Feldman, 1992, Silverstone, 1993).

Even though every state has a number of programs and trained service providers with services targeted for persons who are blind or visually impaired, there are at least four important reasons why occupational therapists should become involved in providing vision-related services and rehabilitation. First, elderly persons comprise the majority of the population with low vision, yet they continue to be the most underserved by existing state, charitable, and private programs (DiStefano & Aston, 1986; Gieser, 1992). According to the American Association of Retired Persons (AARP) (1992), elderly persons typically wait an estimated 5 to 7 years between the time they lose their vision and the time they receive assistance such as rehabilitation. As a result, many older persons with visual impairments are socially isolated, depressed, dependent, and institutionalized, even though functional visual training would allow them to live independently (AARP, 1992). Among those who are in nursing homes, it has been estimated that as many as 48% have a visual impairment (Havlik, 1986).

Vision loss can severely impair a person's ability to interact with the environment, including the use of social and health services, and can hamper performance of even the simplest everyday tasks (Branch, Horowitz, & Carr, 1989). According to the clinical literature (Branch et al., 1989), older persons who confront visual impairment experience a range of psychological reactions, including grief, confusion, anger, fear, anxiety, depression, loss of control, loss of self-esteem, diminished social comfort, and low levels of visual interaction. In addition to the emotional and psychological consequences, vision loss has been cited as a major cause of activity limitation among older persons, a finding supported by the most recent data from the National Center for Health Statistics (Havlik, 1986). Visual impairment has been found to be strongly associated with greater difficulty in performing daily activities, such as walking, getting outside, and transferring to and from a bed or chair (Branch et al., 1989). Often their narrow world becomes smaller with the addition of chronic health problems (DiStefano & Aston, 1986).

The presence of concurrent disabilities underscores the importance of establishing a consolidated rehabilitation program that addresses the multiple health concerns of older persons with visual impairments that is readily accessible to all older persons.

Second, because occupational therapists work with elderly persons, we are constantly confronted with problems created by their visual impairments, and we need to know how to address low vision so that we can more effectively meet their needs. Two thirds of older persons with visual impairments have at least one other chronic condition that limits their mobility or independent functioning (AARP, 1992). Vision loss in elderly persons is also re-
lated to other health conditions and disabilities. There is strong evidence that, among aged persons, poor vision increases the likelihood of falling (Branch et al., 1986). In addition, visual impairments have been found to impede restorative programs for other pathological conditions (Weinrabi et al., 1990).

The number of associated problems is exacerbated by the fact that many providers and elderly persons themselves fail to distinguish between typical age-related visual changes and changes related to eye disease or primary conditions (Branch et al., 1986). Consequently, visual loss is sometimes overlooked. I believe that it is imperative that occupational therapists routinely address the visual aspect of older patients’ performance regardless of their primary condition or reasons for referral to occupational therapy.

A third reason for the need for greater involvement of occupational therapists in vision-related services is that many of the specialists who provide vision training, such as rehabilitation teachers or orientation and mobility specialists, are not available in less populated or rural areas (Branch et al., 1986; Gieser, 1992). A large population in need of low vision rehabilitation are those persons who receive only primary eye care because low vision or vision-related rehabilitation services are unavailable or are unknown to vision specialists (Branch et al., 1986; Faye, 1984; Gieser, 1992). Even though a number of private and state-supported systems exist for persons who are blind or visually impaired, many older persons are underserved because they do not fit within the typical patient categories. Traditional services are provided by nonprofit, charitable institutions that rely on private donations and tax support or by state agencies and contracted nonprofit agencies that rely on dwindling government funding. Because these agencies exclusively serve persons with visual impairments, they are most prevalent in areas with a large population.

Heimerdinger (1995), president and chief executive officer of the Jewish Guild for the Blind, has made a strong case for occupational therapists to acquire the expertise to provide vision-related rehabilitation services. In a letter to traditional providers of blindness and low vision services, he pointed out that in the future: (a) rehabilitation services will be provided through the health care system in a managed care mode, (b) there will be an increasing demand for vision-related rehabilitation as the aging population lives longer and increases in numbers, (c) access to services will be an issue, especially in nonurban areas, (d) even with growth, visual disability will not provide a sufficient market to support a large cadre of specialists, especially in nonurban areas, (e) itinerant services are not outcome or cost effective, (f) the most prevalent health care delivery locations will be community hospitals and outpatient clinics, and (g) the most universally prevalent rehabilitation specialists will be physical and occupational therapists. Heimerdinger has advocated for major efforts by the vision and blindness organizations and professionals to “provide specialized training and resource materials for the licensed occupational and physical therapists who will be available in the local community” (Heimerdinger, 1995, p. 24).

A fourth reason for occupational therapists to provide vision-related rehabilitation is that the application of rehabilitation techniques and approaches has been found to be effective. A number of studies have documented that the proper use of devices, techniques, and training methods can successfully maximize the use of remaining vision in persons with low vision. Training in the use of magnification, illumination, and contrast, along with environmental modifications, has been found to be effective (Goodrich & Mehr, 1986). With individualized training in techniques to maximize the use of residual vision and the use of optical and nonoptical devices, persons with low vision are able to greatly improve their ability to read and perform self-care and work-related activities (Nilsson & Nilsson, 1986). The most dramatic improvements in visual performance are seen when interventions include both individualized training and environmental modifications. Training that takes place in the person’s own home or a simulated environment tends to maximize visual skills and improve functional performance (Goodrich & Mehr, 1986; Nilsson & Nilsson, 1986; Sekuler & Ball, 1986). The consensus of many experts is that comprehensive low vision rehabilitation programs can have dramatic results on the independence and productivity of affected persons (DeSylvia, 1990; DiStefano & Aston, 1986; Fletcher et al., 1991; Weinrabi et al., 1990). Unfortunately, whereas well-organized rehabilitation programs, such as musculoskeletal or cardiac programs, exist to treat persons with such conditions, visual rehabilitation programs have lagged behind the need (Faye, 1990). The needs of many persons, especially elderly persons, for vision-related rehabilitation that address their biopsychosocial needs are mostly unmet (DiStefano & Aston, 1986).

To provide the most comprehensive vision-related rehabilitation, occupational therapists will need to understand and have a working relationship with the agencies and professionals who make up the vision services network. It is also important for occupational therapists to be aware of the concerns that professionals in the blindness and low vision rehabilitation community have about the entry of occupational therapists into the field.

Vision Services Network

Organized low vision treatment services in the United States began in the 1950s with work done by the Industrial Home for the Blind in New York. During the late 1950s and throughout the 1960s, developments were occurring that led to the initiation of more programs (Rosenbloom & Goodrich, 1990). Since 1960, the number of journal articles submitted for publication on the topic of low vision has more than tripled (Rosenbloom & Goodrich, 1990). Additionally, over the past 30 years, there has been a growing awareness of the need for multidisciplinary teams among those who work in the delivery of low vision services (Maino, 1993).

Low vision services in this country have traditionally been offered by or closely affiliated with state, federal, and nonprofit organizations whose principal mission has been the delivery of services for persons who are blind. Historically, many of these agencies served only persons who had gainful employment as a principal goal. Consequently, there is a general perception that many of these agencies have a bias against serving older persons or others without vocational goals. Most of the existing
services are provided at a clinical facility or at the home, school, or work setting of the client. The Veterans Administration (VA) offers some inpatient low vision services to eligible veterans at clinics offered at selected VA medical centers. Some state and private agencies provide field services such as orientation and mobility training or compensatory training in the person’s home. Most of these services are not reimbursed by third-party payers of medical or rehabilitation services for elderly persons, such as Medicare.

Among the specialists who work in the field of vision and low vision rehabilitation are optometrists and optometrists who are considered by many as the gatekeepers of vision services. Although some may criticize these specialists for not referring or informing patients about low vision rehabilitation programs, it must be understood that many of them are not specialists in low vision and therefore do not have the rehabilitation orientation that is found among low vision specialists. The vision services network typically includes the following professionals and services:

- **Ophthalmologists**, who diagnose ocular pathology, recommend appropriate medical care, and assist in defining corrective interventions.
- **Optometrists**, who work with the patient in achieving best correction and prescribe low vision devices that allow the patient to perform essential tasks.
- **Technicians**, who teach the patient the application and use of prescribed low vision devices.
- **Rehabilitation teachers**, who assist the patient in learning to perform essential daily living skills, with or without the use of low vision aids. Usually, these professionals have a master’s degree from a program specifically designed to teach daily living skills to persons with visual impairments.
- **Orientation and mobility specialists**, who instruct the patient in independent travel skills, with or without the use of low vision devices. Typically, these specialists have a master’s degree from a program designed to teach orientation and travel skills to persons with visual impairments.

Occupational therapists are viewed by many who traditionally work with the low vision population as providing expertise about the management of nonvision-related conditions that affect functional performance. The participation of occupational therapists in the rehabilitation of persons with low vision resulting from ocular pathology is relatively new to many who provide specialized services to persons who are blind or visually impaired. This situation has led to some controversy and concern by “traditional providers” as well as by occupational therapists who have worked in low vision rehabilitation. Lambert (1994) recently discussed the most salient concerns of the traditional providers about occupational therapists who treat persons with low vision as being:

- Unfamiliar with the various disciplines in the field, and thereby not appropriately referring patients for other needed services
- Inadequate in knowledge or specialized training in low vision
- Professionals who will introduce the medical model into a system based on a patient-centered, nonmedical model
- Able to bill for third-party reimbursement for occupational therapy services, whereas traditional providers have not secured licensure, and concern that clinics may favor occupational therapy in the delivery of services even though more disability-specific professionals may be the most appropriate provider

In raising these concerns, Lambert’s intention was to initiate dialogue among the various disciplines in order “to meet the needs of each profession and more importantly, the clients” (pp. 297–298).

### Need for Integrated Low Vision Rehabilitation Services

There is a need for greater attention to low vision in rehabilitation programs as well as a more integrated approach to the delivery of low vision services than currently exists. The population in need of low vision rehabilitation includes those persons traditionally treated by occupational therapists in schools and in vocational, hospital, and long-term care settings as well as persons in the community who are not being served by traditional vision or medical rehabilitation programs. Providing low vision services will necessitate occupational therapists’ acquisition of specialized knowledge as well as the development of a collaborative relationship with professionals who comprise the traditional vision services network. Occupational therapists will need to acquire additional knowledge of ocular pathology and optics and receive training in the functional use of magnification before providing low vision services. The introduction of more occupational therapy and new models of service delivery will not replace but rather will expand the current vision services network for persons of all ages who have visual impairments.

### References


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