Introduction

Six years ago we published the first issue of Technology and Disability, and the issue theme was Technology and Visual Impairment. Now with Issue 6:3 we return to the theme of Technology and Visual Impairment. Over this relatively short period of time there have been many technology advances that offer new tools as well as new challenges for persons with vision impairment. At the same time we are beginning to study and understand problems with the use of more traditional assistive devices. This issue summarizes the new developments in technology, openly discusses the challenges, and presents research on the use of both low tech and high tech aids for persons with vision impairment.

Lawrence Scadden opens this issue with an update of his 1991 overview article on technology and visual impairment. He discusses the advantages and challenges of the internet and newer computer operating systems, digital storage and retrieval of audio information on cassettes, and much more. Dr. Scadden describes research on visual restoration through implants and tissue transplantation. This article describes the technology available for persons with vision impairment today, and provides a glimpse into the future.

Older adults experience a high incidence of vision impairment. Cynthia Stuen provides an overview of vision rehabilitation for older adults, as well as a review of the major forms of vision

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impairment faced by older persons. Dr. Stuen also presents results from the Lighthouse National Survey on Vision Loss conducted by Louis Harris.

While assistive devices have the potential to promote more independent function in tasks, there can be unwanted consequences with their use. Julie Mount, Laura Gitlan, and Paul Howard discuss problems with the use of two common travel aids: white canes and dog guides. They explore issues related to musculoskeletal problems, basing their discussion on focus groups with 21 users of white canes and dog guides.

John Stone, together with William Mann, Jennifer Mann and Dianne Hurren report on a study of the use of magnifiers among older persons. In an earlier study a high rate of dissatisfaction with magnifiers was found for this population. By adjusting lighting, or offering a higher powered magnifier, or a magnifier with special features, 13 of 15 study participants achieved a satisfactory result. Case studies illustrate the problems and interventions with three study participants.

In 1993, the University at Buffalo Rehabilitation Engineering Research Center on Aging published a paper on assistive device needs of older persons with vision impairments based on a cross sectional sample. This issue presents a follow-up, longitudinal perspective on the changing needs of older persons with vision impairment. Thirty-eight elders with vision impairment were studied over a 2-year period.

The final paper in this issue was written by a person who uses technology to address his vision impairment. Jeffrey Senge expresses the useful-

ness, and the diffficulties, with living in the larger world of technology, where such everyday items as phones and bread makers have visual displays. He describes his own use of assistive devices and computers, and the adaptations he has made on common household appliances. With clarity, and optimism, Jeffrey Senge offers a description of the importance of technology for persons with vision impairment.

The pace of change and advances in technology will continue. Perhaps in 6 years, maybe less, we will return for another update on technology for vision impairment. For now, this issue provides an excellent overview of the use of, issues with, and research on, assitive technology for persons with vision impairment.

William C. Mann