Vision Problems Of Elderly Immigrants In Israel: A Prospective Study

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Abstract
Eye disorders restrict sight and limit ability of elderly people to function. A model community-based outreach program, Negev Project Vision, was organized to address the eye care needs of the elderly — specifically, immigrants from the former Soviet Union and Ethiopia now living in Israel. Findings show that about 80% of the elderly screened were in need of eye care (e.g., medical or optometry-related services). Among those needing medical treatment, 67% had cataract; 14% trachoma; 9% glaucoma; 9% age-related macular degeneration, and 2% diabetic retinopathy. Half (50%) were found to have vision disorders that could be corrected by prescription eyeglasses. A post intervention interview showed that those provided eyeglasses tend to report a better health status, ability to function, address daily living conditions, as well as interact and a higher level of more with interaction with family and friends. This article discusses community outreach services and policy recommendations related to eye care of the elderly.

Since the late 1980's, Israel has absorbed many immigrants who constitute about 20 percent of the present population. While the vast majority of these people are from the former Soviet Union, others came from Ethiopia. Among the population of immigrants, it is estimated that 16% are over 65 years of age (Brodsky et al., 2000). For many elderly immigrants, life before moving to Israel was a considerable challenge. For example, Ethiopian elderly left behind some of the most destitute living conditions in the world, characterized by average life expectancy of 47 years, lack of food and safe drinking water, and inadequate sanitation and sparse health services (UNICEF, 1995; Isralowitz, 2000).

While not at the same level found in Ethiopia, living conditions with restrictions on food and adequate health care in the former Soviet Union made life difficult there. Poor living conditions have been found to affect the nature and rate of deterioration that occurs among people over the age of 50 in terms of their vision and social, psychological, and physical ability to function (Brenner, et al., 1993).

Studies show limited sight linked to the mental health of elderly people, their behaviors and social involvement (Horowitz, 1995; Wahl, et al., 1999a, 1999b). Visually impaired elderly people experience a range of emotions, including grief, anger, depression, anxieties and other negative feelings leading to decreased self-confidence and self-perception, lower morale, loss of control and feelings of vulnerability (Gillman, et al., 1986; Orr, 1991). Loss of vision is associated with adjustment difficulties that in turn lead to social isolation, detachment and feelings of loneliness (Heinemann, et al., 1988; Orr, 1991).

Additional research shows vision disorders to be a major factor restricting indoor and outdoor daily living activities such as moving in and out of bed or a chair, walking or crossing roads, or traveling (LaPlante, 1988). Moreover, without the ability to read bus numbers, see traffic lights and notice close cars, travel becomes dangerous and stressful causing many elderly to become homebound. Vision disorders have a negative impact on instrumental activities of daily living (IADL) that include homemaking chores and on basic activities of daily living (ADL) such as dressing, washing, and eating (Branch, et al., 1989; Cherry, et al., 1991; Gillman, et al., 1986).

NEGEV PROJECT VISION
In Israel, eye care services are available to older persons needing medical treatment. Routine examinations and optometric care including the provision of eyeglasses are services that must be paid for by the individual. Such services are prohibitively expensive for many elderly persons, especially immigrants with a minimum fixed
income.

In response to this need, a coalition of academic and health care service organizations was organized in 1997 to address the vision needs of elderly immigrants in the Negev, the arid southern region of Israel (Isralowitz, 2000; Isralowitz, et al., 1996). This was achieved as an outcome of donor largesse to Ben Gurion University for a mobile eye unit and portable vision screening equipment to provide community outreach services to Ethiopian and other elderly immigrants. With resources in hand and support from a United States-based non-profit organization, the Director General of the country’s main provider of health care services (Kupat Holim Clalit) agreed to work with the university to address the vision needs of immigrants in the region. The Negev Project Vision/Ben Gurion University mobile unit and equipment were leased to Kupat Holim Clalit for its purposes including ophthalmologic services to its remote clinics in the region. In exchange, Kupat Holim Clalit agreed to be responsible for operation and maintenance of the mobile eye unit, provide a physician and nurse for medical examinations and treatment, and provide the university with two days per month of ophthalmologic eye care services for elderly immigrants identified by the Negev Project Vision project director. Negev Project Vision personnel arranged optometric services.

Negev Project Vision has received national and international recognition as a model initiative (Chertok, 1998). The purpose of this article is to report select findings and provide policy recommendations related to the vision care of elderly persons in Israel. While the study cohort consists of immigrants who came to Israel from the former Soviet Union and Ethiopia during the past decade, the findings and policy implications relate to needs that exist among many elderly people in the country.

METHODS

Personnel of the local department of social services, non-government service agencies, and private facilities responsible for care of the elderly were contacted by Negev Project Vision personnel and informed that screening and follow-up eye care services would be provided at no cost. Ethiopian, Russian and Israeli-born social service agency personnel and university students interviewed elderly persons about their personal background, history of eye disorders and treatment, function ability, social involvement, and attitudes about proper eye care.

SAMPLE

A purposive sample of elderly immigrants, who immigrated to Israel from the former Soviet Union during the early part of the 1990’s (262) and from Ethiopia (36) in 1991, was studied. Those interviewed were aged 60 years or older and were provided screening and follow-up services by an ophthalmologist, optometrist, and nurse working with the Negev Project Vision mobile eye unit. The screening was done in community day care centers and independent living facilities for the elderly in Beer Sheva, the region’s largest city with a population of about 180,000.

MEASUREMENTS: DATA COLLECTION INSTRUMENT, INTERVIEW PROCESS AND DATA ANALYSIS

Existing questionnaires capable of assessing the functional ability of immigrant elderly, including the World Health Organization’s “Quality of Life Instrument” (WHO, 1993), were found not appropriate for the study population in terms of the number of questions used and the lack of cultural sensitivity. Experienced project staff working with immigrants developed the data collection instrument used for this study. The data collection instrument was reviewed for content validity by community organizers and experts in gerontology, ophthalmology and optometry. Because of the prospective nature of the study sample, its external validity is restricted. Descriptive statistics including chi square were used for data analysis purposes.

RESULTS

Among the results, it was found that about 80% of the elderly screened were in need of eye care (e.g., medical or optometry-related services). Half (50%) were found to have vision disorders that could be corrected by prescription eyeglasses. Among those needing medical treatment, 67% had eye disorders due to cataract. Other eye disorders found included trachoma (14%), glaucoma (9%), age-related macular degeneration (9%), and diabetic retinopathy (2%).

The nature and extent of vision disorders were similar for elderly immigrants from Ethiopia and the former Soviet Union. Also, no significant difference was found between the two groups of immigrants in terms of vision related complaints; however, Russian-speaking immigrants expressed a more positive attitude about wearing eyeglasses. Immigrants with limited resources were provided eyeglasses if needed. To understand the impact of this provision, interviews were conducted 6 to 12 months after receiving them. Statistically significant findings show that elderly
people with glasses, compared to those without, report fewer physical difficulties ($\chi^2 = 4.17, p < .05$); consider themselves to be less of a burden on their families ($\chi^2 = 7.46, p < .05$); tend to be more inclined to handle personal tasks ($\chi^2 = 4.99; p < .05$); spend more time with their friends ($\chi^2 = 5.09; p < .05$); and report they are more involved with family events ($\chi^2 = 7.20; p < .01$).

**DISCUSSION**

**THE ELDERLY AND COMMUNITY-BASED CARE**

A major finding of this study, based on objective screening procedures, is that a large proportion (80 percent) of elderly immigrants have visual problems. This compares to only 34 percent of the over 60 year old population in the country who, through self-report, say they have difficulties (Israel Central Bureau of Statistics, 1997). The difference suggests that elderly immigrants may lack awareness of their need for treatment and services. Another important finding is the significant impact proper optometric care, in the form of eyeglasses, has on the quality of life of elderly persons.

Negev Project Vision has demonstrated that a number of organization factors must be addressed if effective outreach services are to be provided. For example, many elderly people in Israel, especially those who do not speak Hebrew, tend to have difficulties communicating with professional service providers. The ability of project staff to relate to the language commonly used by elderly persons seems to have promoted their interest in proper eye care and desire to receive needed treatment and services. Furthermore, Negev Project Vision has shown the importance of multiple tactics of community organization involving informal networks of family and friends to build support for its efforts, rather than reliance on a single intervention approach. Specifically, neighbor-to-neighbor appeals, publicity campaigns via print and other media, brochures and posters, classes, and group programs tend to be important in generating involvement with the Project. Individuals, who have been isolated from one channel of information, say by low literacy or economic disadvantage, have been reached by other methods of communication to promote eye care (Isralowitz, 2000; Fisher, 1992).

Negev Project Vision is a time limited model demonstration effort that addresses the visual needs of older persons through ophthalmologic and optometric screening and treatment services. The ultimate success of the project will be determined by its ability to influence health care policy and improve services provision to the elderly. This must include the provision of eyeglasses to those in need, either free of charge or through a means-tested subsidy. Also, attention must be given to lower the wait time for cataract surgery that is currently about one-year in the Negev compared to about 1 to 2 months elsewhere in the country.

**POLICY IMPLICATIONS: ELDERLY EYE CARE IN ISRAEL**

In Israel, public support is available to elderly persons who are limited in carrying out basic activities. In 1986, the Long-Term Care Insurance Act made available personal care, homemaker services and supervision to elderly people dependent on others for performing activities of daily living. The level of vision is one of the criteria taken into account in order to assess the functional status of an elderly person.

In 1994, the National Health Care Insurance Act was put into effect. This law includes eye care as part of a basket of health/medical services available to citizens without cost. Ophthalmologic services are provided to people with vision disorders. When a health problem arises, an individual may visit a community-based clinic for examination and treatment. If further care is required, the individual is referred to a hospital outpatient clinic or inpatient facility for further medical treatment. The individual can also be referred to rehabilitation services including low vision care. In other words, visual needs are treated only if the problem is diagnosed as one of a medical nature. Regulations do not cover routine optometric screening and eyeglasses. And, in practice, resources are not often available to people who need eyeglasses.

In Israel, economic conditions are deteriorating. It is likely, therefore, that more elderly persons will be forced into declaring that they have a disability and/or illness of a medical nature in order to receive special home support services under the Long-Term Care Insurance Act. For some, such costly intervention can be avoided by providing primary care services such as eye screening and eyeglasses that improve the health status, function ability and quality of life of elderly persons.

In terms of future policy development, several measures should be considered. First, vision screening and primary prevention services should be provided on a national level and be included in the package of services provided under the National Health Insurance Law of Israel. Elderly people need vision screening on an annual basis for early detection of problems. Second, ophthalmologic and optometric examinations should be conducted in facilities that are...
accessible to elderly people such as day care centers, senior
clubs, community-based health clinics, residential settings
and long-term care facilities. Third, eyeglasses need to be
made available to the elderly on a cost-sharing basis defined
by income criteria. Such provision should be made part of
the package of health/medical services available under the
National Health Insurance or Long-Term Care Insurance
Act. Fourth, education and training of general physicians,
nurses and social workers working with elderly persons are
needed in order to improve their understanding and response
to age-related vision impairment. Finally, research is needed
in the country on the nature and scope of vision disorders
according to age, ethnicity, and regional criteria. Such
information is vital for defining policy and determining the
extent of funding resources and personnel needed to address
visual problems. The prospect of Israel’s elderly population
doubling in the next five decades makes consideration and
execution of these recommendations imperative.

References
r-0. Brenner M, Curbow B, Javitt J. Vision change and
quality of life in the elderly: Response to cataract surgery
and treatment of other chronic ocular conditions. Archives
r-1. Branch L, Horowitz A, Carr C. The implications for
everyday life of incident self-reported visual decline among
people over age 65 living in the community. The
r-2. Brodsky J, Shnoor I, Beer S. The elderly in Israel -
Statistical Abstract. Jerusalem: Brookdale Institute and The
Association for Planning and Developing Services for the
Elderly in Israel 2000 (In Hebrew).
r-3. Cherry K, Keller M, Dudley W. A needs assessment of
persons with visual impairments: Implications for older
adults and service providers. Journal of Gerontological
r-4. Chertok H. Seeing the light. MASHAV, Centre for
International Cooperation, Israel Ministry of Foreign Affairs
r-5. Fisher E, Auslander W, Sussman L. Community
organization and health promotion in minority
r-6. Gillman A, Simmel A, Simon, E. Visual handicap in the
aged: Self reported visual disability and the quality of life of residents of public housing for the elderly. Journal of Visual
Impairment and Blindness 1986; 80: 588-590.
r-7. Heinemann A, Colorez A, Frank S, Taylor D. Leisure
activity participation of elderly individuals with low vision.
r-8. Horowitz A. Aging, vision loss and depression: A
r-9. Isralowitz R. Vision change and quality of life among
Ethiopian elderly immigrants in Israel. Journal of
r-10. Isralowitz R, Rosenthal G, & Lifshitz T. Ethiopian
elderly immigrants: a community-social work and medical
intervention to address eye care needs. Journal of
r-11. Israel Central Bureau of Statistics. Survey of the 60+
r-12. LaPlante M. Data on disability from the national health
DC: US National Institute on Disability and Rehabilitation
r-13. Orr A. The psychosocial aspects of aging and vision
r-14. UNICEF. The state of the world's children, New York:
r-15. Wahl H, Scilling O, Oswald F, Hey V. Psychosocial
consequences of age-related visual impairment: comparison
with mobility-impaired older adults and long-term outcome.
Journal of Gerontology 1999a; 54B: 304-316.
r-16. Wahl H, Oswald F, Zimprich D. Everyday competence
in visually impaired older adults: a case for person-
environment perspectives, The Gerontologist 1999b; 39:
140-149.
r-17. World Health Organization. WHOQOL. Study
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