To Hear Again: A Volunteer Program in Hearing Health Care for Hard-of-hearing Seniors

Entendre de nouveau : un programme bénévole de soins auditifs pour les aînés malentendants

by • par

Marilyn O. Dahl, PhD

Western Institute for the Deaf and Hard of Hearing,
Vancouver, British Columbia

ABSTRACT

It is estimated that between 48 to 97% of residents of continued-care facilities have a hearing impairment. Nursing staff and other care-team members are often not prepared to attend to the hearing-related needs of elderly residents, and many such facilities do not have the regular services of hearing health care professionals. Trained volunteers can fill a valuable role in providing help and support to residents and staff in meeting hearing-related needs of seniors. The To Hear Again project featured consumer involvement in hearing health care. A training program was developed and implemented by a consumer organisation, the Canadian Hard of Hearing Association. The program was designed to prepare hard-of-hearing seniors at four sites across Canada to function as peer role models and helpers to other hard-of-hearing seniors in care facilities and, to a lesser extent, in the community. The project included a model for cooperation between a public health unit and a consumer organisation. Professional measurement tools for observation and self-report were adapted for layperson use in assessing needs. Design of the project, materials used, and outcomes are discussed.

ABRÉGÉ

Entre 48 % et 97 % des bénéficiaires des centres de soins prolongés auraient une déficience auditive. Souvent, le personnel infirmier et les autres intervenants ne sont pas prêts à répondre aux besoins auditifs des bénéficiaires âgés et nombre d'établissements ne sont pas desservis régulièrement par des professionnels de la déficience auditive. Des bénévoles bien formés ont un rôle précieux à jouer pour aider et épauler les bénéficiaires et le personnel en répondant aux besoins auditifs des personnes âgées. Le projet « Entendre de nouveau » met en relief la participation des consommateurs aux services de santé auditive. Une organisation de consommateurs, l'Association des malentendants canadiens, a conçu et mis sur pied un programme de formation dans le but de préparer des personnes âgées malentendantes, dans quatre régions différentes du Canada, à servir de modèles et d'auxiliaires à leurs pairs, des aînés malentendants qui résident dans des centres de soins prolongés ou, dans une moindre mesure, d'autres qui vivent chez eux. Le projet propose aussi un modèle de coopération entre un service de santé publique et une organisation de consommateurs. Des outils de mesure professionnels servant à l'observation et à l'auto-évaluation ont été adaptés de façon que des profanes puissent s'en servir pour apprécier les besoins. Les auteurs traitent de la conception du projet, du matériel utilisé et des résultats obtenus.

KEY WORDS

hard-of-hearing seniors • rehabilitation • volunteers • institutionalisation

In 1991, the *Health and Activity Limitation Survey* was published by Statistics Canada. A related document was *Canadians with Impaired Hearing* (Schein, 1992), a comprehensive report on hearing impairment in Canada. Their findings confirmed prior estimates that the prevalence of impaired hearing is far higher among residents of institutions (44.8%) than among those living in households (4.4%). One reason for this difference is that institutions house a high proportion of elderly persons and hearing loss is common in the elderly. Specifically, 98.6% of institutionalised adults with a hearing loss are 65 years of age or older (Statistics Canada, 1991). It was also found that a large proportion of persons with impaired hearing have one or more other disabilities. For example, 60.5% in institutions also have impaired vision. Nearly 70% of hearing-impaired adults residing in households have another disability. Heart disease, arthritis, and dementia are other commonly reported conditions. As age increases, the number of disabling conditions also increases. For the elderly this frequently translates into communication handicaps such as speech disorders, cognitive disorders, sensory impairment, and mobility handicaps (Health and Welfare Canada, 1988). Where hearing impairment combines with other disabilities, the negative consequences are exponential rather than additive (Schein, 1992).

The negative pervading effects of hearing impairment on life

satisfaction in all age groups have been well documented by professionals and hard-of-hearing consumers (e.g., Strassler, 1988; Dahl & Dahl, 1992; Hartmann & Hartmann, 1985; Hétu, Riverin, Getty, Lalande, & St-Cyr, 1990; Mulrow, et al. 1990). With the general concern of society about the aging population, both consumers and professionals have expressed increasing concern about the lack of hearing-related services to elderly residents of care facilities (Browne, 1992; Gough & Semple, 1988; Lubinski, 1981). This concern was addressed by the Canadian Hard of Hearing Association (CHHA) with the development and implementation of the To Hear Again project.

The Canadian Hard of Hearing Association is a volunteer, self-help organization dedicated to the interests and well-being of those who cannot hear well but who are committed to participation in the hearing world. CHHA has received considerable input from members and professionals about the need for additional help to hard-of-hearing seniors, in particular the frail elderly living in care facilities. Prior to the development of the To Hear Again project, CHHA members had expressed a variety of concerns regarding the welfare of hard-of-hearing residents of care facilities. They were concerned that (a) residents and care givers lacked understanding of how to use hearing aids; (b) purchasers often did not return to the hearing aid dispenser about problems with the hearing aid; (c) hearing aid users and their care givers lacked awareness of consumer rights concerning the purchase of an aid, or of protection in dealing with the vendor in regard to problems; (d) potential purchasers lacked awareness of options when purchasing hearing aids (e.g., selection of a model with a T-switch); (e) most people had no knowledge of other assistive listening devices; and, (f) often the hearing aid purchaser received no information about a self-help group (e.g., CHHA).

The experience of CHHA members had been that there was a general low level of awareness of the consequences of hearing loss on the part of professional health care givers (physicians, nurses, and aides). In particular, it was felt that among care givers in care facilities, there was a lack of knowledge about hearing aids or other devices, to the detriment of the well-being and health of the resident. Further concerns were expressed that health care givers did not recognize the hearing aid as a prosthesis about which they should be knowledgeable in relation to the overall care of the patient. Anecdotal incidents often depicted faulty diagnosis; for example, behaviour associated with impaired hearing being misdiagnosed as dementia, possibly contributing to and exacerbating the progress of dementia in certain elderly persons.

Most importantly, concerns were expressed with regard to the vulnerability of the elderly to being sold hearing aids inappropriately, that is, where it seemed likely that they could not manage use of the hearing aid and would fail to derive help for their hearing problems. During discussions of these concerns by CHHA members, the question was raised regarding the need to conduct a formal needs assessment survey before developing a project to address the problem. The conclusion was reached that sufficient data existed to confirm the existence of the need for action designed to assist hard-of-hearing seniors in care facilities with their hearing-related needs. It was noted that conducting a survey would simply prolong the time before action could be taken and needlessly divert funds needed for implementing the project.

CHHA members felt that it was possible that the concerns could be addressed by educating hard-of-hearing consumers to act as friendly visitors to peers in care residences and in the community. Such visitors could also serve as a bridge between residents and care providers, by producing a heightened awareness on the part of care givers regarding the implications of being hard of hearing. This in turn could lead to improved attention to the care and provision of hearing aids and other assistive listening devices. In such ways, the educated hard-of-hearing consumer could also act as an advocate. A major ambition of the project was to establish a model method which CHHA could adopt to expand volunteer hearing helper services across Canada, in cooperation with professional resource persons.

Project Concept

In the autumn of 1992, the CHHA implemented the To Hear Again project which was funded by the Seniors' Independence Program of Health Canada. The 18-month project was designed to train and prepare hard-of-hearing seniors as volunteer visitors who would work primarily either in care facilities or in the community to help other seniors cope with the effects of hearing loss. Components of the program included an introduction to understanding the physical and psychological effects of hearing disorders, care of the hearing aid, experience with assistive listening devices, strategies in coping with hearing loss, and the role of the volunteer in relating to residents and care givers in a facility. Role playing and hands-on experience with hearing aids and other devices were a part of the training sessions. Volunteers were prepared to offer an information session to care givers. Close working relationships with professional resource persons was an integral part of the project concept.

Personnel for the project included a project coordinator, an advisory committee consisting of consumers and professionals from across Canada who are members of CHHA, and an audiologist engaged as the external evaluator. The project was conceptualized as a service-oriented project designed for continuing expansion, which would also gather data leading to practical recommendations for improving the delivery of hearing health care services to seniors in Canada.

Project Goals and Objectives

The goals of the project were to train hard-of-hearing seniors as volunteers to (a) provide direct practical assistance in the area of hearing health care to hard-of-hearing and late-deafened seniors, and (b) provide information to significant others and to care givers.

To meet the first goal, the following objectives were set:

1. The project coordinator will prepare a training manual, tools, and materials for the course.
2. The volunteer will demonstrate mastery of the training course information by effectively role playing a visit to a senior in a care facility using the tools provided in the course, with peer assessment in the classroom.
3. Successful performance as a volunteer visitor will be demonstrated through verbal reports to the project coordinator, from the volunteer and the liaison at the care facility at the third and six month.
4. At the end of the project, the training manual will be revised and made available to the public.

To meet the second goal, the following objectives were set:

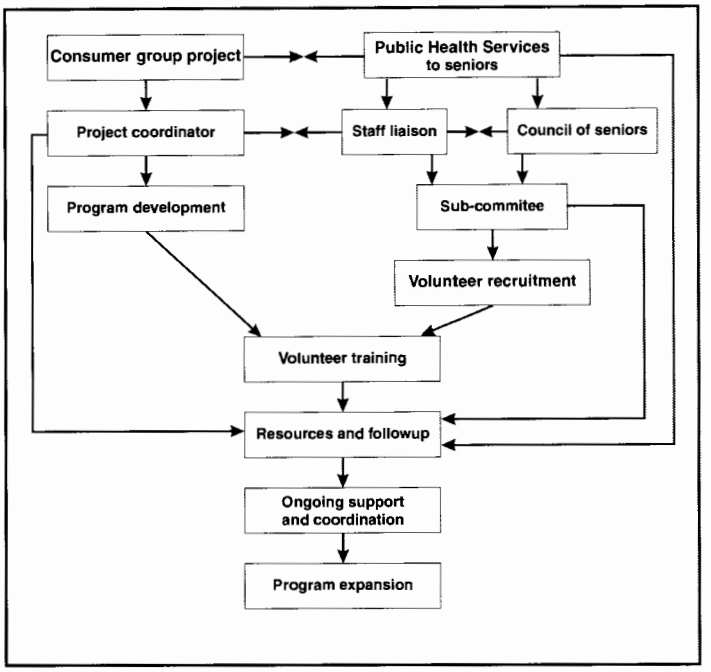
1. The project coordinator will prepare bilingual materials for public distribution, including posters and brochures for care facilities.
2. The volunteer will distribute these materials to care facilities and significant others.
3. The volunteer will demonstrate the ability to present an information session to staff by role playing such a session in the classroom, with peer assessment.
4. Effectiveness of an information presentation to staff will be measured by verbal report of the volunteer to the project coordinator and feedback from the liaison at the care facility.

Project implementation

Volunteers were solicited through advertisements in *Listen/Écoute* (the national CHHA magazine), community newspapers, and announcements in seniors' leisure centres. Volunteers were asked to commit to a half day of visiting per week, for a minimum of six months. Sites were selected by the Seniors Committee of the Board of Directors of CHHA in consultation with their local Branches across Canada. Sites were: Abbotsford, British Columbia (pilot site); Saskatoon, Saskatchewan; Saint John, New Brunswick; and, Markham (Municipality of York), Ontario. Volunteers came from cities, small towns, and rural areas in each geographic location. All the volunteers at three training sites (Abbotsford, Saint John, and Saskatoon) were CHHA members, with varying levels of consumer experience.

A somewhat different approach was taken in Markham, in the Municipality of York (Figure 1) compared to the other sites. This was because the Public Health Nurse responsible for

Figure 1. The CHHA/YORK model.



Services to Seniors, Office of Medical Health Officer, Municipality of York, requested that a training session be held in York. The Public Health Nurse assigned a staff member experienced in working with volunteers as the local liaison to the Project Coordinator. The Council for Seniors, Municipality of York, established a sub-committee for the project to find volunteers for the project and provide ongoing support to the group. The York class provided opportunity for a unique demonstration of a public health unit working with a disability organization to develop self-help and advocacy skills in its regional population. None of the volunteers in the York group were CHHA members. The York group lacked the prior knowledge base which CHHA members tend to have regarding experience in self-help and advocacy for the hard of hearing and they has less prior knowledge of hearing aids and technical devices. Therefore, in addition to the initial training session, arrangements were made for a local refresher class to be conducted by a hearing aid technician a month after the initial class. Furthermore, since this group of volunteers lacked the support which others received from their local CHHA Branch meetings, the York Seniors' Sub-Committee organized periodic support meetings for the group.

Volunteers from Abbotsford, Saint John, and Saskatoon were expected to select their own site to visit, to be familiar with the facility, and to name a local audiologist who would serve as a professional resource to them. Volunteers were thus expected to be self-directed, resourceful, and motivated. The Project

Coordinator then contacted all facilities and resource persons by letter, to explain the project and affirm their role in supporting the volunteer. In York, the local liaison person selected all facilities and assigned the volunteers, secured a technical resource person for the volunteers, and coordinated meetings of the local Seniors' Committee.

All volunteers attended the initial week-long training session and a follow-up session three months later. The objectives of the follow-up session were to (a) provide the volunteers with the opportunity to share their experiences, including successes and problems encountered, and provide mutual support, (b) address any problem areas in their performance, and (c) make revisions to the course, as needed. Between sessions, individual ongoing help was available from the Project Coordinator, by telephone, fax, and mail. CHHA provided name tags and liability insurance coverage for all trained visitors in the project. Each volunteer received a hearing aid basic care kit, a one-to-one communicator, a supply of materials (Appendix A), a training manual, and forms modified from professional tools to use for assessment (Alberti, Pichora-Fuller, Corbin, & Riko, 1984; Ventry & Weinstein, 1983) and record-keeping. Topics covered in the training sessions are listed in Appendix B. Classes included the provision of information, discussion, videos related to the topic, hands-on experience with devices, role-playing of visiting sessions, and staff inservices. Volunteers were reminded that, "the most important thing which you as a volunteer can do is to bring the personal contact, as a friendly visitor, to the hard-of-hearing senior. In care facilities where the elderly no longer have the capabilities to respond to teaching, you fill a valuable role as a resource person to care givers, with information on communicating with hard-of-hearing people, and about assistive devices." (Dahl, 1994). Volunteers received a certificate attesting that they had completed the training course. Several hearing aid dispensers loaned various models of hearing aids for hands-on experience in training sessions.

Care facilities for the aged were the primary targets for the project, but volunteers could opt to visit seniors at home in the community. The population served was mainly the frail elderly.

Thirty-one volunteers in four different provinces attended the training classes. Of the 31 volunteers who were trained, 25 (81%) visited seniors. Of these, 24 (96%) visited seniors one half day a week. In total, 32 facilities were visited, with the majority being residential and long-term care facilities. One volunteer (4%) visited seniors in their homes, with the visits arranged through a rural community health unit. Over a five-month period of weekly half-day visits, the highest number of visits per volunteer was 36, with a total of 288 visits for all volunteers. On average, each volunteer visited 15 to 16 residents three to four times. Usually, staff recommended the residents to be visited. Staff tended to choose those who had a hearing aid, whether or not the hearing aid was currently being worn. In a residential facility in which seniors functioned independently, the volunteer was given weekly use of an office and used the facility newsletter and bulletin board to announce her availability on a drop-in or appointment basis. In this situation, visits were, therefore, on a self-selection basis.

Problems identified by volunteers

Volunteers provided information about their visits in verbal and written form. The session assessment tools were intended primarily to provide structure to the visits. Volunteers were asked to write additional comments about each visit on the back of the forms, and return them to the project coordinator at the end of three months and six months. Nineteen provided brief comments in addition to completing the forms and five provided lengthy comments. The latter five also elected to keep a dated log of their visits, including comments on interactions with staff and family. In addition to problems identified on the forms, problems were discussed by telephone and during the follow-up session. As well, near the end of the project, volunteers were asked to complete a seven-point questionnaire. They were asked how many visits they had made, with how many people, and what was the problem most often encountered with residents and with staff. Other questions addressed what the best part of the program had been for them, if they would continue to visit, and if they would be willing to train another volunteer.

Problems commonly experienced by residents, as identified by the volunteers, dealt mainly with the hearing aids. These were: excessive wax in the earmould, dead batteries, inability to properly seat the earmould in the ear canal, inability to manage the controls on the hearing aid, inability to clean the aid, refusal to wear the aid or unhappiness with it, lack of awareness of other assistive devices which could be of help to them in communication situations, difficulty in getting the hearing aid repaired (especially due to their own lack of mobility), and lack of family support. Volunteers expressed concern that in care facilities there was often no set procedure for dealing with the needs associated with hearing aid maintenance. The questions were often raised, "Who buys the batteries?", "Who looks after getting the aid repaired, or a new earmould made?", "Who pays for an economically deprived person's needs?". Volunteers expressed concerns that in many cases the frail elderly could not wear, manage, or benefit from, in-the-ear hearing aids, which were the most common models sold to them. There was a consensus that in many instances, a one-to-one communicator would be a better choice than a conventional hearing aid. Commonly identified problems with nursing care seemed to be rooted in a general lack of preparedness to care for a hearing aid because this topic had not been included in nursing care training. Volunteers also observed a frequent lack of awareness by nursing staff of meth-

ods for communicating helpfully with hard-of-hearing seniors and lack of awareness of assistive devices.

A number of seniors expressed caution when approached by volunteers. They needed reassurance that the visitor was not trying to sell them a hearing aid. Therefore, a handout and brochure were prepared, either of which could be used to introduce the visitor.

Information to staff and significant others

Each volunteer presented a packet of information and awareness materials to their contact person in the facility who was either a director of care or coordinator of volunteers. Volunteers posted notices on bulletin boards which described the services they offered and how they could be reached. Videotapes on coping with hearing loss were left in the staff room, and it was suggested that staff or significant others could view the tapes at their convenience. When the opportunity arose, the volunteers presented information sessions to staff. They also interacted with family members and provided them with information on resources, equipment, and coping strategies for living with a hearing loss.

Arranging information sessions for staff proved to be the most difficult task. In most nursing homes, staff described themselves as too busy to hold an inservice session and unwilling to attend a lunch hour session. Staff turnover and shift rosters also presented difficulties. As well, some volunteers were more experienced and comfortable with making a presentation to a group than were others.

Some volunteers identified the need for a more structured form of communication with staff about the residents. They suggested that each volunteer keep a record of time of visit, name of resident visited, and pertinent facts arising from the visit. A copy of this record would be provided to staff.

Information to the public

Volunteers who were CHHA members had prior involvement with advocacy efforts. The York volunteers demonstrated their acquisition of advocacy skills by lobbying to have assistive listening equipment installed in a number of public meeting places. They also arranged for two volunteers to appear on local television to promote the program.

Materials developed in the project are available from CHHA (Appendix A). These include handouts such as brochures, posters, information sheets suitable for caregivers or for inclusion in procedure manuals on wards, and a comprehensive training and resource manual available for future training programs for volunteer hearing health visitors. The manual is also suitable as a resource book for caregivers and reflects, in part, the practical experience and feedback of the participants in the project.

Project Conclusions

The project has provided valuable experience to CHHA in a number of areas. An effective model has been developed for training and expansion of volunteer services in the area of hearing health care that includes materials and a delineation of process. Characteristics of the effective volunteer visitor for hard-of-hearing seniors were identified. These included the need to be a clear speaker, a patient listener, and knowledgeable and empathetic about coping with a hearing loss and hearing devices. The visitor had to be accepting of possible cognitive difficulties in seniors and of the potential need to repeat the same information in subsequent visits. Identification of common problems of hard-of-hearing seniors, particularly those associated with the effects of institutionalization, tended to reinforce existing impressions which CHHA held of such problems. It was evident that the hard-of-hearing volunteers also benefited from this type of project participation. Overall, the project demonstrated the relevance of CHHA's project focus on partnership efforts and the importance of working in cooperation with professionals in the field and utilizing existing service delivery structures to implement hearing health care efforts.

Volunteers felt they had demonstrated mastery of the training and visitor role to varying extents. The volunteer's satisfaction with the visitation experience was closely related to the receptivity and support provided by the institution and its personnel and to volunteer preferences with regard to the types of resident to visit. As the project visiting progressed, it was evident that the volunteers tended to fall into two categories: (a) those who were more comfortable with the priority of tending to the hearing aid and who could work with the very frail incapable of learning and responding to the volunteer's teaching, and (b) those who preferred an interactive teaching and information type of visit with more active seniors. It seems that this latter group would be happier in community visitation. Both types of volunteers could potentially serve a useful role in a comprehensive volunteer visitor program.

In general, as far as the visitors could discern, residents felt that they had benefited from the program in terms of appreciating a friendly visit from someone who understood the problems associated with being hard of hearing, including factors involved in caring for a hearing aid. Appreciation was expressed to the volunteer for "trouble-shooting" the hearing aid and providing information on other useful devices and other coping strategies. Nearly all hard-of-hearing seniors who were visited had no previsit knowledge of assistive listening devices. These additional devices could help them to maintain some independence and enhance their potential to communicate with others. Need for assistance was indicated by comments by seniors that they did not know how to care for the hearing aid or had a problem with

the hearing aid making a whistling noise (feedback) or not working.

Volunteers reported that staff who attended an information session said they found it helpful to learn about the experience of living with a hearing loss from a person who had a hearing problem. Contact persons at institutions, usually the director of care or coordinator of volunteers, were visited or called three and six months after volunteer visits to determine reactions to the project and to elicit suggestions for improvement. They felt that the volunteers made a useful contribution and hoped that the program would be expanded. It is interesting that during these contacts many nurses, both directors of care and head nurses, expressed awareness that there seemed to be a correlation between acquired hearing loss and the progress of dementia.

The initial focus of the project was to provide the services of a friendly visitor who could relate helpfully to the various aspects of coping with a hearing loss. The reality was that in most cases, the visit focused on problems related to the hearing aid. This happened largely because staff referred residents with hearing aids to the volunteer. Obviously, the resident with a hearing aid was easily identifiable by staff as having a hearing problem, but the referral pattern also indicated that care of the hearing aid was often a problem for both resident and caregiver. External evaluation of the project by an audiologist is reported in this issue (Carson, 1997).

As yet, resources have not permitted a complete follow-up assessment which was recommended by the external evaluator. However, one year postproject, York reports that six of their original volunteers continue to visit seniors and that three more volunteers have been trained by the liaison. Of the others, six continue to visit institutions, with the regularity of visits varying from weekly to intermittently or on an "on call" basis. Five other volunteers state that they use their experience on the project with local groups in the community. Four have not resumed visiting, due to health problems. Expansion of the program has begun in Newfoundland. CHHA members in Alberta and Saskatchewan anticipate doing the same this year. Unfortunately, information was not available from the CHHA office about additional individuals and groups who have ordered and used the program materials. A future evaluation of the program should include new users as well.

CHHA's review of the project outcome by their Seniors Committee resulted in the following recommendations: (a) that they continue to expand the To Hear Again project in close cooperation with professionals in the field; (b) that institutions which train nurses and other health care workers include a component on caring for the hard-of-hearing patient and related prosthetic devices; (c) that institutions caring for the aged establish care policies which include the expectation of basic care of hearing aids for residents; and, (d) that a mechanism be established for institutions to cooperate with CHHA on the distribution of an education/information program and materials to staff of all residential care facilities for seniors.

General Conclusion

The lack of awareness and attention to the problems of hard-of-hearing and late-deafened persons results in an enormous human cost. The effect is not only in terms of human suffering; there is also a significant economic cost resulting from neglect of hearing-related problems in the aged. Professional needs assessment studies of a community sometimes fail to assess hearing-related health, safety, and security needs of seniors in their homes. Unnecessary admissions to nursing homes may follow family concerns about safety because the aging person could not hear the fire alarm, phone, or doorbell, and families have been unaware of the availability of alerting devices. It seems likely that residents of facilities could deteriorate at an accelerated pace, thus requiring higher levels of care and more medication when their hearing impairment goes unattended (Uhlman, Larson, & Koepsell, 1986). Staff who give nursing and personal care tend not to have received training in the care of hearing aids (a medical prosthesis), not to know of other assistive listening devices, and to assign low priority to the hard-of-hearing condition in care facilities. The basic care of a hearing aid as a prosthesis to partly alleviate a disabling condition is often not a part of nursing training and care.

Given the existing economic and human resource limitations and the increasing recognition of the positive value of consumer involvement in health care, it seems timely to use trained volunteers who can act as friendly visitors to enhance the communication opportunities of the elderly. It is the human touch, which the volunteer has time to give, which can do much to improve the quality of life for hard-of-hearing seniors in care facilities.

Please address all correspondence to: Marilyn Dahl, Executive Director, Western Institute for the Deaf and Hard of Hearing, 2125 West 7th Avenue, Vancouver, BC V6K1X9, e-mail mdahl@widhh.bc.ca.

References

Alberti, P.W., Pichora-Fuller, M.K., Corbin, H., & Riko, K. (1984). Aural rehabilitation in a teaching hospital: Evaluation and results. *Annals of Otology, Rhinology, and Laryngology, 93*, 589-594.

Browne, N. (1992). Hearing loss and residential homes for the aging. *Listen/Écoute, 1* (3), 27.

Carson, A. J. (1997). Evaluation of the To Hear Again project. *Journal of Speech-Language Pathology and Audiology, 21*, 160-166.

Dahl, M. (1994). *To Hear Again: A Training and Resource Manual.* Ottawa: Canadian Hard of Hearing Association.

Dahl, M., & Dahl, H. (Eds.). (1992). *Jerusalem Congress Report: Fourth International Congress of the Hard of Hearing.* Port Coquitlam, BC: MD Enterprises.

Gough, K. H., & Semple, J. E. (1988). Hearing impaired geriatric residents and health care professionals. *Canadian Journal of Rehabilitation, 1,* 163-168.

Hartmann, H., & Hartmann, K. (Eds.). (1985). *Awareness and identity of the hard of hearing: Stockholm Congress Report.* Hamburg: International Federation of the Hard of Hearing.

Health and Welfare Canada. (1988). *Report on acquired hearing impairment in the adult* (catalogue no. H39-123/19886). Ottawa: Supply and Services Canada.

Hétu, R., Riverin, M., Getty, L., Lalande, N. M., & St-Cyr, C. (1990). The reluctance to acknowledge hearing difficulties among hearing-impaired workers. *Audiology, 24,* 265-276.

Lubinski, R. (1981). Speech, language and audiology programs in home health care agencies and nursing homes. In D. Beasley & G. Davis (Eds.), *Aging: Communication process and disorders* (pp. 89-92). New York: Grune and Stratton.

Mulrow, C. D., Aguilar, C., Endicott, J. E., Velez, R., Tuley, M. R., Charlip, W. S., & Hill, J. A. (1990). Association between hearing impairment and the quality of life of elderly individuals. *Journal of the American Geriatrics Society, 38,* 45-50.

Schein, J. (Ed.). (1992). *Canadians with impaired hearing.* Ottawa: Statistics Canada.

Statistics Canada. (1991). *Health and activity limitation survey.* Ottawa: Statistics Canada.

Strassler, J. (Ed.). (1988). *Montreux Congress Report: Third International Congress of the Hard of Hearing.* Zurich: Bund Schweizerischer Schwerhoringen-Vereine (BSSV).

Uhlman, R. F., Larson, E. B., & Koepsell, T.D. (1986). Hearing impairment and cognitive decline in senile dementia of the alzheimer's type. *Journal of American Geriatric Society, 34,* 207- 210.

Ventry, I. M., & Weinstein, B. E. (1983). The Hearing Handicap Inventory for the Elderly: A new tool. *Ear and Hearing, 3,* 128-134.

Appendix A
Materials for the Project[1]

1. Training/resource manual
To Hear Again (Dahl, 1994)
2. Brochures
A chance to hear; A chance to be heard
Care of all-in-the-ear hearing aids (large print)
Consumer advice for buying a hearing aid
Hard of hearing — What does it mean?
3. Posters
How to communicate with people who are hard of hearing or deaf
How to help with hearing aids
4. Booklets
A self-help guide for better hearing
Manual for seniors who are hard of hearing
5. Other
Hearing access symbol stickers
6. Selected videotapes
Seniors Independence Program videos
(prepared by the Canadian Hearing Society)

1. All materials are available to the public from the CHHA.

Appendix B
A Brief Overview of Course Content

1. Introduction to materials, use of the manual, resource persons.
2. Understanding hearing loss, physical and psychological effects of hearing disorders.
3. The hearing aid — expectations, care, and common problems.
4. Strategies in coping with your own and someone else's hearing loss.
5. Assistive listening and communication devices, the symbol of access for impaired hearing.
6. Visiting the resident in a care facility.
7. Ethics and limits.
8. Role of the volunteer; relating to staff, resource people, family; building your own reward system; building continuity.
9. Offering an information session to staff.