Augmentative Communication News

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UPFRONT

Most would agree that getting old is a preferable alternative. . . aging itself being a desirable event. Yet too often we hear stories that highlight the painful and undesirable effects associated with aging, rather than the positive experiences and successful accommodations people make during the aging process.[1] While being ill certainly can be devastating (no matter what your age), most elderly people are not sick. On the other hand, aging and disability are strongly correlated. As we age, we are likely to develop disabilities that affect communication, mobility, activities of daily living, work and recreation. And we are likely to experience ageism, *i.e.*, prejudice against the elderly.

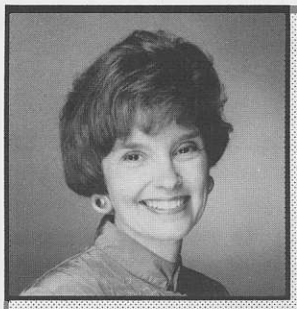
The demographics of aging have changed. The expected life span of people in many nations is increasing dramatically. The number of healthy, productive persons in their 60's, 70's, 80's and 90's, with and without disabilities, is growing. Many books, magazines and journals now focus on issues related to aging. The field of gerontology is expanding, and institutes on aging are springing up all over the world. Older people are creating new markets and professional service challenges. While medical and social services establishments are accustomed to working with persons with acquired *(continued on page 2)*

For Consumers

The third thirty: Keep on communicating!

- In this century, life expectancy has increased from 46 years to nearly 80 years in many countries.
- The fastest growing part of the population in some countries is women over 80.
- Researchers predict there will be more adults over 65 than children under 17 years by the year 2030.
- A large, longitudinal study conducted at ages 50, 60, 65, 70 and 80 years by the National Institutes of Mental Health concluded that when healthy people age in their own communities (and not institutions), the progressive deterioration in both mental and physical capacities found in earlier, cross-sectional studies of people at similar ages had disappeared.
- The decline in various capacities with age is not universal.
- The "disengagement theory" (*i.e.*, as people grow older, they withdraw from society and social activities) was not the pattern found among healthy aging individuals.

This information comes from the popular book *The Fountain of Age* by Betty Friedan.[6] It is a well-researched, lengthy but readable collection of facts and figures on aging. It also provides some new perspectives on aging issues. Friedan discusses studies that demonstrate that people who think of old as being ill, frail, inactive and lacking power are far more likely to self-fulfill the prophecy of isolation and passivity. She highlights *successful aging*, defined as "people who show little or no loss in various functions to age 70, as compared to *usual aging* *(continued on page 2)*



(UPFRONT *from page 1*)

disabilities, little research has been done to define the needs of persons who are aging with a disability.[2] Today this group is beginning to demand information relevant to their conditions.

"In the past we didn't age, we just died!" says June Kailes, a disability advocate. "We are the first generation to live this long, so the question is not will we live? but, how well will we live?"[3]

This issue of ACN focuses on aging and AAC practices with persons in their "third thirty"—ages 60 to 90 years. AAC professionals have paid comparatively little attention to the application of AAC devices, techniques and strategies to ameliorate communication impairment in our elders. In fact, a very small percent of AAC professionals work with people over 65 years of age.[4] To date we have remained complacent when professional colleagues reject the idea of recommending AAC strategies, devices and techniques because they find some devices too complicated and/or because they assume older clients won't accept different ways of communicating.[5]

For Consumers shares information about aging in general, and aging with a severe communication impairment in particular. **Clinical News** explores a growing (but hidden) dichotomy in AAC services to the elderly. It also discusses storytelling as a communicative style and suggests ways to use poetry. The **Equipment** section highlights reasons to use technology and ways to make it more user friendly for older adults. **University Research** summarizes data from Susan Balandin's study on the aging of individuals with cerebral palsy in Australia. **Governmental** shares additional information garnered on my recent trip to Australia. "Gudday" for now.

Sarah W. Blackstone, Ph.D., Author

For Consumers (from page 1)

(some limitation in function) and *pathological aging* (severe limitations).[7,8] Factors associated with successful aging include:[6]

- An ability to create bonds beyond the family.
- Carrying out activities in society that involve thinking and making choices. [Note: this factor was almost as strong a predictor for survival as not smoking.]
- Accurate, realistic, active identification with one's own aging (as opposed to resignation to the stereotype of "being old" or denial of age changes).

Communication skills play an important role in all these factors.

By focusing on the elderly without disabilities, *i.e.*, those aging *successfully*, Friedan is sometimes guilty of both *ageism* and *ableism* (discrimination based on ability).[9] The reality is that most people over age 60 experience a series of changes in their functional status. Hearing loss; diminished strength, flexibility and endurance; visual problems and cognitive changes are most notable. *The Fountain of Age* all but ignores issues faced by persons aging with life-long disabilities. The book also fails to highlight the many assistive technologies now available to help people adapt to changes in functional status.

"Accurate, realistic, active identification with one's own aging,"[10] a characteristic of those who age successfully, means a willingness to make appropriate accommodations for one's disabilities. More and more, people who age *successfully* will do so not because they are free from functional limitations, but because they continue to function with their existing disabilities, using: (a) assistive technology (both low and high tech), (b) adaptive strategies and techniques and (c) appropriate support systems.[11-13]

The present

June Kailes, a disability advocate and expert on aging, observes that both the aging population and the younger disabled population continue to struggle against segregation and institutionalization.[14] Elderly people are segregated from the younger population when they live in retirement communities or nursing homes and/or concentrate their activities in adult day centers. People aging with disabilities are further segregated from their non-disabled elderly peers, and thus are doubly stigmatized. They are also much more likely to be institutionalized,[15] even though data suggest that elders with developmental disabilities could successfully reside in less restrictive and less costly alternative care settings.[16]

For most people, the prospect of aging is a concern. Pioneer AAC users who have spent their lives fighting for access to education, communication, employment and membership in their communities, may find the lack of services, information and support currently available to elderly persons with life-long communication impairments to be downright frightening. For those who acquire communication problems later in life, the prevailing lack of awareness and negative attitudes expressed by

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service providers and funding sources toward assistive technology in general and non-speech communication in particular has created a serious attitudinal barrier to the use of AAC techniques in solving severe communication problems.[5,12]

Use it or lose it

The adage "use it or lose it" is relevant to the mind, body and spirit. It is equally true of communication. Maintaining the ability to communicate in the presence of a severe communication impairment requires assistive technology, compensatory strategies and at least one willing, able and available communication partner.

A recent book edited by Lubinski and Higginbotham, *Communication Technologies for the Elderly: Vision, Hearing and Speech,* seeks to enhance the communication opportunities of elders through the use of technology.[12] It calls for "the commitment of communication professionals to provide reasonably priced technologies that are appropriate, essential and easy to use."[17] The book supports the need for elderly persons to have access to communication devices that are designed to assist them in dealing with their functional limitations, while respecting their preferences and communication styles.

Having AAC devices and strategies is not enough. It is necessary to use them regularly to communicate. Another relevant adage is "practice makes perfect." One way to maintain communication skills is to form (or join) a community support group. For example, aphasia groups run by consumers can be very rewarding:[18]

- Donald Moore writes that his group was a "psychic boost."[19]
- Roger Ross writes about six support groups he's been involved with since 1991, three of which he started. He says, "I did not get better until I met other people with the same problem. . . .My colleagues and I believe that joining a group is the most important thing you can do for yourself. . . . Some of us have been at this organized talking and listening for some years."[20]

Ross believes that while it is *acceptable* for groups to have help from a professional, it is not essential. "Talking and listening should be done mainly by the persons with the problem. Spouses and other caregivers should form their own groups."

Be prepared

Kailes makes the following suggestions for persons currently aging with a disability, and for those who support them.[14]

1. Work to make changes <u>now</u> in the systems you will need to depend upon later.
2. Become "the" expert on your own disability.
3. Make sure you have good friends across a range of ages.
4. Know how to use the personal assistance (PA) network.
5. Pay attention to the physical layout of your residence. Make plans to live where there is enough room for a personal assistant.
6. Choose to live where you can maintain your social network.
7. Be aggressive about gaining access to and using assistive technology.
8. Have monies in reserve to pay for PAs. [Note: Great idea, but for people already living on the edge of poverty, saving money for the future isn't an option.]

The future

The expectations of yesterday are not going to predict tomorrow. Health care providers, educators, social service professionals, governments and individual citizens are examining assumptions about the aging process.[21] Research now confirms that environmental factors, attitudes, expectations and lifestyle can and do make a significant difference in the aging experience. It is also becoming apparent that assistive technology "will play an increasingly critical role in maintaining the balance among functional limitations associated with aging, life-long impairments and independence."[22] Technology, especially communication technology, not only will improve a person's functional abilities and quality of life, but may reduce costs. New technology can enable persons to receive care in their homes, where monitoring can be accomplished from a distance and access to assistance and advice can be readily available.[23,24,25]

"To do" list

AAC interventions are designed to help ensure that individuals with severe communication impairments keep on communicating and to prevent dependence, fear and isolation.[26] As a group, AAC consumers, researchers, service providers, advocates, payers, educators and manufacturers have the capability to respond to the challenges older people with severe communication impairments will bring forward. We must prepare. Our "to do " list includes:

- Defining the diverse needs of elders with communication impairments caused by degenerative, acquired <u>and</u> congenital problems.
- Developing AAC strategies/tools that directly address the needs, preferences and styles of older people.
- Increasing awareness of AAC services and devices among payers, physicians, speech-language pathologists, and consumer groups who represent elderly persons.
- Conducting and publishing outcome studies that support the effectiveness and benefits of specific AAC intervention approaches and tools with specific groups of persons in their third thirty.
- Educating ourselves about the different intervention strategies required to serve the communication needs and preferences of older clients.

Clinical News

Who can benefit?

Elderly people are the most heterogeneous segment of society. Thus, developing strategies to address their needs is a multi-faceted challenge. AAC professionals are just beginning to conceptualize, develop and share intervention approaches designed specifically to meet the communication needs and expand the communication opportunities of elderly people. Certain subgroups of elders (those with acquired/degenerative conditions) receive considerable attention from AAC professionals. Others have received almost none (elders with congenital conditions).

Table I summarizes clinically relevant information about the types of disorders, causes, courses and problems faced by aging adults.[27,28] It also gives examples of AAC devices and strategies. The chart is adapted from work by Garrett and Yorkston. Ten subgroups are listed. The six nonshaded areas address individuals with severe communication impairments acquired later in life.[29] Little information is available about the use of AAC with persons who have dementia. However, much is written about successful AAC interventions for people with amyotrophic lateral sclerosis, brain-stem strokes, traumatic brain injuries, multiple sclerosis and aphasia. Even so, articles in *Asha* magazine report that most elderly people define successful intervention as "regaining the ability to talk" and state that elderly people do not consider the "use of an augmentative communication system indicative of successful intervention."[5] This reflects an attitude that implies it is okay not to be able to communicate if you are elderly. A similar statement about children would be abhorred and heralded as a failure on the part of professionals to do their job well, not an unwillingness on the part of consumers to accept unfamiliar approaches. We have

Table I. Summary of AAC applications for elderly persons with SCI
Adapted from Garrett and Yorkston[29]
Expanded to include congenital problems (shaded areas) and sensory impairments

Domain	Disorder	Common causes	Typical course	Types of problems	AAC devices/strategies
COGNITION (Degenerative or fluctuating	Dementia	Altzeimer's disease; Multiple strokes	Progressive deterioration	Loss of memory & intellectual functoning. Changes in behavior, mood, personality	Signaling device; Identification aid; Timer or activity signal; Memo systems/list maker; Environmental organizer; Instructional device; Biographic introducer; Memory book and wallet—memory activities; Calendar box, schedule, etc.
	Confusion	Trauma; Stroke; Infection; Multi-drug therapy	Fluctuating	Deficits in attention, information processing & orientation	
(Congenital)	Mental retardation	Perinatal complications; Early trauma; Genetic syndromes	Generally improves with development. Depends on etiology	Overall delays in development and learning. Strong correlation with other developmental problems	
LANGUAGE (Acquired)	Aphasia	Stroke	Improves. Later stabilizes	Reduced ability to speak, listen, read and write	Attention getting device; Basic needs request; Communication board, wallet, device; Comprehension enhancer; Conversation enhancer; Storytelling; Game-playing, etc.
(Congenital)	Language Disorder	Perinatal problems; Genetic; Autism; Trauma	Improves with development	Delayed/disordered development of syntax, semantics, phonology, pragmatics. Difficulty learning to read/write	
MOTOR PLANNING (Acquired)	Apraxia	Stroke; Trauma; Tumor	Improves. Later stabilizes	Disruption of motor planning. Often associated with aphasia	Augmented response system; Comprehensive communication system; Situation specific communication system (topic boards), etc.
(Congenital)	Developmental Apraxia	Mostly unknown; Genetic; Trauma	Improves with development. Seems to stabilize	Reduced intelligibility. Often associated with language problems	
SPEECH PRODUCTION (Acquired)	Dysarthria (paresis of muscles)	Locked-in syndrome; Amyotrophic lateral sclerosis; Parkinson's disease; Multiple sclerosis; Dystonia	Some improve & stablize. Others are progressive & deteriorate	Reduced speech intelligibility because of paresis of muscles involved in speech (articulation, respiration, phonation)	Yes/no signal; Call system; Auditory scanning system; Direct selection or scanning device; Portable writing device; Voice amplifier; Alphabet board, Alerting system; Phone adaptation; Multi-purpose system; Alphabet pacing board, etc.
(Congenital	Dysarthria	Cerebral palsy; Other developmental disabilities	Improves with development; Stabilizes; May worsen in later life	Reduced intelligibility due to articulation, respiration, phonation problems	
HEARING	Hearing loss/ deafness	Presbycusis (hearing loss associated with aging)	Affects higher frequencies. Gradually worsens	Reduced acuity and increased distortion. Difficulty hearing and participating in conversations/groups—particularly in noisy environments	Hearing aid; Assistive listening device; Relay system; TTD; e-mail; Internet access; Captioning
VISION	Visual impairment/ blindness	Presbyopia; Cataracts; Macular degeneration	Gradually worsens. Surgery can correct some problems	Difficulty reading. Can affect mobility; increases risk of falling	Glasses; Screen reader; Text enlarger; Books on tape

work to do. Many of our colleagues still think AAC means complicated high-tech devices, when in fact we offer a broad range of adaptive strategies.

The four shaded areas in Table I address those aging with congenital problems. Although almost nothing is written about them, long-time AAC users may require adjustments to their communication systems to accommodate changes in functional status or lifestyle. In addition, another group needing AAC is emerging. Individuals who have "gotten by" using their dysarthric speech are suddenly finding that others are having more difficulty understanding them as they age. These individuals may need to (re)consider using AAC devices and communication strategies. Without augmentation, they may find opportunities to participate in social events diminishing and their social networks shrinking.

Conclusion

Staying "connected" is crucial to aging successfully. AAC professionals can help people who are growing older maintain or gain these connections.

Storytelling

Sheela Stuart's research examines the ways elders use storytelling as a communication style and the implications of storytelling for the work AAC professionals do with elderly persons.[30] She identified four different functions served by three types of stories.[31]

Functions of storytelling.

1. **Information transfer.** Elders tell stories to communicate world knowledge/wisdom. Most contain a particular proposition: "*You know I don't just tell these stories for the fun of it. I want you to have the benefit of all that stuff I learned, and I don't wanna get preachy about it, so I tell a story, and you get the idea.*"
2. **Usefulness.** To transmit culturally relevant information.
3. **Intimacy.** To create a common experience between the storyteller and listener.
4. **Entertainment.** To amuse, pass the time, entertain.

Types of Stories.

1. **Individual monologues.** Most monologues intermingle time references of past and present. They have an introductory phrase at the beginning of the story, a summation phrase at the end and are comprised of basic segmental and expansion elements. The **basic segments** tell the core of the story and supply repeated elements. Sometimes the same words are used; other times words are interchangeable, *e.g.*, "My mother passed away." and "My mom died." The **expansion segment** supplies greater detail in relation to key topic areas. **Chaining** occurs when repeated stories follow one another.

Stuart also notes that communication partners who interact on a regular basis use two additional story types:

2. **Contributed group.** Several people collectively tell a story.
3. **Thematic evolving.** Basic segments of a story are told with new details added.

Stuart concludes that it is important to incorporate storytelling capabilities into voice output communication aids for AAC users and suggests the following:[30]

- Provide several individual monologue stories. Include references to past and present. Include introductory and summation phrases, basic elements and some expansions.
- Use age and gender appropriate vocabulary. Reflect the personal style of the individual.
- Incorporate variations in synthesized voice, rhythm and intensity so the person can communicate emphasis and emotion appropriate to the story line.

Poetry

As with storytelling, poetry writing can play a valuable therapeutic role in helping older people to "stay connected." Devices developed for AAC users (*e.g.*, topic specific overlays, communication boards, choice boards) may ultimately prove useful in helping to promote self-expression not just among our usual clients, but for a broader segment of the aging population, such as the people involved in the poetry "seminar" described below:

Twenty-five students in a nursing home in New York City, ranging in age from 50-94 years, met 16 times for about an hour on Wednesday mornings.[32] One was blind, two visually impaired, eight used wheelchairs, eight were foreign born. Several also had a serious hearing loss, severe speech problems and/or memory loss. Many were in pain and depressed. Most were from working class backgrounds and had a limited education. Few routinely read or wrote. None had ever written poetry. Their teacher, Kenneth Koch, suggested the kind of poem to write, *e.g.*, "colors," "secrets." This relieved the hesitant, inexperienced students of the burden of finding a proper subject of their own. The students dictated, the teacher wrote, frequently interacting to say, "Here's what you've written so far. What do you want to say next?" The poems emerged:

- One 83-year old wrote, "Loving a lady could be like a rose/That has soft petals."
- A 65-year-old from Georgia wrote, "When I was a little boy and got beaten/It was quiet afterwards."
- A 94-year-old woman wrote about the feel of a thin gold necklace, "Something soft and gentle/Glides through your fingers/And it seems to grab your hand and lead you/On to something greater/If only you had the sense to follow it."
- A 59-year-old wrote about the ocean, "So huge/So powerful/So rich/I have everything/Everything my heart desires."
- A 90-year-old wrote, "Writing has given me a reason to live/Besides, it keeps us off the streets."

"Things were in these students," concludes Koch, "but, for the most part, hidden." Writing poems, helped them discover these "things" and make them into art. They were the richer for that, and so, in a different way, were those who heard their poems or read them.

Equipment

Making technology user friendly

This section considers some of the communicative functions people may need to augment as they age. For example, elders with dementia and those with severe mental retardation may benefit most from devices that help them organize information, participate in daily activities and express their basic needs. Older persons with dysarthria and intact language, on the other hand, are likely to want to use a wide range of AAC devices. They need unrestricted access to language, and many use, or would like to use, computers and other mainstream technologies to work, recreate, communicate and more. Individuals with language impairments often benefit from devices that help them process spoken and written language, as well as enable them to produce language.

Today's AAC devices and other assistive technologies can enhance these (and more) communicative functions:

- Signal attention, emergency
- Provide identification
- Express wants/needs
- Compensate for memory loss
- Enhance comprehension
- Support conversation
- Maintain social relationships
- Give information
- Get information
- Chat
- Tell stories
- Tell jokes
- Play games
- Give speeches
- Write memos/letters
- Write papers, books, memoirs
- Use the phone
- Access the Internet
- Send e-mail
- Enhance social participation
- and more

Increasing acceptance

We have technology that can augment important communicative functions. At this time, there is no conclusive evidence that elderly persons accept or reject high tech aids more or less often than other populations.[33] There is, however, evidence that older adults who confront a disabling condition for the first time have more difficulty accepting devices, and that people with cognitive impairment may be reluctant to use devices, at least initially. While our elders have a reputation for not accepting change, they have, in fact, experienced and adapted to profound changes in the world and in the use of technology during their lifetimes. Perhaps our expectations are influencing their outcomes. Research shows that low tech devices are underutilized by elderly persons because of:[33]

1. A lack of knowledge about how to use devices
2. A lack of knowledge about how to repair or replace devices
3. Changing needs or preferences
4. Feelings of embarrassment or stigma
5. Differences between needs in the clinic and the community.

Asking those who count

Before recommending a device, clinicians should ask consumers and family members some questions that provide insight into their future use of the device and identify potential problems. For example:[33]

- Do you expect to use this device in your home? How?
- Where else do you expect to use the device?
- Do you feel any pain using the device? Is the device awkward to use?
- Do you get tired of using the device?
- Do you think this device will enable you to do what you want to do at home?

Instructional approaches

Elders learn new skills more easily when instruction is brief and there are repeated opportunities for practice. Guidelines for instructing older adults to use low and high tech devices include:[33]

- Use valued activities
- Facilitate experimentation
- Involve the family
- Listen to how the individual and family members perceive the device
- Provide in-home follow-up
- Provide repair information
- Use short and repeated training sessions

Additional Resources

The 1996 ***Guide to Augmentative and Alternative Communication Devices*** contains profiles of 91 AAC devices complete with photographs. This guide organizes devices into five different categories, including those with (1) primarily visual output, (2) primarily spoken output, (3) both spoken and visual output, (4) speech amplifiers and (5) electronic artificial larynges.[34]

"Help sheets" by Melanie Fried-Oken give valuable advice on the following topics:[35]

- Voice amplification equipment
- First letter pointing with an alphabet board
- Wall chart communication system
- Clarification strategies for communication aid users
- Conversational control phrases
- Listener responsibilities for communication
- Instructions for Yes-No communication
- Dependent encoded scanning techniques for alphabet and phrase communication boards
- Etran boards

University/Research

Aging with CP: An Australian study

Susan Balandin[36] recently completed a survey of Australians over 30 years of age with cerebral palsy. She distributed 470 questionnaires. Of the 279 respondents, eleven percent used a communication board, nine percent used a VOCA, three percent used an interpreter, and five percent used signs or gestures. Respondents reported their primary concerns were health and aging. Seventy-seven percent said their physical condition was worsening as they aged and they didn't know what to do. Some reported conflicting advice from professionals—"Physical therapists say one thing; physicians say another." Some had been summarily told, "What do you expect? You're getting older."

Respondents said they talked with a variety of people (*e.g.*, parents, spouses, friends) about the aging process. However, only forty percent reported communicating about issues of aging with their caregiver/attendant, and forty-three percent said they had never read any relevant material. [Note: Balandin says it wasn't clear whether this was due to literacy problems or difficulty accessing relevant materials.] Eight percent stated they were experiencing changes in their communication skills, and ten percent noted more difficulty swallowing.

Literature on aging with cerebral palsy contains research related to halting or reversing limitations resulting from the aging process. However, suggestions about how to prolong communication skills and swallowing are missing. Thus, based on her preliminary data, Balandin suggests AAC consumers and professionals do the following:

- Insure that consumers have the opportunity to discuss their communication needs regularly.
- Review communication systems to insure that the individual continues to access his/her system easily.
- Be sure personal assistants and caregivers have accurate information about the aging process and services that are available to assist people as they age.
- Be sure consumers, staff and family receive adequate training and gain an understanding of the aging process so they view it positively rather than with fear.
- Help AAC users and those who support them to deal with change in a positive manner.
- Present information in a variety of formats to insure that those who do not read are kept well informed.
- Support consumers to continue to participate in their communities and maintain control over their lives.

Governmental

Australia: A happening place

Returning Down Under after an eight year hiatus, I ventured from Sydney north to a spot beyond Cairns in the rainforest, and then east, to the living coral of the Great Barrier Reef. What beauty! Australia is a large country and sparsely populated—17 million Australians number just over half of Canadians and less than one-third of people in California. Just outside Sydney, I met with Sue Pitt, Susan Balandin and Tessa Barnes-Hughes at the Spastic Centre,[36] which was founded 50 years ago by parents of a child with cerebral palsy. I toured their well-stocked assistive technology program, which provides services to people of all ages and types of disabilities. I later met with Teresa Iacono from the Macquarie University[37] who told me about her distance learning project in AAC and her research in early intervention. Distance learning is crucial for Australians interested in AAC. While each state has AAC activities, there are no national laws mandating services and few universities offering courses. AGOSSI, a group primarily for speech-language pathologists, and ARRATA, an interdisciplinary group focused on assistive technology, allow AAC professionals, manufacturers and researchers to collaborate and keep in touch with AAC activities in Australia and elsewhere.

In Cairns, Keila Waksvik[38] gave us a tour of the Assistive Technology Resource Centre. She and her colleagues organized an evening with a group of 40 teachers, speech-language pathologists, occupational therapists, parents, administrators and instructional aides around AAC and related topics. These professionals, consumers and family members were busy, excited, creative, productive and over-worked—just like everyone everywhere else. They raised familiar questions:

- Is there data to reassure families that devices, signs, symbols do not interfere with the development of speech?
- How do you motivate people to use AAC devices and techniques?
- How can you successfully include children who use AAC in regular classrooms?

I spoke with a smaller group about ISAAC's Emerging Nations Initiative in the Pacific Rim who suggested:

- Disseminate the results of projects already completed in other areas of the world in "how to" manuals.
- Support the formation of "Twin Centers," similarly to international twin-city relationships.
- Involve Australian organizations, *e.g.*, AGOSSI/ARRATA.
- Link with existing university activities in New Guinea/Indonesia.

Australia may be "down under," but it sure felt up and coming and very vital when it comes to AAC. It is further testimony to how important the work of a few dedicated professionals and parents can be in AAC.

References

[1] Berlin, C. (April 1994). Research Directions. *Asha*, 38.

[2] Trieschman, R.B. (1987). *Aging with a disability*. New York: Demos Publications.

[3] Kailes, J. (1994). Midlife cripdom: Getting fewer miles per gallon? (Good news, bad news and the current state of knowledge). *Aging with disability pack*. 4. (see address in **Resources**)

[4] Blackstone, S. (1990). Populations and practices in AAC. *Augmentative Communication News*. 3:4, 1-3.

[5] Bessler, C. D. & Toner, M. A. (April 1994). What older consumers think. *Asha*. 40-41.

[6] Friedan, B. (1993). *The Fountain of Age*. NY: Simon & Schuster. 75-81.

[7] Rowe, J. & Kahn, R. (July 1987). Human aging: Usual and successful. *Science*.

[8] Overeynder, J., Janicki, M. & Gurk, M. (February, 1994). *Aging and cerebral palsy. Pathways to successful aging: A national action plan*. New York State Developmental Disabilities Planning Council, 155 Washington Avenue, Albany, NY 12229. 8-9.

[9] For a discussion on ableism, see the December 1995 issue of *Alternatively Speaking* by Michael Williams.

[10] Friedan, B., *op. cit.*, 82-84.

[11] Historical summary of federal recommendations on aging 1980-1992. *Interim report of the Task Force on aging research*, September 1993.

[12] Lubinski, R. & Higginbotham, J. (Eds.) (Fall, 1996). *Communication technologies for the elderly: Vision, hearing and speech*. Singular Press.

[13] Cherow, E. (Ed.) (1990). Proceedings of the Research Symposium on Communication Sciences and Disorders and Aging. *ASHA Reports #19*.

[14] June Kailes. (June 1996). Personal communication.

[15] Heumann, J. (1985). The independent living movement: Benefits for the elderly. *Proceedings from Toward a Unified Agenda conference*. 6-12.

[16] Janicki, M. & MacEachron, A. (1984). Residential, health and social service needs of elderly developmentally disabled persons. *The Gerontologist*. 24:2, 128-147.

[17] Higginbotham, J. (Fall, 1996). Aging and assistive technology: A critique. In *Communication technologies for the elderly: Vision, hearing and speech*. R. Lubinski & J. Higginbotham (Eds.). Singular Press.

[18] Audrey Holland. (April 1996). Personal communication.

[19] Moore, D. E. (1994). A second start. *Top Stroke Rehabilitation*. 1(2): 100-103.

[20] Ross, R. (1995). Aphasia groups: A view from the inside. Available from 8519 E. San Daniel Drive, Scottsdale, AZ 83258.

[21] Overeynder, J. et. al., *op. cit.*, 10. See also Ontario Federation for Cerebral Palsy; *Aging with a lifelong physical disability: A self-help guide*. (1992). 1020 Lawrence Ave. W., Suite 303, Toronto, Ontario M6A1C8 See also Rau, Marie T. (1993). *Coping with communication challenges in Alzheimer's disease*. Singular Press.

[22] The threshold of discovery. *Future directions for research on aging. (April, 1995). Report of the Task Force on aging research*. Department of Health and Human Services.

[23] Kane, R. L. (April 1994). Looking toward the next millennium. *Asha*. 34-35.

[24] *Proceedings of the workshop on elderly, elderly disabled and technology*. (January 1994). Commission of the European Communities. Brussels.

[25] TADSEM '91 *Australasian seminar: At home with a disability proceedings*. (September 1991). Department of community services. P.O. Box 108, Ryde, NSW, 2112, Australia.

[26] Weinstein, B. & Clark, L. (April 1994). The educational imperative, *Asha*, 35-36.

[27] Yorkston, K. & Garrett, K. (Fall, 1996). Assistive communication technology for elders with motor speech disability. In *Communication technologies for the elderly: Vision, hearing and speech*. R. Lubinski & J. Higginbotham (Eds.). Singular Press.

[28] Garrett, K. & Yorkston, K. (Fall, 1996). Assistive communication technology for elders with cognitive and language disabilities. *Ibid.*

[29] See Tables 2. in references #27 and #28 above.

[30] Sheela Stuart. (April 1996). Personal communication.

[31] Stuart, S. (1995). The types of stories adults tell and how to tell them with Talk:About. *Talk:About Reference*. Don Johnston, 1000 N. Rand Rd., Bldg. 115, PO Box 639. Wauconda, IL 60084.

[32] Koch, K. (1977). *I Never Told Anybody: Teaching Poetry Writing in a Nursing Home*. New York: Vintage Books.

[33] Gitlin, L. & Schemm, R. (April, 1996). Maximizing assistive device use among older adults. *Team Rehab Report*, 25-28.

[34] Available from RERC on AAC, ASEL, Univ. of Delaware/A.I. duPont Institute, P.O. Box 269, 1600 Rockland Rd., Wilmington, DE 19899. 302-651-6895 (fax) 302-651-6830 (voice). $25 US (+$2 shipping Canada; overseas shipping varies).

[35] Available from ACI, 1 Surf Way, #237, Monterey, CA 93940. $5 US plus shipping.

[36] Balandin, S. (April 1996). Personal communication. For Spastic Centre address see below.

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