UNDERSTANDING THE IMPACT OF AGING ON INTERPERSONAL COMMUNICATION

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Effective interpersonal communication can be an important tool for overcoming the negative impact of aging. Ironically, age-related factors tend to threaten communication ability. As Carmichael (cited in Samovar & Porter, 1982) has suggested,

> Our culture has chosen to ignore many of the normal communication needs of our older citizens. It may very well be that older people in our culture are communication starved. Many experience a state of communication deprivation that could be affecting other aspects of their lives, including such social psychological phenomena as life satisfaction, self esteem, or even the will to live. (p. 155)

Until recently, there has been no conceptual framework for dealing with communication change in the older client. We cannot expect to treat communication impairments, however, unless we understand the ways in which human communication is affected by aging processes. This understanding is needed for at least three major reasons. First, the treatment of communication disorders has its roots in a broad knowledge of normal communication process and must define as its goal the return of the individual to the communication environment (Rees, 1981). Second, it is impossible to define, develop, or modify clinical procedures without knowing the characteristics of the individuals with whom the procedures are to be used (Jacobs-Condit, 1984). Third, because of the possible changes in communication status associated with "normal" age-related life changes, the need for innovative and expanded service delivery roles must be explored.

The primary purpose of this article, therefore, is to consider some of the communicative changes associated with normal aging and to discuss the implications of these changes for assessment and intervention. Other aspects of aging which affect clinical management are also highlighted. No attempt is made to summarize age-related communication disorders and associated treatment approaches, since excellent sources for reviewing such information are available elsewhere (cf., Beasley & Davis, 1981; Oyer & Oyer, 1976; Schow, Christensen, Hutchinson, & Nerbonne, 1978).

AGING

Definitions

Perhaps the greatest difficulty in addressing this topic is the definition of such varied terms as *aging, the elderly,* and *older.* Chronological aging—the actual number of years a person has lived—typically is used to define old age, allowing us

to describe the characteristics of selected subpopulations and to project population growth and change. In general, old age is considered to begin at 65 or 70.

Defining old age chronologically has its flaws (Haak, 1976; Usden & Hofling, 1978). There is no physical or psychological reason to select 65 over 60 or 70. One does not wake up feeling "old" on the morning of one's 65th birthday, and specific biological changes are not timed to begin at that age. In reality, our cultural perspective on aging frequently is influenced by factors other than chronological age. A man who retires at age 55 may be seen as old, despite his actual years. A student who completes his B.A. at 40 may be viewed as young, simply because he is beginning a career.

A second approach to aging is to define it in biological terms. There are at least two sets of factors that contribute to biological aging. *Primary aging* refers to the inherited aspects of aging, including which parts of the body wear out when and our susceptibility to certain diseases. *Secondary aging* refers to the effects of various disease processes and environmental factors, including nutrition, medical care, exercise and activity, and stress exposure (Busse, 1978). In both types of aging, not all changes occur, or occur at the same age, in all individuals. Further, the manner in which individuals adapt to age-related changes may be as significant as the actual fact of their occurrence.

A third approach to aging is to define it as a "state of mind." There are considerable anecdotal and sociopsychological data to support such a definition. In effect, different individuals adopt diverse strategies for dealing with chronological and biological aging. These strategies are influenced by the individual's acceptance of aging, and they may affect how old one is perceived to be.

Regardless of one's approach to the definition of aging, it is essential to remember that older people probably are more heterogeneous than any other age group (Busse, 1978; Butler, 1978). Thus, any generalizations about the elderly—including those made in this paper—should be recognized as such and interpreted accordingly.

Demographics

At present, about 12% of the U.S. population is over 65. At least one-half million of these individuals are impaired in speech or language and some 7–8 million are hearing impaired. By 2050, the U.S. Bureau of Census (1983) estimates that about 22% of our population will be over 65, with a quarter of these individuals over the age of 85. At that time, based on current figures, nearly 1½ million of our elderly will be speech-language impaired and 22 million will have hearing impairments. These figures are particularly striking when considered against the incidence of communication impairment in individuals of all ages. For example, by 2050, only 2% of the hearing impaired will be under age 15, as compared with 59% over the age of 65. Similarly, only 23% of the speech-language impaired will be under age 15 in 2050, versus 39% over age 65 (Fein, 1983).

The implications of these data are evident. Although older individuals already represent a sizable proportion of the communicatively impaired population, they

will increasingly demand more time from the speech-language pathologist and audiologist in the future. Consequently, we must become better prepared to meet these needs. In the following sections, some of the broad areas of life change confronting older individuals are described, and their implications for communicative functioning and for implementation of appropriate management procedures are discussed.

SOCIOCULTURAL CHANGES AND INFLUENCES

Economic changes frequently accompany aging. Many older people are poor—for a variety of reasons (Haak, 1976; Knox, 1981). Although the percentages of elderly persons living below the poverty level parallel statistics for the country as a whole, the elderly as a group tend to fall well below the national average in income and many possess fixed incomes in an inflationary economy. In addition, health care costs are escalating dramatically at a time of increased need for such services.

Even more fundamental changes occur within the social world of the older individual, only some of which are related to financial concerns. Major alterations in life roles (retirement, grandparent status, withdrawal from social/community groups) begin as early as the 40s for some individuals but tend to peak at or beyond the 60s for most (Kalish, 1977; Maddox, 1978; Streib, 1977). Retirement can bring with it a major shift in social status, associated with the loss of professional or social standing. Physical relocation within or outside the community, due to reduced resources or changes in family size and residential needs, also may lead to significant changes in life style (Fischer, 1982). For some older individuals, the environmental changes may be dramatic—a shift from one's own home to a small apartment in a high-rise complex for the elderly or to a nursing home. Most of the security and stability of the original home environment may be swept away under these circumstances, as the older person is transplanted into a world restricted to the elderly. At the same time, friends and family members begin to die off or disperse as a consequence of the mobility of the American society. The result of all this change may be a rapidly dwindling social support system, at a time when it is most needed (Hutchinson & Beasley, 1976; Schulz & Rau, in press).

One major impact of many of these social and economic changes is the effective isolation of the older person from the rest of society and the consequent development of myths and stereotypes about old age and the elderly. The early attitude research of Tuckman and Lorge (1953) shocked many by suggesting that society held a negative view of aging and of older individuals (cf. Bennett & Eckman, 1973; McTavish, 1971). Even older respondents viewed other older persons negatively. Subsequent research revealed that health professionals in various disciplines also held negative attitudes towards older clients with respect to rehabilitation potential, occupational preference, and the value of life-saving measures (see reviews in Davis & Holland, 1981; Solomon, 1982).

Recent writers have suggested a reverse trend in the past few years (Schonfield, 1982). In interviews and questionnaires, individuals now express fewer "ageist" attitudes. In one study, specialists in communication disorders seemed to reveal

favorable attitudes towards the communication skills of the elderly (a positive response bias), even disagreeing with factual statements which carried negative connotations (Shadden, in press). Regardless of current trends, however, the problem of negative valuation of old age and older people is undoubtedly still with us.

Implications for Communicative Behaviors and Management

The sociocultural changes identified above can affect the nature and frequency of interpersonal communication. Many of the changes isolate older individuals or reduce their social contacts, perhaps contributing to a commonly described pattern of disengagement (Havighurst, Neugarten, & Tobin, 1968; Neugarten, 1972). The ageist attitudes of society at large may also contribute to this isolation. Communicative frequency and skills may suffer as a consequence.

In addition, as older individuals are perceived (or perceive themselves) as less adequate or powerful, the balance within communicative exchanges may shift to the detriment of the older communication partner (Dowd, 1980). Negative attitudes and stereotypes have been shown to reduce the degree to which one may be willing to take a listener's perspective, or to accommodate one's speech style to that of a conversational partner (Giles, 1977; Helfrech, 1979). A failure to do either of these may cause communication breakdown (cf. Rubin & Brown, 1975). (Perhaps the stereotype of older individuals as garrulous and unwilling to relinquish a newfound listener is due to this sort of communication interference.)

Speech-language pathologists and audiologists must be sensitive to these negative patterns of social interaction and communication behavior. In 1977, Kalish suggested that the stereotypical expectations of health care professionals might be expected to influence the availability and nature of health care services available to older persons. Since there are no clear data to indicate that communication disorders professionals are immune to ageist attitudes, all of us must examine closely our perceptions and expectations with respect to older clients. Are we put off simply because the individual is 86 years old? Are our perceptions of rehabilitation potential influenced realistically—or inappropriately—by age considerations?

As a related consideration, a breakdown in the social network of the older individual may lead some to desire or even demand that the helping professional assume an active role in that network (Runnebohm, 1981). Each professional must judge whether or not s/he feels that such a role is appropriate and, equally importantly, whether or not s/he is willing or able to assume that role. Do we find a particular client frustrating or draining because of his demands for support or because of the many factors that appear to be "stacked up" against him?

A major readjustment of our professional involvement with the client's physical and interpersonal environment may also be required. We must become more sensitive to the social, occupational, and leisure world to which the individual will return, and we must design intervention programs that address communicative needs in that world. This statement has a number of implications for traditional service delivery. For example, greater use must be made of existing assessment

protocols that evaluate degree of functional handicap or self-perceptions of handicap. These assessment tools include the Hearing Handicap Inventory for the Elderly (Ventry & Weinstein, 1982), the Self-Assessment of Communication (Schow & Nerbonne, 1982), or the Communicative Abilities of Daily Living aphasia test (Holland, 1980). Such tools provide us with ways of measuring—and addressing—the extent to which the communication impairment truly appears to be interfering with daily communicative functioning, as perceived by others and the client him/herself.

Because of the major shifts in social networks and family/peer support systems, it is important that we identify one or more "significant others" in the client's world, whether a neighbor, roommate, another professional, a volunteer, or the more traditional family member (Weinstein, 1984). These individuals may play a critical role in determining the success or failure of any management procedure and its carryover to daily functioning. The selection and effective use of a hearing aid, for example, will depend greatly on the degree to which a significant other is able to participate in (a) learning how to use and care for the aid and (b) working with the older client who is learning to use the aid in various listening situations. The successful implementation of PACE therapy for the aphasic individual (Davis & Wilcox, 1981) will depend partially on whether or not there is a significant other who will use similar communication procedures with the client outside the therapy setting.

Additional concerns include shaping the physical environment and selecting assistive equipment to facilitate effective communication. For a client in a long-term care facility, speech-language pathologists may wish to work closely with administrators and other professionals to restructure the physical setting as a way of increasing opportunities for small group communication. Certain environmental demands or interests may dictate that an older hearing-impaired client be fitted with one of the assistive devices known as SPACE AIDS (Situational Personal Acoustic Communication Equipment). The laryngectomee or certain dysarthrics may need to be equipped with a portable microphone and amplification system to ensure adequate loudness for individuals within the living setting.

It is important that we increase our attempts to educate older persons and professionals concerning communication process and disorders. This may reduce client resistance to acknowledging a communication problem and may increase the support received from significant others. Speech-language pathologists and audiologists may also need to become more active in helping the older client find community resources for financial assistance or transportation.

PHYSIOLOGICAL CHANGES

Aging affects more than social and economic functioning. Physiological change is inescapable. Most, if not all, sensory systems become less efficient as individuals get older. We may lose the ability to see, hear, taste, smell, or detect touch as well as when we were younger (Schmall, 1978; Wegg, 1975). Motor functioning is also affected. We begin to react and move more slowly, and to tire more easily. Chronic conditions such as arthritis further reduce mobility. Bones become brittle. Basic

bodily functions such as sleeping, eating, and elimination may be disrupted (Schmall, 1980). Changes in physical appearance and speech also act as "signals" of old age. Rate of speech slows, pitch can be altered, voice quality can become tremulous, loudness is reduced, fluency may break down, pronunciation may become slightly imprecise (cf. Kahane, 1981; Kent & Burkhard, 1981; Nadol, 1981; Oyer, Kapur, & Deal, 1976; Schow et al., 1978).

Physiological aging also increases the likelihood of specific medical problems, partially due to a decline in the body's ability to heal itself. Many of these problems are chronic (Schmall, 1980; Wantz & Gay, 1981). The older individual frequently suffers from multiple health difficulties. In addition, some elderly persons suffer from one of the dementias, commonly called *senility.* These are a group of organic, irreversible disorders associated with neurological deterioration which occur in 4–15% of the older population.

Implications for Communication Behavior and Management

Physiological changes associated with aging can have an indirect impact on interpersonal communication. For example, sensory deficits may limit enjoyment of activities such as watching a movie, thus reducing social activities. Similarly, motor or health-related difficulties in "getting around" may limit social accessibility. In addition, age-related hearing loss directly affects the older person's ability to interact in specific situations, and visual deficits may interfere with the ability to respond to situational and nonverbal communication cues. Changes in body appearance and speech quality may also elicit negative responses from nonelderly communication partners (Sebastian & Ryan, 1980).

While the primary effects of physiological change on communication may be indirect, the speech-language pathologist or audiologist must adjust to these changes in selecting clinical management procedures. First, sessions must be scheduled so as to accommodate fatigue or health restrictions, and the length of clinical sessions may need to be reduced. Second, visual deficits can be dealt with by requiring clients to wear corrective lenses at all times or by providing magnifying lenses when printed materials are presented. Clinicians should gather together visual materials that are simply defined and prepared with bold print. Lighting should not be direct or fluorescent, and glare should be reduced.

Third, limb mobility and motor dexterity should be evaluated, so that appropriate decisions can be made in selecting a hearing aid and/or augmentative communication system. Ease of manipulation and maximum independence should be given priority. Assessment tasks requiring fine motor coordination (e.g., manipulating a dial) should be eliminated or modified, and additional response time should be provided.

PSYCHOLOGICAL CHANGE

The cognitive changes associated with aging are well documented in a variety of sources (see discussion in Robertson-Tchabo, 1984). Intelligence and cognitive

style, memory, and latency of response have been researched extensively. It now appears that major changes in intellectual functioning are not observed until rather late in life. Verbal abilities appear less affected by age than psychomotor performance, and skills that depend on previous experience and accumulated knowledge show little decline (Botwinick, 1977). Data concerning linguistic production indicate reduction in word-finding skills, elaboration of syntax, and possible modifications in discourse characteristics. Current memory research suggests that older persons may require more rehearsal or more time than younger persons in order to store new information in memory. However, theories of memory function in older individuals are changing constantly as new research emerges. In general, pacing and rate of stimulus presentation appear to influence the response behavior of older subjects on cognitive tasks.

In considering psychological change, emotional status cannot be neglected. Incidence figures for mild emotional disturbance in the older population range from 50 to 60% (Butler & Lewis, 1972). Depression is the most common form of emotional disturbance. It has been suggested that depression may be a product of high levels of stress associated with age-related life change. Excessive stress reduces any individual's ability to adapt to further change. Thus, communication adequacy may suffer as emotional stability and adaptive resources are threatened.

Speech-language pathologists and audiologists must develop and maintain an understanding of age-related psychological changes for several reasons. First, this understanding enables us to distinguish diagnostically between specific speech-language-hearing disorders and "normal" changes in behavior. Second, we must recognize the factors that may influence an older client's motivation and cooperation in a testing situation. If s/he is experiencing "performance" anxiety due to an unfamiliar testing situation or concerns about failing cognitive abilities, extra reassurance and positive reinforcement may be required. If s/he is depressed or under high levels of stress, additional counseling may be appropriate. If necessary, referral for psychological counseling may be indicated, or team counseling in a group setting may be considered.

In addition to these concerns, specific changes in clinical procedures can be made in order to accommodate to shifts in cognitive speed, style, or efficiency. Examples include the following:

1. repetition and simplification of instructions and/or explanations;
2. increased demonstration of tasks and provision of opportunities to learn tasks or familiarize self with materials;
3. slower rate of presentation of materials/explanations;
4. increased length of stimuli;
5. increased response time; and
6. selection of alternate testing materials or tasks, as needed.

SUMMARY

The major premise of this article is that communication skills and behaviors are threatened by many of the life changes confronting older individuals at a time when

these skills are essential to continuing growth and adjustment and, more specifically, to the successful interface of professional and their services with older clients and their needs. An understanding of the impact of aging on communication is necessary for at least three reasons. First, such an understanding is required if appropriate modifications of existing management procedures are to be made. Second, the development of new procedures oriented specifically towards older communicatively impaired clients implies knowledge of normal aging processes and communication changes. Finally, practicing and student clinicians must begin to grapple with the issues of expanding traditional roles to include the actual facilitation of communicative functioning in the elderly.

Our professional association, ASHA, has recently moved to recognize gerontological training needs in speech-language pathology and audiology. Hopefully, the next few years will see an improvement in the breadth of our gerontological training, a proliferation of research on the communication process and aging, and an exploration of nontraditional intervention roles. It promises to be an exciting time for those interested in the communication needs and problems of older individuals.

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