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ABSTRACT

This review of the literature on older American Indians with disabilities examines the "early" aging of American Indians compared to the general population. It discusses the situation of American Indians on reservations, focusing on their socioeconomic conditions; education, housing, and transportation; health conditions; and service delivery. Aging American Indians in urban settings are then discussed in terms of disability status and functional limitations, health care and human service needs, education and employment, and quality of life. The review indicates that American Indians age faster than the general population, experiencing limitations in daily functioning at earlier ages than non-Indian populations. The aging American Indian is faced with poverty, poor health, and difficult living conditions. Recommendations are made regarding the health care and human service needs of older American Indians with disabilities. (Approximately 40 references) (JDD)

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The Older American Indian with Disabilities:

Implications for Providers of Health Care and Human Services

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Abstract

This paper includes a review of the literature as regards the older American Indian. American Indians, in general, are at a greater risk than the general population for contacting multiple diseases and disabling conditions. This problem is particularly acute among the elderly American Indians. Low income, lack of formal education, inadequate transportation, and poor housing and health care conditions have contributed to this situation. Based on a recent study conducted in the Denver metropolitan area, recommendations are made regarding the health care and human service needs of older American Indians with disabilities.

Key Words

Aging; Native Americans; Minority Aging; Rehabilitation Needs

The Older American Indian with Disabilities: Implications for Providers of Health Care and Human Services

According to the 1990 U.S. Census, there are approximately 1.96 million American Indians in the United States (Bureau of Census, 1991). In recent years, more than one half of this population has been located in urban areas (Bureau of Census, 1985). There are no exact figures as to how many elderly American Indians live on or near reservations versus urban areas (John, 1988). It is likely that many elders stay on reservations while the younger people move to urban areas. Conversely, those who have gone to the urban areas may return to the reservation when they retire (Benedict, 1971; Weibel-Orlando, 1982). The growth rate in the American Indian elderly population has paralleled the growth in the population of the elderly in the country as a whole (Weibel-Orlando, 1982).

There were about 109,000 elderly American Indians (aged 60 and older) in 1980, or 8.4% of the total American Indian population (Bureau of Census, 1985). However, the National Indian Council on Aging (1988), has asserted that there was a significant undercount of American Indians in the 1980 census. Language barriers and the reticence of elders to give out information for fear that they might lose some of their benefits were given as the reasons for the undercount. Rogers and Gallion (1978), who have studied the characteristics of elderly Pueblo Indians in New Mexico, expressed a similar concern regarding the accurate counting of American Indian elderly. According to these researchers, both the U.S. census population data as well as tribal statistics reflect an undercount. The National Indian Council on Aging (1988), taking into account the projections of the Bureau

of the Census (1986), has estimated that there are more than 200,000 American Indian elderly, 60 years or older.

Of primary concern when addressing the needs of elderly American Indians is the fact that they can be considered "older" at an early chronological age than members of the majority population (Block, 1979; Dukepoo, 1980; Edwards, Edwards, & Daines, 1980; Guttman, 1979; John, 1988; National Indian Council on Aging, 1984; Red Horse, 1982). For example, life expectancy of American Indians is significantly lower than that of the general population. Based on data from the 1980 U.S. Census, the National Indian Council on Aging (1988), reported "that the average life expectancy of Indian people . . . was approximately 63 years; or eight (8) years lower than that of the general U.S. population" (p. 4). Women tend to outlive men among American Indians; 55 of every 100 persons reaching age 65 are women (Benedict, 1971).

Quality of life is also of concern. Too often, an Indian elder leads life which is characterized by poverty, deprivation, poor health, poor housing, and greatly limited social opportunities (National Indian Council on Aging, 1988). The World Health Organization reported in 1979 that American Indian people at age 45 experience the same functional limitations in their activities of daily living as non-Indian people at age 65 (cited in National Indian Council on Aging, 1988). A national study conducted by the National Indian Council on Aging (1981a) compared over six hundred American Indians, age 45 or older, and from several reservations, to non-Indian residents in Cleveland, Ohio. This study revealed findings similar to that of the World Health Organization; researchers concluded that

the American Indians experienced a diminished quality of life, and significantly lower life expectancy compared to that of the non-Indian population.

Due to the "early" aging of American Indians, the United States Congress amended the Older Americans Act in 1981 to allow Indian tribes to define "elderly" for their respective communities (Older Americans Act, Amendments of 1981, Title VI as cited in Gelfand, 1987). As a result, "elderly" can refer to persons aged 50 years or older, 55 years or older, and 60 years or older. Each tribe can set its own minimum age for eligibility for services. Forty-one percent of the tribes have set the minimum at age 55 (Gelfand, 1987). The state of Montana considers Indian people 45 years or older as senior citizens (Edwards et al., 1980).

Socioeconomic Conditions

Elderly Indian people form the most deprived group of individuals in the United States (Benedict, 1971; Block, 1979; Cook, 1990; Edwards, 1983; John, 1985; National Indian Council on Aging, 1984). American Indian elders are part of a sub-population that continues "to be overrepresented at the lower end of the socioeconomic scale," with a 50% to 60% unemployed rate and with a significantly lower educational level than the general population (Morgan & O'Connell, 1987). Indian elders live "in a state of grinding poverty, the scope and impact of which is unknown to any other population group in the United States" (Benedict, 1971, p. 52). According to John (1980), "the problem of low income plagues most Indians, but is chronic among the elderly" (p. 297).

Among reservation-based elderly, Dukepoo (1980) found that monthly income ranged from $102 to $450; among urban Indians, income ranged from $30 to $1,500. A national study revealed that approximately 6% of American Indian

elderly were employed, with 57% reporting incomes that barely covered their expenses (National Indian Council on Aging, 1981b). According to Cook (1990), 50% of the Indian elderly receive social security benefits, less than 51% of Indian elders receive Medicare, and less than 40% receive Medicaid. The Social Security Administration has closed field offices, and enforced reduction in personnel. These measures have resulted in very little outreach efforts to locate and enroll eligible Indian people (Cook, 1990).

Education, Housing, and Transportation

According to Benedict (1971), "for Indians, the lack of education may be the single most important barrier to advancement." In a study conducted by the National Indian Council on Aging (1981b), researchers found that approximately one quarter of Indian elderly people interviewed had barely four years of formal education; 64% had less than an eighth grade education. A similar finding was reported by Dukepoo (1980) who found that "on the average, reservation respondents had slightly less than an eighth grade education (6.8 years); urban elders slightly more (8.7 years)" (p. 17). It has also been reported that rural living conditions, such as lack of proper roads, lack of transportation and communication facilities, and poor housing are the most serious problems facing elderly American Indians (John, 1988; National Indian Council on Aging, 1981b).

Drawing information from the findings of 1980 U.S. census, the 1981 White House Conference on Aging, a national study of the housing, health, safety status of Indian elders (National Indian Council on Aging, 1986), and a survey report on the housing status of Indian elders, published by the Select Committee on Aging (1988, December), United States House of Representatives (Committee

Publication No. 100-698), the National Indian Council On Aging (1988) presented the following description of American Indian housing conditions: (a) 16% of the Indian homes lacked electricity, (b) 17% had no refrigerators, (c) 21% had no indoor toilets, and (d) 50% had no telephones. Specifically, in terms of the homes occupied by Indian elders: (a) 26% of the homes were constructed prior to 1939; (b) 26.3% had no indoor plumbing at all; (c) only 50% of the Indian elders' homes had complete bathrooms indoors; and (d) broken windows and doors, leaking roofs, damaged floors, and inadequate heating were characteristic features. The National Indian Council on Aging (1988) cited a 66% reduction in federal funding for Indian housing programs in only seven years as the reason for the lack of improvement in the housing conditions of elderly Indians. Relaxing eligibility requirements for federal programs, particularly the programs of Housing and Urban Development, Bureau of Indian Affairs, and the Administration on Aging, has been suggested as a way to improve the living standards of the elderly Indians (Cook, 1990).

Health Conditions

The effect of poor living conditions on American Indians is evidenced through major health indices (Gelfand, 1982). Stock (1987) profiled American Indian health conditions in the following words:

> Poor nutrition and housing have contributed to a tuberculosis rate more than six times the national average in 1980. Contaminated water supplies make Native Americans 70 times more likely than Whites to suffer from dysentery. Rates of influenza and pneumonia are three times the national average. Native Americans are 10 times more likely than White Americans

> to have strep throat; eight times more likely to get hepatitis and almost four times more likely to get mumps, chicken pox, and whooping cough (p. 152).

These characteristics place American Indian people in general, and the elderly Indians in particular, at greater than average risk for the exposure to multiple diseases and disabling conditions.

The Indian Health Service (1990) documented the following 1987 mortality statistics: compared to the general U.S. rate, causes of death among American Indians in the nine Indian Health regional service areas were: (a) tuberculosis, 740% greater; (b) alcoholism, 612% greater; (c) accidents, 297% greater; (d) diabetes mellitus, 265% greater; (e) homicide, 120% greater; (f) suicide, 104% greater; (g) gastrointestinal diseases, 38% greater; (h) cerebrovascular diseases, 21% greater; (i) diseases of the heart, 3% greater; and (j) malignant neoplasms, 14% less. A 1986 survey conducted among 622 Indian elders revealed that 71.1% of the respondents had seen a doctor for an illness in the preceding six months; 30.0% of the respondents had been hospitalized for illness in the preceding 12 months. Fifty percent reporting having arthritis, 52.5% were currently taking medications for existing health conditions, 31.9% were ill at the time of their interviews, 16.4% were physically disabled, 51.4% had fair to poor hearing, (9.5% had hearing aids), and 50.4% had poor eyesight (National Indian Council on Aging, 1986).

There is also concern related to the dietary and nutritional needs of older American Indian people. As Edwards has noted (1983), "an important yet unaddressed research question focuses on the contribution of diet to health

problems such as diabetes, liver and kidney disease, and obesity that particularly affect American Indian people" (p. 78). The relationship between diseases such as diabetes and visual impairments or blindness is of concern. Diabetes among American Indians in North America affects a significantly higher proportion of the population than in the general population (White & Martin, 1990). The incidence of visual impairment for American Indians is 88.8 per 1,000 compared to 30 per 1,000 for whites (Kirchner & Peterson, 1988). Indeed, Stock (1987) has pointed out the alarming rate at which diabetes and glaucoma are increasing among American Indians. O'Connell (1987) reported that diabetic retinopathy, cataracts, and glaucoma are among those health problems occurring more frequently among American Indians than in the general population. Also, retinitis pigmentosa, a genetically inherited eye disease, is found widely among Navajo, Apache, and Hopi people on reservations (White & Martin, 1990). A study conducted by Martin and O'Connell (1986) among Pueblo American Indians with disabilities in New Mexico revealed that 41% of the people interviewed had more than one disability. While visual disorder (with 15% of the sample) was the most prevalent disability, diabetes (with 9% in the sample) ranked the third most prevalent disability. [Alcoholism ranked the second most prevalent disability (with 14% of the sample)].

Service Delivery

Services most likely to be available to American Indian elders are: (a) meals, (b) recreational activities, (c) transportation by car or van (d) Indian activities or dances, (e) trips or excursions, (f) outpatient alcohol and drug services, (g) outpatient mental health and medical services, (h) community planning, (i) adult education, and (j) a language interpreter (Edwards et al., 1980). The following

were reported as the top ten unmet service needs of American Indian elders (Edwards et al., 1980): (a) homemaker services, (b) sheltered employment workshops, (c) consumer protection service, (d) nursing homes, (e) cars and vans for transportation, (f) community volunteer program, (g) outpatient mental health and medical services, (h) inpatient alcohol and drug services, (i) buses, and (j) outpatient mental health counseling.

According to O'Connell (1987), "American Indians who are disabled appeared to be underrepresented in the State-Federal (Rehabilitation) system . . . in the area of sensory disorders (conditions of the eye and ear), orthopedic impairments due to accidents, asthma and allergies, diabetes, speech conditions, and skin conditions" (p. 8). Many elderly Indians, in particular, do not receive services and benefits to which they are entitled (National Indian Council On Aging, 1981b). Failure to receive services can be attributed to factors such as lack of income, and lack of information regarding service eligibility, or available benefits in various entitlement programs (Murdock & Schwartz, 1978; National Indian Council on Aging, 1981b). Fear, mistrust, and insensitivity of the agency personnel are also found to be reasons for service barriers to utilization of formal services (Dukepoo, 1980; Rogers et al., 1978). For many American Indians, the task of accessing resources is not easy. The "socio-political misunderstanding" originating from beliefs such as: Indians live on federal lands and are served separately by the federal government under the Bureau of Indian Affairs and the Indian Health Service, and Indians pay no state taxes on reservations, and hence, do not qualify for any state supported social services, lead some state agencies to assume that

Indians should not expect services from the state (Cook, 1990; Joe, 1988; Toubbeh, 1985).

Health care and delivery of health services on the reservations may be less than optimal (Morgan & O'Connell, 1987). Omohundro, Schneider, Marr, and Grannemann (1983) reported that there are only half the number of hospitals or health service providers in rural areas when compared to what is available in urban areas. Rural hospitals "are older, less likely to be accredited, and have fewer specialized services" (p.11). In addition, few trained medical and para-medical personnel serve the disabled community on the reservations, thus limiting service delivery (Omohundro, Schneider, Marr, & Grannemann, 1983).

Professional staff of health care and human service agencies may not be trained to work in rural communities, and may not be culturally sensitive (Dukepoo, 1980; John, 1986; Rogers et al, 1978). According to Edwards et al. (1980), "more American Indian people could benefit from receiving services provided by staff who are professionally trained in identifying and meeting the needs of older American Indian people" (p. 221). Indians among personnel in service delivery systems are, again, too few in number to counter the culturally sterile service provided (Joe, 1988; Morgan & O'Connell, 1987; Toubbeh, 1985). Undoubtedly, there is a need to consider the cultural environment from which the elderly come. Their extended family structure, their beliefs and value systems should be important considerations while planning services (Dukepoo, 1980; Murdock et al., 1978; Red Horse, 1980; Primeaux, 1979). Limited English proficiency on the part of the Indian elderly persons, and lack of proficiency in the tribal language on the part of

the service provider have also been cited as reasons for ineffective service delivery (National Indian Council on Aging, 1981b; Rogers et al, 1978).

Additional reasons for inadequate health services according to Cook (1990) and the National Indian Council on Aging (1988), are:

1. As elders tend to accept ill health as part of their old age, health service personnel also tend to show the same attitude toward the health problems of the elders.

2. The Indian Health Service has no gerontological focus and no program of geriatric health care.

3. The Indian Health Service has, due to budget constraints, eliminated the kinds of services very often needed by elders. For example, provision of eye glasses, dentures, hearing aids, and prosthetics has been discontinued.

4. The Indian Health Service does not provide long-term care.

Hence, there is no in-home or nursing home care designed to meet the needs of the elders. To summarize the condition of services delivery to elderly American Indians, utilization of services among the elderly minorities is not commensurate with their levels of need (Colen, 1983). According to John (1986), "reasons for this situation are availability, awareness, and accessibility. Enough evidence exists to conclude that each of these is a problem among Native Americans, although the significance of each varies according to type of service, region, or tribe. In general, a full range of services is unavailable to Native American elders" (p. 111).

The Aging American Indian in an Urban Setting

In a recent study which assessed the needs of urban American Indians with disabilities (Marshall, Johnson, Martin, Saravanabhavan, & Bradford, in press;

Marshall, Johnson, Martin, & Saravanabhavan, 1991), 51% of the 100 American Indians interviewed were ages 45 - 69 [Age parameters for the research were 14 - 70]. The average age of this sub-sample was 56; 69% (n = 35) were female, and 31% (n = 16) were male. Tribal affiliations were varied; however, a large majority of those interviewed were Sioux (See Figure 1). All interviews were conducted face-to-face with the person who had a

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Insert Figure 1 about here

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disability with the exception of one individual. In this one instance, a spouse was interviewed (wife); the individual was reported as being blind, as having a hearing impairment, as having heart problems, substance abuse, Alzheimer's disease, and as having had a stroke.

In terms of marital status, 29% of the sub-sample were married, 29% were divorced, 22% were either a widow or widower, and 6% were never married. Fourteen percent reported their marital status as "other." The individual (versus family) mean annual income of interviewees was $5,911, with a range from $1,544 - $19,226. The individual mean annual income of female interviewees was $5,514, with a range from $1,544 - $19,226. The individual mean annual income of male interviewees was $6,777, with a range from $2,500 - $17,500. While interviewees may have lived in places other than their current city of residence, they reported on average to have lived the past 15.3 years in the Denver, Colorado metro-area.

Disability Status and Functional Limitations

On average, interviewees reported three disabling conditions each. Disabling conditions included, for example, arthritis, diabetes, blindness/visual impairment, heart problems, substance abuse and orthopedic disorders (see Figure 2).

Insert Figure 2 about here

A large majority reported functional limitations in the areas of lifting, walking, and seeing (see Figure 3). A statistically significant difference was found in two areas of functional limitation as reported by females and males (see Figure 3). That is, functional limitation was reported by 83% ($n = 29$) of the women and by 56% ($n = 9$) of the men in the area of lifting. In the area of remembering, 49% ($n = 17$) of the women and 19% ($n = 3$) of the men reported limitations.

Insert Figure 3 about here

The majority of interviewees reported using glasses and medication to cope with their disabling conditions and functional limitations (see Table 1). A quarter (25%) reported using traditional or native medicine.

Insert Table 1 about here

The majority of interviewees also reported needing glasses, or needing improved glasses (see Table 2). Less than a quarter reported needing medication, or needing changes in their medication.

Insert Table 2 about here

Health Care and Human Service Needs

Interviewees reported receiving a variety of social and medical services; very few reported receiving vocational services (see Table 3). The

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Insert Table 3 about here

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majority reported having received medical services [75% (n = 38)], and assistance in receiving benefits such as food stamps [69% (n = 35)] in the year prior to the survey (see Table 4). Typically, persons who received medical and other human services reported them to be helpful (see Table 4).

Insert Table 4 about here

However, many individuals reported needing services which they had not been able to receive in the year prior to the survey (see Table 5). For

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Insert Table 5 about here

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example, 11 persons reported receiving dental care (see Table 4). Of the 39 persons who reported not receiving this service, 25 (64%) stated that they had

needed dental care. Of these, almost a-third (32%) stated that they did not receive the service because they could not afford it.

A plurality [29% (n = 15)] of interviewees reported turning to friends for information regarding available services. Friends were followed by a local Indian health and social services agency (9%), a relative (8%), and the newspaper (6%) and television (6%) as sources of "useful" information.

Education and Employment

A larger proportion of female interviewees reported having obtained a high school diploma than male interviewees; however, the same proportion reported having obtained a bachelor's degree (see Table 6). For those not completing high school, or obtaining a GED, interviewees reported having a average of 8.4 years of education.

Insert Table 6 about here

Almost a quarter [24% (n = 12)] of the interviewees reported working for pay. Of these, the majority (75%) were female. The average age of those working was 57, with the range being 45 - 67. On average, they earned $8,362. The average age of working females (n = 9) was 59, with average earnings of $7,371. The average age of working males was 55, with average earnings of $11,333.

Six (12%) of the interviewees reported that they were looking for employment; on average, they had been job-hunting for 6.8 months. Almost half of the interviewees [49% (n = 25)] reported having had problems in securing employment, with the plurality citing their disability(ies) as a problem (see Table 7).

Over a third also cited lack of transportation and lack of money as being problems in securing employment.

Insert Table 7 about here

Quality of Life

In terms of overall health status, almost a third (31%) reported their health status as "good." The plurality (43%) rated their health status as "fair;" a quarter (25%) reported their health status as "poor." No one reported their health status as "excellent." Interviewees were asked to indicate their agreement or disagreement with nine quality of life statements. In general, they reported being satisfied with where and how they lived (see Table 8).

Insert Table 8 about here

The majority [68% (n = 34)] of interviewees reported that they lived with family; this was the case for 72% (n = 25) of the women, and 56% (n = 9) of the men. On average, interviewees lived with 2.3 persons. The majority [57% (n = 29)] reported having daily contact over the past year with immediate family members. A third [33% (n = 17)] reported having had contact with extended family members once or twice monthly, followed by 22% (n = 11) who reported having daily contact with extended family members.

However, the majority (57%) did indicate that it was difficult for them to get to services when they needed to (see Table 8). In terms of transportation, 51% of those interviewed (n = 26) reported owning a car, with the majority (65%) of these

persons being female (n = 17). A plurality [43% (n = 22)] reported using their personal car as their most typical form of transportation, followed by those using the public bus [25% (n = 13)], and those depending on the car of a friend or family member [18% (n = 9)].

While no one reported being homeless, only 16% live in a home they own. Less than a third [31% (n = 16)] reported that their income was enough on which to live. This percentage is even less for females: 29% (n = 10) of the women reported that their income was adequate compared to 38% (n = 6) of the men. While the majority [63% (n = 32)] reported having some form of medical insurance, 37% or 19 individuals did not. Of those who had medical insurance, the majority (56%) reported having Medicaid, followed by 13% who reported having Medicare, and 13% who obtained medical services through the Veteran's Administration. Of those who did not have any form of medical coverage, the majority [58% (n = 11)] stated that they could not afford the coverage.

Discussion

Research has indicated that the aging American Indian is faced with poverty, poor health, and difficult living conditions. It has been suggested that American Indians "age faster" than the general population: specifically, they experience limitations in daily functioning at earlier ages than the non-Indian population. Unless providers of health care and human services are reservation-based, they may not see this population. They may believe that aging American Indians are typically served on reservations, or by governmental agencies. However, research in an urban area has indicated that many Indian people in the city do not access the services they need.

In a survey of American Indians with disabilities in Denver, Colorado, the majority of persons interviewed were found to be between the ages of 45 and 69. In general, they reported having multiple disabling conditions each, functional limitations in basic areas such as lifting, walking, and seeing, and reported needing basic assistive devices such as glasses. Inadequacy of income was reflected in lack of home ownership, lack of transportation, and lack of comprehensive health care coverage, including dental care.

Barriers to obtaining needed services included a lack of outreach on the part of health care and human service providers; interviewees typically stated that a "service was not offered." when explaining why they did not receive a needed service. Lack of transportation was also frequently cited as a barrier to obtaining services. Lack of transportation was second only to "disability" when interviewees reported problems related to securing employment.

Friends provided the primary source of information regarding services. Indeed, the social network would appear to be very strong with this population. Aging American Indians with disabilities reported not being isolated from family members. The majority had daily contact with immediate family, and saw extended family members at least once a month.

Conclusions and Recommendations

While the health care and human service needs of aging American Indians are extensive and undeniable, they have reported, in at least one study, satisfaction with their quality of life. They have identified accessing services as a problem, resulting, in part, from the lack of outreach conducted by service providers. They

have identified problems stemming from their disabilities in the form of functional limitations, but also environmental barriers in the form of inadequate transportation.

Health care and human service professionals concerned with aging, and interested in better serving this population must:

1. Do everything within their power and expertise to improve the quality of life an Indian elder leads. As pointed out earlier, many Indian elders need improved housing, basic health care, greater economic security, educational, and employment opportunities. A collaborative effort on the part of service providers to identify the unique needs of the elderly people in their particular area would be a critical first step.

2. Serve American Indians at a younger age than non-Indians.

3. Provide outreach services to the older American Indian, rather than expect that he or she will come to the office.

4. Utilize the informal networks of American Indians, that is, friends and family, to make services known in the Indian community.

5. Provide transportation to services when necessary.

6. Assist with vocational services when needed.

7. Train more personnel in culturally sensitive and geriatric care and medicine.

8. Remember that more than 50% of American Indian people live in urban areas, and ensure that health care and human services are accessible to urban Indian elders.

References

Benedict, R. A. (1971). A profile of Indian aged. Occasional Papers in Gerontology, 10, 51-55.

Block, M. (1979). Exiled Americans: The plight of Indian aged in the United States. In D. Gelfand & A. Kutzik (Eds.), Ethnicity and aging: theory, research, and policy (pp. 184-192). New York: Springer Publishing Company.

Bureau of Census. U.S. Department of Commerce . (1991). 1990 Census of Population and Housing, Public Law 94-171 Data. CD-ROM. Washington, DC.

Bureau of Census, U.S. Department of Commerce. (1986). Disability functional limitation, and health insurance coverage: 1984/85 (Current Population Reports, Series P-70, No. 8). Washington, DC: U.S. Government Printing Office.

Bureau of Census, U.S. Department of Commerce. (1985). 1980, Census of population. Subject reports: American Indians, Eskimos, and Aleuts on identified reservations and in the historic areas of Oklahoma, Part 2. Washington, DC: U.S. Government Printing Office.

Colen, J. L. (1983). Facilitating service delivery to minority aged. In R. L. McNeely & J. L. Colen (Eds.), Aging in minority groups (pp. 250-259). Beverly Hills: Sage Publications.

Cook, C. D. (1990). American Indian elderly and public policy issues. In M. S. Harper (Ed.), Minority aging: Essential curricula content for selected health and allied health professions. Health Resources and Services Administration,

Department of Health and Human Services (DHHS Publication No. HRS P-DV-90-4). Washington, DC: U.S. Government Printing Office.

Dukepoo, F. C. (1980). The elder American Indian. San Diego: San Diego State University, Center on Aging.

Edwards, D. E., Edwards, M. E., & Daines, G. M. (1980). American Indian Alaska Native elderly: A current and vital concern. Journal of Gerontological Social Work, 2(3), 213-224.

Edwards, D. E. (1983). Native-American elders: Current issues and social policy implications. In R. L. McNeely & J. L. Colen (Eds.), Aging in minority groups (pp. 74-82). Beverly Hills: Sage Publications.

Gelfand, D. (1987). Older American act. In G. L. Maddox (Ed.), The Encyclopedia of Aging (pp. 499-502). New York: Springler Publishing Company.

Guttman, D. (1979). Some theoretical and methodological issues in research with minority elderly. In E. P. Stanford (Ed.), Minority aging research: old issues - new approaches (pp. 21-30). San Diego: San Diego State University, Center on Aging.

Indian Health Service. (1990). Regional differences in Indian health. Washington, DC: U.S. Department of Health and Human Services, Division of Program Statistics.

Joe, J. R. (1988). Government policies and disabled people in American Indian communities. Disability, Handicap & Society, 3(3), 253-262.

John, R. (1980). The older Americans act and the elderly Native American. Journal of Minority Aging, 5(4), 293-298.

John, R. (1985). Service needs and support networks of elderly Native Americans: Family, friends, and social service agencies. In W. A. Peterson & J. Quadagno (Eds.), Social bonds in later life (pp. 229-247). Beverly Hills: Sage Publications.

John, R. (1986). Social policy and planning for aging Americans: Provision of services by formal and informal support networks. In J. R. Joe (Ed.), American Indian policy and cultural values: Conflict and accommodation. (Contemporary American Indian Issues Series, No. 6.) Los Angeles: University of California, American Indian Studies Center.

John, R. (1988). Use of cluster analysis in social service planning: A case study of Laguna Pueblo Elders. The Journal of Applied Gerontology 7(1), 21-35.

Kirchner, C., & Peterson, R. (1988). Estimates of race--ethnic groups in the U.S. visually impaired and blind population. In C. Kirchner (Ed.), Data on blindness and visual impairment in the U.S. (pp. 81-89). New York: American Foundation for the Blind.

Lowrey, L. (1987). Rehabilitation relevant to culture and disability. Journal of Visual Impairment & Blindness, 81(4), 162-164.

Marshall, C. A., Johnson, M. J., Martin, W. E., Jr., Saravanabhavan, R. C., & Bradford, B. (in press). The rehabilitation needs of American Indians with disabilities in an urban setting. Journal of Rehabilitation.

Marshall, C. A., Johnson, M. J., Martin, W. E., Jr., & Saravanabhavan, R. C. (1991). The assessment of a model for determining community-based needs of American Indians with disabilities through consumer involvement in community planning and change: Final report (rev. ed.). Flagstaff, AZ: Northern Arizona

University, Institute for Human Development, American Indian Rehabilitation Research and Training Center. (Available from the American Indian Rehabilitation Research and Training Center, Institute for Human Development, Northern Arizona University, P. O. Box 5630, Flagstaff, AZ 86011).

Martin, W., Jr., & O'Connell, J. C. (1986). Pueblo Indian vocational rehabilitation services study (Final Report). Flagstaff, AZ: Northern Arizona University, American Indian Rehabilitation Research and Training Center. (Available from American Indian Rehabilitation Research and Training Center, Institute for Human Development, Northern Arizona University, P. O. Box 5630, Flagstaff, AZ 86011.)

Morgan, J., & O'Connell, J. C. (1987). The rehabilitation of disabled Americans. International Journal of Rehabilitation Research, 10(2), 139-149.

Murdock, S. H., & Schwartz, D. F. (1978). Family structure and the use of agency services: An examination of patterns among elderly Native Americans. Gerontologist, 18(5), 475-481.

National Indian Council on Aging. (1981a). American Indian elderly: A national profile. Albuquerque, NM: Cordova Printing.

National Indian Council on Aging. (1981b). Indian elderly and entitlement programs: An accessing demonstration project. Washington, DC: Administration on Aging (DHHS). (Eric Document Reproduction Service No. ED 220 219). (Also Available from National Indian Council on Aging, P O Box 2088, Albuquerque, NM 87103.)

National Indian Council on Aging. (1984). Indian and Alaska Natives. In E. B. Palmore (Ed.), Handbook on the aged in the United States (pp. 269-276). Westport. CT: Greenwood Press.

National Indian Council on Aging. (1986). Research project to derive information on the health, housing, and safety status of Indian elders (Final Report). Albuquerque, NM: NICOA.

National Indian Council on Aging. (1988). American Indian elderly: A demographic profile. (An Informational Paper). Albuquerque, NM: NICOA.

O'Connell, J. C. (Ed.). (1987). A Study of the special problems and needs of American Indians with handicaps both on and off the reservation: Volume I (Executive Summary). Flagstaff, AZ: Northern Arizona University, Native American Research and Training Center.

Omohundro, J., Schneider, M. J., Marr, J. N., & Grannemann, B. D. (1983). Disability in rural America: A four-county need assessment (Final Report). Fayetteville. AR: University of Arkansas, Arkansas Rehabilitation Research and Training Center.

Primeaux, M. C. (1979). Health care and aging American. In A. M. Reinhardt & M. D. Quinn (Eds.), Current practice in gerontological nursing (Monograph). St. Louis, MO: C. V. Mosby.

Red Horse, J. (1982). American Indians and Alaska Native elders: A policy critique. In E. P. Stanford & S. A. Lockery (Eds.), Trends and status of minority aging. San Diego: San Diego State University, University Center on Aging.

Roger, C. J. & Gallion, T. E. (1978): Characteristics of elderly Pueblo Indians in New Mexico. The Gerontologist, 18(5), 482-487.

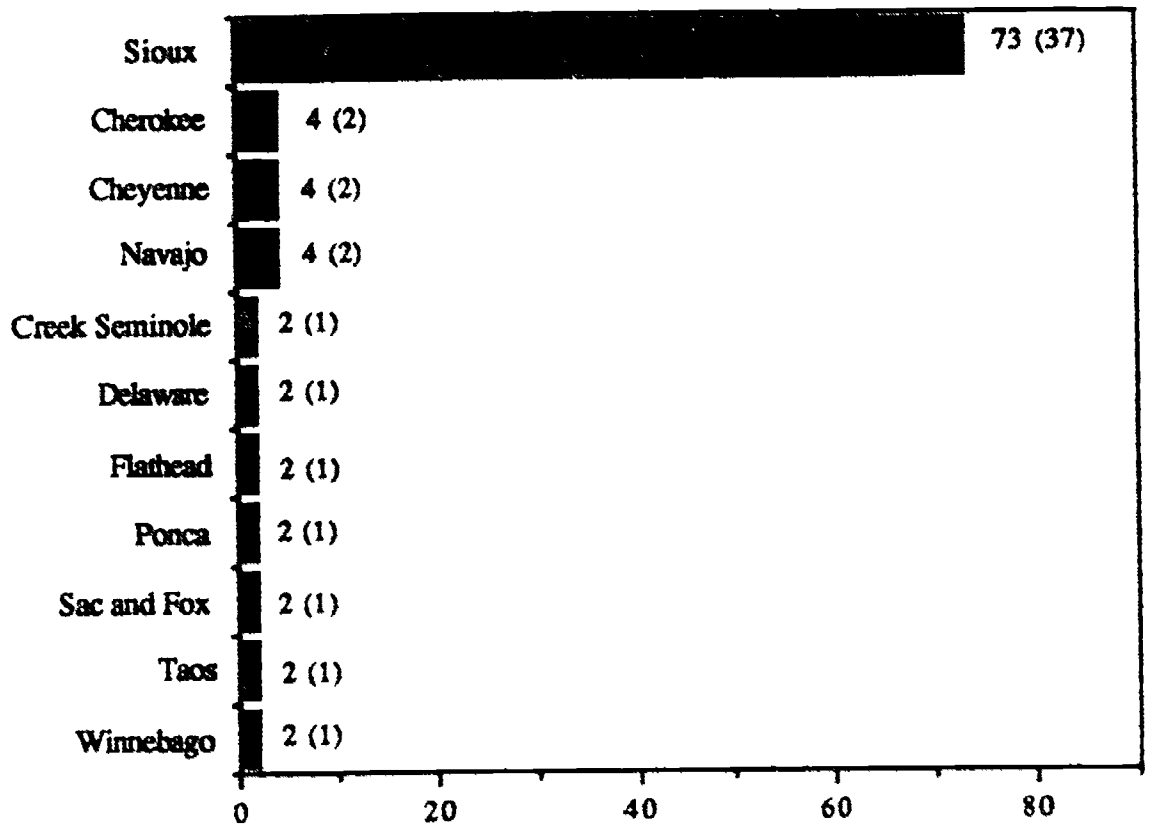
Stock, L. (1987). Native Americans: A brief profile. Journal of Visual Impairment & Blindness, 81(4), 152.

Toubbeh, J. I. (1985). Handicapping and disabling conditions in Native American populations. American Rehabilitation, 11(1), 3-8.

Weibel-Orlando, J. C. (1982, December). Indians and aging: You can go home again. Paper presented at the annual meeting of the Anthropological Association, Washingto.., DC. (Eric Document Reproduction Service No. ED 232 816.)

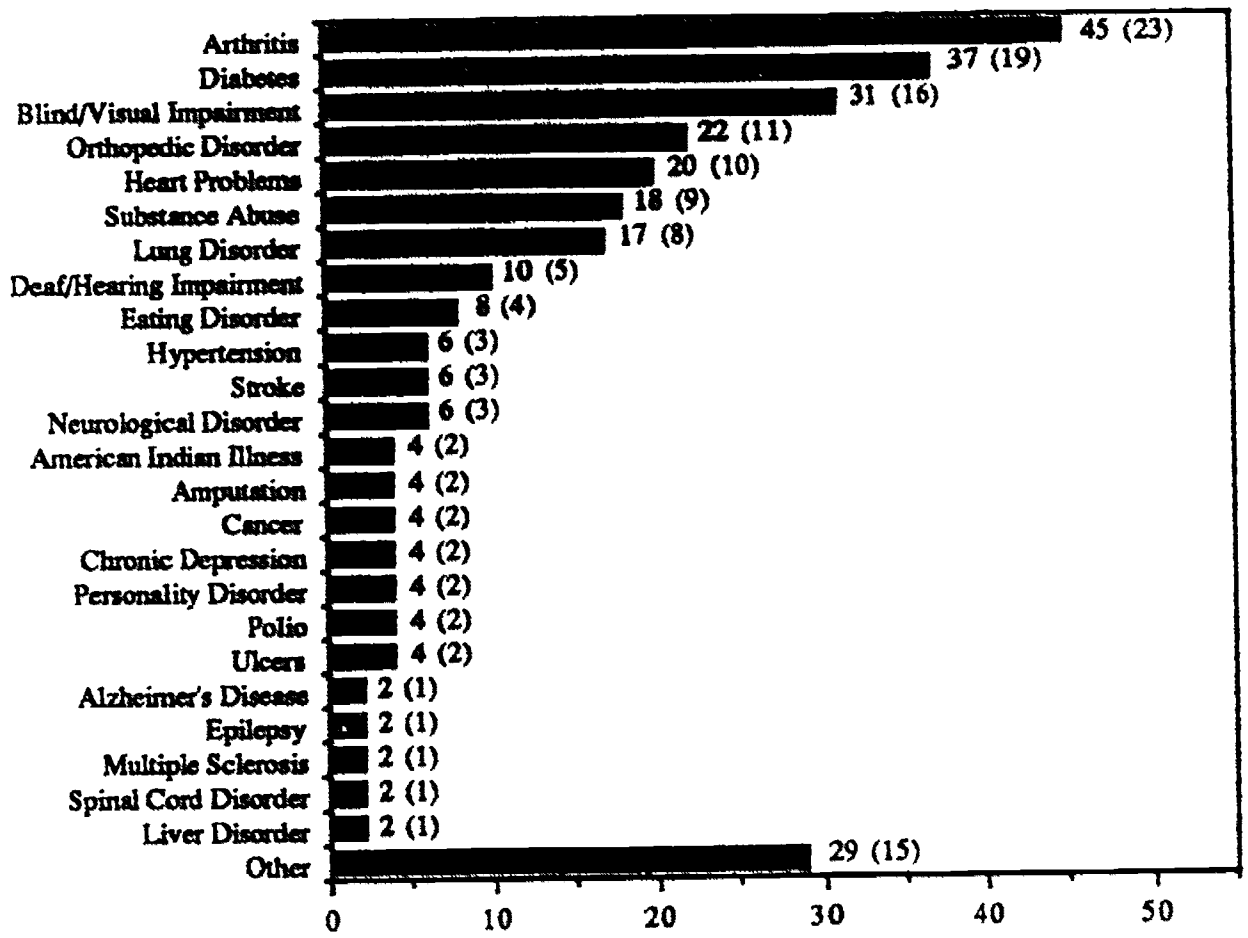
White, K., & Martin, W., Jr. (1990). Training program for individuals working with older American Indians who are visually impaired. Unpublished manuscript. (Application for federal grant under the Kuhry Bequest Program for the Blind, Federal assistance number 84.999). Northern Arizona University, Institute for Human Development, Flagstaff, AZ.

Figure 1. Tribal Affiliations



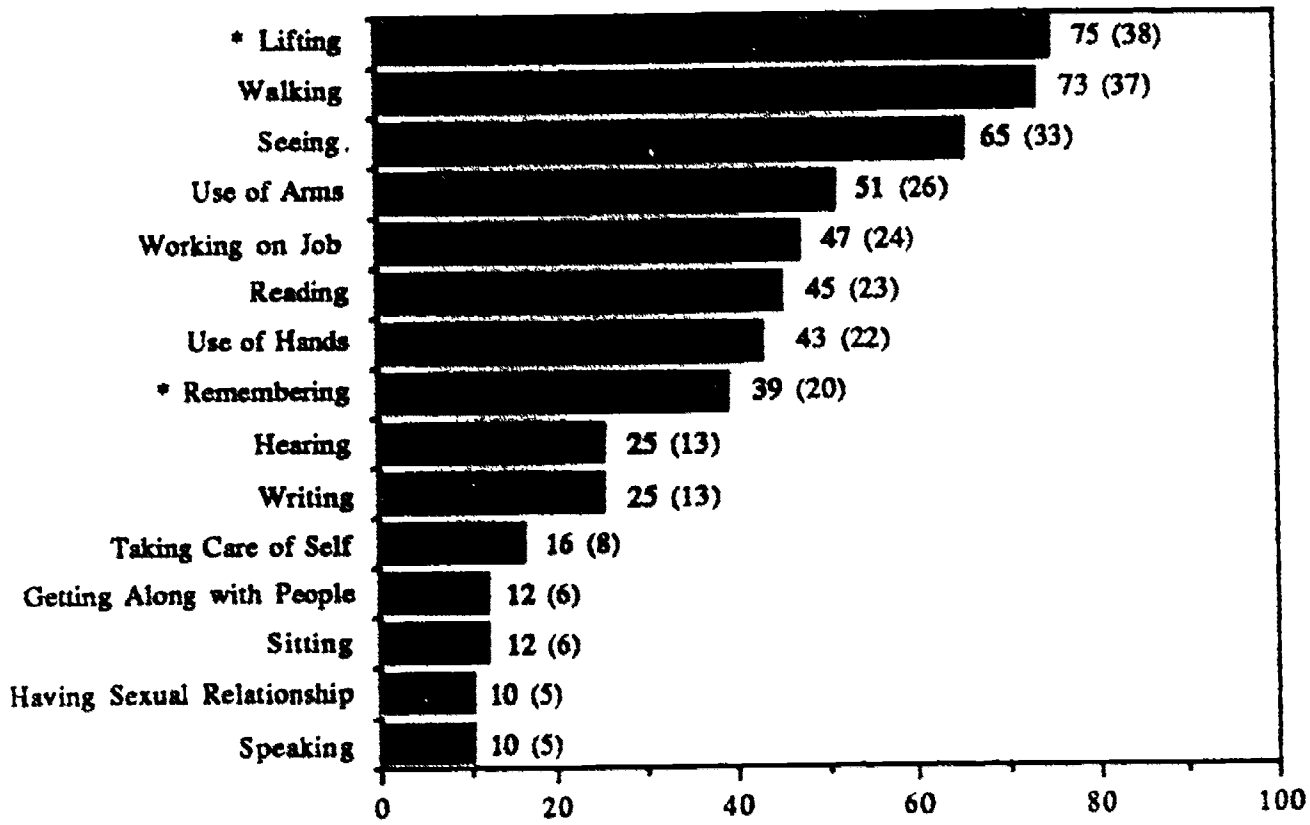
Note. Bar reflects percentage. Actual number given in parenthesis.

Figure 2. Disabling Conditions



Note. Bar reflects percentage. Actual number given in parenthesis.

Figure 3. Functional Limitations



Note. * Chi square analysis indicated significant difference between men and women, $p < .05$. Bar reflects percentage. Actual number given in parenthesis.

Table 1

Use of Assistive Devices and Treatment

	Use Currently	
Assistive Devices/Treatment	n	%
Glasses	(39)	76%
Medication[a]	(34)	67%
Cane/Crutch	(14)	27%
Native Medicine Way	(13)	25%
Prosthesis/Brace	(6)	12%
Walker	(3)	6%
Wheelchair	(2)	4%
Hearing Aid	(1)	2%

[a]35% (n=12) reported experiencing side-effects.

Table 2

Needed Assistive Devices and Treatment

Assistive Devices/Treatment	Need/Need Improved	
	#	%
Glasses	(32)	63%
Medication	(12)	24%
Hearing Aid	(7)	14%
Cane/Crutch	(4)	8%
Native Medicine Way	(2)	4%
Prosthesis/Brace	(1)	2%
Wheelchair	(1)	2%

Table 3

Services Received at Time of Interview

	Interviewees Receiving Service	
Person or Program Providing Assistance	n	%
Social Security Administration	(24)	47%
Denver Indian Health and Family Services	(23)	45%
Social Services	(23)	45%
Medicare/Medicard	(22)	43%
Private Medical Doctor	(22)	43%
Denver Indian Center	(15)	29%
Native Medicine Way	(14)	27%
Your Church	(13)	25%
Senior Citizen Program	(13)	25%
Sweat Lodge	(11)	22%
Catholic Community Services	(8)	17%
Veterans Affairs Administration	(8)	17%
Eagle Lodge	(5)	10%
Alcohol Counseling Program	(3)	6%
IHS	(3)	6%
Job Service Program	(2)	4%
Psychologist	(2)	4%
School	(1)	2%
State Division of Vocational Rehabilitation	(1)	2%

Table 4

Services Received in Past Year

Service	Interviewees Receiving Services		Reporting Services as Helpful	
	n	%	n	%
1. Coordination of Services	(12)	24%	(11)	92%
2. Help Receiving Food	(24)	47%	(20)	83%
3. Help Receiving Clothing	(13)	27%	(9)	69%
4. Help Receiving Housing	(12)	24%	(9)	75%
5. Help Receiving Benefits	(35)	69%	(24)	69%
6. Instruction in ADL	(2)	4%	(1)	50%
7. Vocational Training	(12)	24%	(11)	92%
8. Medical Care	(38)	75%	(32)	84%
9. Dental Care	(11)	22%	(7)	64%
10. Individual or Family Counseling	(9)	18%	(8)	89%
11. Alcohol Treatment	(7)	14%	(5)	71%
12. Drug Treatment	-0-	NA	-0-	NA
13. Legal Assistance	(1)	2%	-0-	NA

Table 5

Services Needed in Past Year but Not Received

	Interviewees Needing Services		Barriers		
Services	n	%a	n	%	Barrier
1. Coordination of Services	(18)	46%	(7)	39%	Service not offered
2. Help Receiving Food	(9)	33%	(7)	78%	Service not offered
			(1)	11%	No transportation
3. Help Receiving Clothing	(9)	26%	(6)	67%	Service not offered
			(3)	33%	No transportation
4. Help Receiving Housing	(12)	32%	(8)	67%	Service not offered
			(2)	17%	No transportation
			(1)	8%	Not well enough to use
5. Help Receiving Benefits	(8)	50%	(2)	25%	Service not offered
			(1)	13%	No transportation
			(1)	13%	Not well enough to use
6. Instruction in ADL	(7)	14%	(4)	57%	Service not offered
			(1)	14%	Not well enough to use
7. Vocational Training	(8)	21%	(4)	50%	Service not offered
8. Medical Care	(6)	46%	(3)	50%	Could not afford

aPercentage based on number needing, but not receiving, services.

Table 5 (cont'd)

Services Needed in Past Year but Not Received

	Interviewees Needing Services		Barriers		
Services	n	%a	n	%	Barrier
9. Dental Care	(25)	64%	(8)	32%	Could not afford
			(6)	24%	Service not offered
			(2)	8%	No transportation
			(1)	4%	Hours not convenient
			(1)	4%	Not well enough to use
10. Individual or Family Counseling	(4)	10%	(3)	75%	Service not offered
			(1)	25%	No transportation
			(1)	25%	Could not afford
11. Alcohol Treatment	(6)	14%	(2)	33%	Did not want to use
			(1)	17%	Service not offered
			(1)	17%	No transportation
			(1)	17%	Could not afford
12. Drug Treatment	(2)	4%	(1)	50%	Service not offered
			(1)	50%	Could not afford
13. Legal Assistance	(2)	4%	(1)	50%	Could not afford

aPercentage based on number needing, but not receiving, services.

Table 6

Education by Sex

	Female		Male	
	n	%	n	%
High School Diploma	(13)	39%	(4)	25%
GED	(2)	6%	(1)	6%
Associate of Arts	-0-		(1)	6%
Bachelor's Degree	(2)	6%	(1)	6%

Note. No one reported having a graduate degree.

Table 7

Problems Cited in Securing Employment

Problems Cited	n	%
Because of disability	11	44%
Lack of transportation	10	40%
Lack of money	9	36%
Because of age	8	32%
Because of ethnic background	8	32%
Because of home responsibilities	6	24%
Lack of job availability	6	24%
Employers do not give fair chance	5	20%
Because of sex	3	12%
Lack of skills required for job	3	12%
Lack of job-finding skills	2	8%
Lack of skills in completing application forms, etc.	2	8%

Note. 49% (n = 25) of those surveyed reported having had problems securing employment; multiple-response item.

Table 8

Percentage of Interviewees in Agreement with Quality of Life Statements

	Agree/Agree a lot	
	n	%
1. I like the number of people who live with me.	(35)	69%
2. It is difficult to get services when I need to.	(29)	57%
3. I feel safe from danger.	(37)	73%
4. If I could, I would live somewhere else.	(25)	49%
5. It is convenient to get my clothes washed, go shopping, etc.	(39)	76%
6. The people who live with me care about what happens to me.	(41)	80%
7. I am happy where I live.	(38)	75%
8. The people in the neighborhood are nice to me.	(40)	78%
9. The people I live with make me feel comfortable.	(39)	76%