

RURAL HEALTH FACTS

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Arthritis in American Indian and Alaska Native Elders

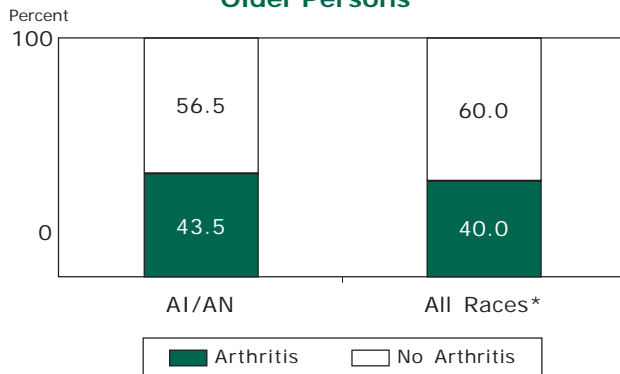
Arthritis affects 43 million U.S. adults (one in five), making it one of the most prevalent diseases (Centers for Disease Control and Prevention, 2006). As the population ages, this number will increase dramatically. Arthritis can limit independent living and burden the lives of family members and other caregivers. Annually, arthritis is related to 36 million clinic visits, 750,000 hospitalizations, and health care costs of \$80 billion (Associated Press, 2005).

This study assesses arthritis prevalence and its impact on the health of American Indian and Alaska Native (AI/AN) elders. Information was used from a nationwide survey, conducted by the National Resource Center on Native American Aging, involving more than 8,000 AI/AN elders (aged 55 and older).

Native Elders and Arthritis

Among AI/AN elders, 43.5 percent indicated they had arthritis (Figure 1); this is higher than the prevalence rate among all races of US elders (40%). Females were much more likely than males to have arthritis (50.2% vs. 35.4%). The prevalence of arthritis increased with age. Respondents aged 55-64 were least likely to have arthritis (40.1%). Comparatively, 45.6 percent of those aged 65-74 and 49.8 percent of those aged 75 and older had arthritis.

Figure 1. Arthritis Prevalence Among Older Persons



*Centers for Disease Control and Prevention (1994).

Among the AI/AN elders with arthritis, 13 percent indicated rheumatism was the only chronic disease they possessed; conversely, 87 percent indicated they also had one or more other chronic diseases. The most commonly-mentioned *additional* diseases were high blood pressure (59.2% of arthritics), diabetes (43.6%), cataracts (28.3%), asthma (16.6%), and congestive heart failure (13.8%).

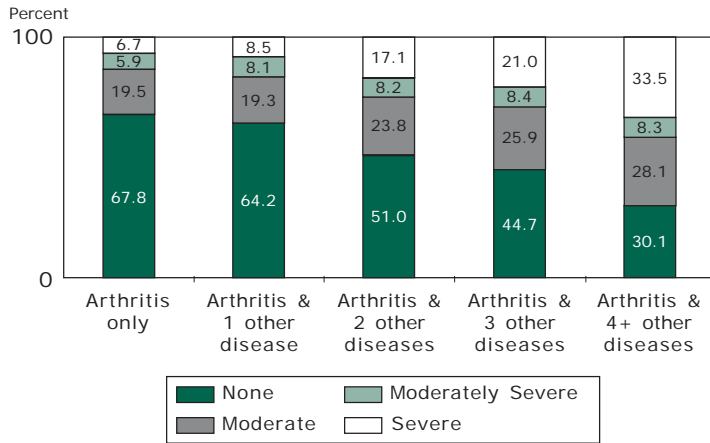
Arthritis and Activity Limitations

Activity or functional limitations reflect the level of physical disability in a population and are a part of eligibility criteria for long-term care services (e.g., nursing homes, assisted living facilities, and community-based programs). *Activities of daily living* (ADLs), considered fundamental to survival, include eating, walking, using the toilet, dressing, bathing, and getting in/out of bed. More than one-half (56.7%) of AI/AN elders with arthritis reported having no ADL limitations. Alternatively, one-third (34.6%) had problems walking. Other ADL limitations included bathing/showering (21.3%), getting in and out of bed (19.0%), dressing (15.7%), using and getting to the toilet (12.5%), and eating (7.6%).

Instrumental activities of daily living (IADLs), less critical to self-sustenance, include cooking, housework, shopping, managing money, using a phone, and getting outside the home. Among AI/AN elders with arthritis, about one-half (51.2%) reported having no IADL limitations. Of the elders who reported IADL limitations, the most commonly cited was: heavy housework (42.6%), followed by shopping (21.8%), preparing meals (21.6%), light housework (20.2%), getting outside (18.6%), managing money (10.6%), and using the telephone (7.2%).

Those with a chronic disease in addition to arthritis were more likely to have activity limitations (Figure 2). Among persons with arthritis *only*, approximately two-thirds (67.8%) had little or no activity limitations. Conversely, among persons with arthritis and four or more other chronic diseases, only one-third (30.1%) reported little or no functional limitations.

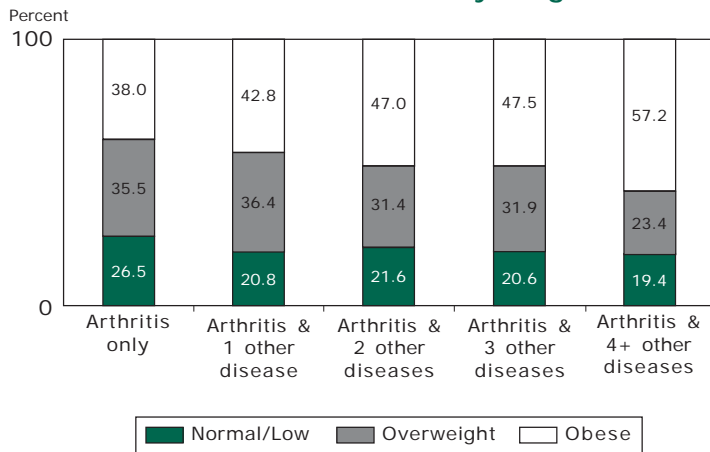
Figure 2. AI/AN Elders with Arthritis and Severity of Functional Limitations



Arthritis and Body Weight

Among AI/AN elders with arthritis, 21.4 percent were at a normal/low body weight. The remainder were either overweight (31.9%) or obese (46.7%). Figure 3 illustrates the relationship between number of chronic diseases and body weight among those with arthritis. Among persons with arthritis *only*, rates of overweight and obesity are at problematic levels. Those with additional chronic diseases are even more likely to be obese.

Figure 3. AI/AN Elders with Arthritis: Number of Chronic Diseases and Body Weight



Conclusion and Implications

Arthritis is a substantial public health concern for older American Indians and Alaska Natives. As tribal elders are living longer, this disease is likely to become an even larger problem in future years. There is much that Natives can do to control this disease. Early diagnosis and treatment of arthritis appear to reduce symptoms and related disability. Pain relief for persons with arthritis is an important symptom to manage. Educational and behavioral interventions can reduce arthritis pain and disability. For example, telephone consultations with health care providers and several exercise programs have had beneficial outcomes (Suomi & Collier, 2003). Also, the *Arthritis Self-Help Course*, a six-

week, two-hour per week class, has been shown to reduce pain and health care costs.

The CDC is working in conjunction with other entities to fulfill the goals of the National Arthritis Action Plan (1999), which include:

- Increase public awareness of arthritis as the leading cause of disability and an important public health issue
- Prevent arthritis - ex: maintenance of good bone health through regular exercise and proper nutrition (calcium and vitamin D)
- Promote early diagnosis and appropriate health care management of arthritis
- Reduce arthritis-related pain and disability
- Assist persons with arthritis in developing and accessing needed health resources
- Ensure that persons with arthritis receive physical, mental and emotional support

Physical activity has been found to reduce pain and disability, and improve function among many arthritis sufferers. Also, maintaining an appropriate body weight and avoiding joint injuries reduces the risk of developing arthritis and may decrease disease progression. Early diagnosis and appropriate disease management, including self-management activities such as self-help courses, weight control, and physical activity can assist elders with arthritis to maintain/increase function, lower health care costs, and improve quality of life.

References

Associated Press. (2005). One in three U.S. adults has arthritis. *USA TODAY*. Retrieved January 21, 2006, from http://www.usatoday.com/news/health/2002-10-24-arthritis_x.htm

Centers for Disease Control and Prevention. (2006). *Targeting Arthritis: Reducing Disability for 16 Million Americans*. Atlanta, GA: CDC.

Suomi, R. & Collier, D. (2003). *Effects of arthritis exercise programs on functional fitness and perceived activities of daily living measures in older adults with arthritis*. *Archives of Physical Medicine and Rehabilitation*, 84(11), 1589-94.

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