

American Indians and Alaska Natives and Diabetes

Diabetes mellitus poses a significant public health challenge for the US. Some 800,000 cases are diagnosed each year, and changing demographic patterns in the US are expected to increase the number of people at risk for diabetes and who eventually develop the disease. Diabetes is a chronic disease that usually manifests as one of two major types. In type 1, which occurs mainly in children and adolescents, the body does not produce insulin, and insulin administration is required to sustain life. In type 2, which usually occurs in adults over 30 years of age, the body becomes unable to use its own limited supply of insulin effectively. (US DHHS, 2000).

Adult-onset diabetes also has **strong physiologic ties to cardiovascular disease (CVD)**. The majority of patients with diabetes mellitus die of complications of CVD rather than of causes associated directly with glucose control. (US DHHS, 2003).

Diabetes is a major clinical and public health challenge among certain racial and ethnic groups in which both the number of new cases of diabetes and the risk of associated complications are great. Vulnerable and high-risk populations include Asian Americans and Pacific Islanders, elderly persons, and economically disadvantaged persons. Factors that account for this chronic disease epidemic include behavioral elements (e.g., increased fat consumption, decreased physical activity, obesity), demographic changes (aging, increased growth of at-risk populations), genetics, cultural and community traditions, and socioeconomic status. The level of patient knowledge and empowerment has a great impact on the disease burden associated with diabetes. (US DHHS, 2000).

Overweight and Obesity

Overweight and obesity are major contributors to many preventable causes of death. On average, higher body weights are associated with higher death rates. Those who are overweight or obese have a substantially higher risk of developing high blood pressure, high cholesterol, type 2 diabetes, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances and breathing problems, and certain types of cancer. (US DHHS, 2000).

- **Incidence and Mortality**
- **Complications**
- **Traditional Health Beliefs and Practices**
- **Risk Factors and Challenges**
- **Strengths and Protective Factors**
- **Adherence Factors**
- **Diet**
- **Complementary and Alternative Medicine**
- **Service Interventions**
- **References and Resources**

Strengths and Protective Factors

Adaptability

- **New solutions, ideas, and creativity evolve** within the ceremonial life of the community. (MSH, 2003).

Community Strength

- Community organizing, networking, and a sense of tribal purpose and solidarity lead to **strong community-level organizations that encourage healthy behaviors** and support access to and utilization of preventive, healing, and other health services, as appropriate. (MSH, 2003).

Mobilizing and Building on Community Strengths: The Healthy Nations Initiative

“Since 1993, 14 American Indian and Alaska Native communities have worked diligently to reduce the harm due to substance abuse in their communities. Funded by the Robert Wood Johnson Foundation’s Healthy Nations Initiative I, these communities implemented creative strategies that span the continuum from community-wide prevention, early identification and treatment to aftercare. Drawing upon the unique strengths of their own cultural traditions to find solutions to local substance abuse problems, these efforts have identified important and useful lessons. Characteristics that appear to increase the likelihood of success” include:

- A culture-focused approach. “Culture became ‘the program’ for the most effective grantees instead of culture as an ‘add on.’”
- Community ownership and “buy-in.” “Effective programs stressed that community members should be involved at all levels of the planning and implementation and incorporated the perspective of ‘doing with’ the community instead of ‘doing for’ the community.”
- Effective collaboration. “Programs that established effective collaborative linkages across service organizations and successfully combined resources and talents were more effective.” (Noe et al., 2003).

For more information on this initiative and the programs of the 14 grantees, visit the Healthy Nations Initiative web site at <http://www.uchsc.edu/ai/hni/>.

Connection with the Past

- By **revitalizing old practices and making the community aware of them**, American Indians and Alaska Natives have established (or reestablished) constructive activities promoting health and healing. (MSH, 2003).

Family and Elders

- Family, including **traditional kinship and extended-family structures** within the community, is of paramount importance among and within all American Indian and Alaska Native groups. (MSH, 2003).
- **The presence of elders is critical to the provision of culturally competent services for American Indians and Alaska Natives.** Elders can provide specific advice and emotional

support and can guide the approach to counseling or other forms of intervention and prevention from an American Indian and Alaska Native perspective. (MSH, 2003).

Holistic Thinking

- **Holistic thinking is a strength** of the American Indian and Alaska Native community and should be used to identify effective action. (Office of Minority Health, 2002).

Recommendation

Providers can obtain better results for American Indian and Alaska Native patients by taking a holistic approach to health and addressing physical, emotional, mental, and spiritual needs in the care and treatment plan. (Oropeza, 2002).

Identification with Culture

- **Indian youth who have a greater identification with their Native culture** may demonstrate less drug and alcohol use and other unhealthful behaviors. (MSH, 2003).

Abstinence from Alcohol

- A handful of studies has shown that American Indians, more so than any other ethnic groups in the US, have **a tendency to give up alcohol during the middle years of adulthood**. (May and Gossage, 2001).

Abstinence Days Far Outnumber Drinking Days

“An over-emphasis on drinking among American Indians, while ignoring the abstinence measures, has been common in the past among journalists, academics, and others. That is, even though males (and to some extent females) [of Northern Plains and Rocky Mountain tribes] may drink substantial quantities when they do drink, on most days no drinking occurs at all. Similarly, approximately 35% of the adults are complete abstainers. Therefore, abstinence days in each month and year far outnumber drinking days. If the point prevalence of drinking is taken as any day, particularly a weekday, the modal pattern of drinking among American Indians is abstinence. This is not intended to minimize the fact that heavy drinking causes a tremendous number of problems ranging from adverse social consequences, morbidity, and mortality. It is, however, intended to emphasize the clearly documented strengths rather than the weaknesses exhibited in this population. The modal category on most of the frequency of drinking variables is zero drinks for both males and females.” (May and Gossage, 2001).

- Studies of drinking epidemiology among the Navajo have shown that **a low percentage of Navajo adults drink**—only 30% to 52% of the adult population. Further, more males than females drink (64% for males, 40% for females). (May and Gossage, 2001).
- In general, **southwestern tribes and the Plains tribes of Oklahoma appear to have lower prevalence rates of drinking** than do Northern Plains tribes. (May and Gossage, 2001).

Leisure Activities

- **Physically active leisure pursuits.** The most common leisure activities reported by male participants in the Strong Heart Study were gardening, walking, and hunting, whereas walking, gardening, and dancing were most popular among women. The men in all three

areas of the study were at least 50% more active than the women were. Both men and women from the Dakotas were more active than participants from Arizona and Oklahoma. (National Heart, Lung, and Blood Institute, 2001).

- **Relatively less television viewing.** The average number of hours of TV viewing per day for the men and women in each area of the Strong Heart Study was less than that cited by the Nielsen Report on TV watching by people aged 54 and older. (National Heart, Lung, and Blood Institute, 2001).

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