

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**

Incidence and Mortality

- **American Indians and Alaska Natives have the highest prevalence rates of diabetes in the world.** (Indian Health Service, 2001).
- About **15% of American Indians and Alaska Natives who receive care from the Indian Health Service have been diagnosed with diabetes**, a total of 105,000 people. On average, American Indians and Alaska Natives are 2.6 times as likely to be diagnosed with diabetes as are non-Hispanic whites of similar age. The available data probably underestimate the true prevalence—for example, **between 40% and 70% of American Indians aged 45 to 74 were found to have diabetes in a recent screening study in three geographic areas.** (NDIC, 2002).

Undiagnosed Cases Hide Actual Rate

The actual prevalence of diabetes may be one-third to one-half higher in many communities because of undiagnosed cases, as estimated by the American Diabetes Association. (Indian Health Service, 2001).

- **Diabetes mellitus is one of the most serious health challenges** facing American Indians and Alaska Natives in the US today. The disease is very common in many tribes, and morbidity and mortality from diabetes can be severe. (NDIC, 2002).

Prevalence of Type 2 Diabetes

- **Most American Indians and Alaska Natives with diabetes have type 2**, which is now common in American Indian children aged 10 and older. A small number of American Indians (about 2% to 4%) have type 1 diabetes. (NDIC, 2002).
- A review of National Institutes of Health data on type 2 diabetes in adolescents aged 15 to 19 years living in the Gila River Indian Community indicates that the **prevalence of type 2 diabetes is much higher than the Indian Health Service has estimated** (5.1% versus 0.46%). Both data sources, however, suggest a secular increase in prevalence between 1986 and 1996–1997. (Fagot-Campagna et al., 1999).
- A recent Centers for Disease Control and Prevention review of the current knowledge about type 2 diabetes among children and adolescents in North America revealed that **American Indian young people have the highest prevalence of type 2 diabetes.** In the 15- to 19-year age group, the current prevalence per 1,000 is 50.9 for Pima Indians from Arizona (active population screening by the National Institutes of Health), 4.5 for all US American Indian populations (reported cases from the US Indian Health Service outpatient clinics), and 2.3 for Canadian First Nation people from Manitoba (reported cases from outpatient clinics). In comparison, the prevalence of type 1 diabetes for US residents aged 0 to 19 years is 1.7 per 1,000. (CDC, 2002).
- Between 1990 and 1998, **the total number of American Indian and Alaska Native children, adolescents, and adults aged 35 and younger diagnosed with diabetes**

increased 71%, from 4,534 to 7,736—a rate of about 9 of every 1,000 people in that age group in 1998. (CDC, 1999).

(For data on gestational diabetes, see **Risk Factors and Challenges**.)

Prevalence Rates in Specific Groups and States

- Data from the Navajo Health and Nutrition Survey, published in 1997, showed that **22.9% of Navajo adults aged 20 and older had diabetes**. Fourteen percent had a history of diabetes, but another **7% were found to have undiagnosed diabetes** during the survey. (NDIC, 2002).
- The **prevalence of type 2 diabetes ion Alaska Natives varies by subgroup**. For example, in 1993, Eskimo groups had a prevalence of 12.1 per 1,000, Indian groups had a prevalence of 24.3, and Aleut groups had a prevalence of 32.6. (NDIC, 2002).
- Among the **Pima Indians of Arizona**, about 50% of people between the ages of 30 and 64 have diabetes. Diabetes rates are highest in Pima children whose parents developed diabetes at an early age. (National Diabetes Education Program, 1999).
- **Minnesota and Wisconsin have high rates**. In a population-based study, the rate of diabetes for American Indians in Minnesota and Wisconsin was 600% higher than the rate for whites. (Minnesota Department of Health, 2001).

No Stereotyping!

There are more than 560 federally recognized tribes in the US, and about 100 others are recognized by individual states. (Department of the Interior, 2002). Health beliefs, practices, and status may vary greatly among different tribes, among different regions, and, as for members of any population group, among individuals. Each community and its individuals are unique, and it is dangerous to generalize.

- The official rate of diabetes among **Navajo** Indians aged 45 and over is 40%. (Indian Health Service, 2000).

Prevalence Rates for Women

- **American Indian and Alaska Native women 65 years and older have especially high rates:** nearly 25% have diagnosed diabetes. By comparison, among the non-Hispanic white population in the US, 11.2% of women 65 and older have diabetes. (Indian Health Service, 2000).
- **American Indian and Alaska Native women are almost three times as likely to be diagnosed with diabetes** as are white women of similar age. The disease is common in many tribes. (National Women's Health Information Center, 2003).

Mortality Rates from Diabetes

- The **rate of diabetes deaths has been increasing** in both the Indian and the US all-races populations. Since 1993, the Indian age-adjusted diabetes death rate has increased 93%. For

the US all-races population, the increase since 1982 has been 39%. In 1994–1996, the Indian age-adjusted mortality rate (46.4 deaths per 100,000) was 3.5 times the 1995 all-races rate (13.3). (Indian Health Service, 2001).

Complications

- One study showed a **49% prevalence of diabetic retinopathy in American Indians** in Oklahoma. Pima Indians also have high rates of diabetic retinopathy. (NDIC, 2002).
- From 1987 to 1990, **American Indians with diabetes experienced end-stage renal disease six times more frequently** than did non-Hispanic whites. Especially high rates of diabetic nephropathy (kidney disease) were seen in Alaska Natives and in Cherokee, Chippewa, Navajo, Oklahoma, Pima, Sioux, and Zuni tribes. (NDIC, 2002).
- Among Alaska Natives, **women are more likely to develop end-stage renal disease and are more likely to die of renal failure** than men are. (NDIC, 2002).
- The incidence of **periodontal disease is 2.6 times higher in Pima Indians with diabetes** than in those without it. (NDIC, 2002).

Traditional Health Beliefs and Practices

- **Enduring spirit.** The impact and durability of the practice of prevention and intervention for thousands of years should engender respect for American Indians' enduring spirit. They are stubborn in holding on to what they believe is important, and they discard what they do not feel they need—often with community consensus. There is no argument that Indian Native peoples have survived for thousands of years under all kinds of conditions and circumstances. (Sage, 2001).
- **Holistic approach to life.** Concepts that are key to the cultural context, identity, adaptability, and perseverance of American Indians and Alaska Natives include a holistic approach to life, a desire to promote the well-being of the group, an enduring spirit, and a respect for all ways of healing. (MSH, 2003a).
- **Communal ceremonies.** There are many systems of healing among American Indians and Alaska Natives. Nearly all of them share the belief that large, communal ceremonies promote the well-being of the entire tribal group. (Sage, 2001).
- **Role of elders as advisers.** In many tribes, extended families (and particularly elders) are very important to the lives of individual members and will be part of a patient's medical experience. (MSH, 2003).

Religion, Philosophy, and Spirituality

- **Spiritual belief** is a pervasive aspect of Indian culture, although belief systems vary widely among tribes or nations and among geographic areas. Most Indians teach that the interconnectedness of all things leads to a relationship among man, Creator/God, fellow man, and nature. In many Indian traditions, healing, spiritual belief or power, and community are not separated, and often the entire community is involved in healing ceremonies and in maintaining the power of Indian “medicine.” (Hendrix, 2002).
- **Healing is considered sacred work** and in many Indian traditions cannot be effective without considering the spiritual aspect of the individual. Many contemporary Indians use “white man’s medicine” to treat “white man’s diseases” (e.g., diabetes, cancer, gallbladder disease) and use Indian medicine to treat Indian problems (e.g., pain, disturbed family relationships resulting in physical symptoms, sicknesses of the spirit). (Hendrix, 2002).
- **Religion permeates all aspects of life** and is an integral part of the American Indian and Alaska Native holistic worldview. Religious concepts influence both the physical and the emotional well-being of the individual. (Kittler and Sucher, 1998).
- **Duality.** Spiritually, American Indians and Alaska Natives may be Christian and at the same time follow traditional spiritual practices and beliefs.
- **Illness means imbalance.** In American Indian and Alaska Native culture, health reflects a person’s relationship to nature, broadly defined as the family, the community, and the environment. Every illness is due to an imbalance, with supernatural, spiritual, or social implications. Treatment focuses on the cause of the imbalance, not just the symptoms, and is holistic in approach. Traditional American Indian medicine is concerned with physical, mental, and spiritual renewal through health maintenance, prevention of illness, and restoration of health.
- **Shared beliefs.** In spite of the enormous diversity in tribal cultures, languages, and religious beliefs among American Indian and Alaska Native tribes, they share some fundamental beliefs related to health, illness, and prevention.
 - √ All healing begins with the Great Spirit (or Supreme Creator). Illness is an opportunity to purify one’s soul.
 - √ Humanity is made up of body, mind, and spirit, and health is maintained by preserving harmony among the body, heart, mind, and soul. Illness affects the mind and spirit as well as the body. Spirituality and emotions are just as important as the body and the mind are.
 - √ Plants and animals, as well as humans, are part of the spirit world that exists alongside, and is intermingled with, the physical world.
 - √ Death is not an enemy but a natural phenomenon of life. The spirit existed before it came into a physical body and will exist after the body dies.
 - √ One’s relationships with others and with the earth are essential components of health. Disease is felt not only by the individual but also by the family. (Diversity Resources, Inc., 2001).

Specific Traditional Illness

- **Ghost sickness.** Ghost sickness manifests as a preoccupation with death. Symptoms include weakness, bad dreams, feelings of danger, dizziness, hallucinations, and anxiety. (Mutha et al., 2002).

Traditional Healers

- **Connect culture and context.** Traditional healers do not separate the culture from the context, and they view the connection and dynamic interaction between them as necessary for the healing process. (Sage, 2001).
- The **role of the healer**, as traditional practitioner, is to reaffirm cultural values, integrate all the pieces into the cultural context, and consider all those involved in the community. (Sage, 2001). In addition to administering cures, medicine men and women are often seen as **culture brokers**, preserving American Indian and Alaska Native identity in the midst of rapid social change. (Kittler and Sucher, 1998).
- Many American Indian and Alaska Native individuals may have **more respect for and rely more on traditional healers** than on Western medicine providers.

Specific American Indian and Alaska Native Groups

Inuit

- In traditional Inuit (also called Eskimo) culture, **an *angakut*, or shaman, is the spiritual leader** of each tribe. He interprets the causes of sickness or hunting failure, determines personal or family responsibility, and isolates the broken taboo. Similar to shamans from other cultures, the *angakut* goes into a trance so that his soul can leave his body and travel long distances to discover the causes of illness and other community problems. (Robinson, 1995–2002).

Navajo

- **Extended family.** Navajo society is matriarchal, built on the belief that a goddess known as First Woman, Spirit Woman, Whiteshell Woman, Thinking Woman, or Changing Woman created the universe. In Navajo society, the extended family, often called a “camp,” generally comprises the senior married couple, their unmarried children, their married daughters, and the daughters’ husbands. (Diversity Resources, Inc., 2001).
- **Leading female elder controls health decision-making.** Traditional Navajos must obtain the permission of the leading female elder before entering a hospital or undergoing surgery. (Diversity Resources, Inc., 2001).

Risk Factors and Challenges

Obesity

- Recent studies confirm **disproportionately high rates of obesity and overweight among American Indian women**, although rates in specific groups vary. A study of American Indian women in urban Phoenix found that 69.6% of those surveyed were overweight, with 41.6% considered obese. The Navajo Health and Nutrition Survey reported that 59% of Navajo women (on reservations) were overweight. A survey of Indian women in California found that 44.5% were overweight. (Glanz, 2003).
- **Central obesity is a major contributing factor.** Ongoing cooperative research by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) with volunteers from the Pima community, as well as data from other tribes, shows that the major factors contributing to type 2 diabetes in American Indians are obesity, especially central obesity (upper-body, or above-the-waist, obesity); genetics; and high levels of insulin in the blood, which results in insulin resistance, a forerunner of type 2 diabetes. (Indian Health Service, 2000).
- **Obesity** is a major risk factor for diabetes in Pima Indians and is **widespread in many tribes**, with increasing rates of obesity measured in several communities in the US and Canada. (Gohdes, 1995).
- **Central obesity** was characteristic of Canadian Indians studied in Manitoba and Ontario. In young Pimas, the waist-to-hip ratio, a measure of central obesity, was more strongly associated with diabetes than was body mass index. In Navajo women, a small study found that an increased waist-to-hip ratio was associated with a statistically significant increased risk of diabetes, but a similar association was not significant in Navajo men. (Gohdes, 1995).

Gestational Diabetes

- The **prevalence of gestational diabetes** in certain groups of American Indians and Alaska Natives is as follows: 14.5% of all pregnancies in Zuni Indians, 3.4% of all deliveries in Navajo Indians, 5.8% of deliveries in Yup'ik Eskimos. (NDIC, 2002).
- Follow-up studies of American Indian women with gestational diabetes found that they had a **high risk of developing subsequent diabetes**: 27.5% of Pima Indian women developed diabetes within four to eight years, and 30% of Zuni Indian women developed diabetes six months to nine years after pregnancy. (NDIC, 2002).
- A study of the prevalence of diabetes in American Indian children found that the **strongest single risk factor for diabetes in Pima Indian children was exposure to diabetes in utero**. (NDIC, 2002).

Hypertension

- Recent studies of American Indians in Arizona and Oklahoma showed that the **prevalence of hypertension was higher** than among non-Hispanic whites in a national survey. (NDIC, 2002).

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).

Adherence Factors

Questions to Promote Adherence

- Do you have any questions about what I explained?
- Do you understand what I am recommending?
- Is there anything that would make it difficult to follow my recommendations?
- Is there anything that you think should be changed?

(MSH, 2003b).

Providers should:

- Acknowledge bias.
- Value diversity and difference.
- Look for cultural strengths.
- Recognize the interaction of race, culture, and gender.
- Know that culture is important to the clinical encounter.

(MSH, 2003b).

Communication: Verbal and Nonverbal

- **Handshake.** A firm handshake in Anglo-American culture is a symbol of strong character, but in some American Indian groups, a limp hand is culturally appropriate and is a symbol of humility and respect. (HRSA, 2003b).

Recommendation

To enhance provider-patient communication, build culturally competent care elements into clinical practice guidelines. For example, use the mnemonics BATHE, ETHNIC, and ADHERE. (HRSA, 2003d).

- **English language.** More than 1 in 20 American Indians and Alaska Natives lives in a household in which no adolescent or adult speaks English “very well.” (Smedley et al., 2003).

- Some American Indians and Alaska Natives exhibit a **style of communication that is reserved** and may be interpreted as unfriendly. Many American Indian and Alaska Native people also exercise caution in personal communications with others. Information or problems may not be readily shared.

Recommendation

Do not interpret a failure to volunteer information as an indication that nothing is wrong. An American Indian or Alaska Native patient is more likely to share information if you have developed trust. (Oropeza, 2002).

- **Slow down.** American Indian languages have some of the longest pause times compared with other languages, especially English. Silence is valued, and long periods of silence between speakers is common. (Hendrix, 2002).

Create an Atmosphere of Open Communication

Perhaps the most important thing a provider can do to ensure that a patient adheres to recommended treatment is to create an atmosphere of open communication. The patient needs to trust that the provider is acting in his or her best interests. The patient needs to understand the purpose of the treatment and be confident that the provider has used good judgment in recommending it. What many providers overlook is that the patient needs to be able to tell the provider when he or she does not understand something about the recommended treatment—most importantly, when the treatment conflicts with the patient's beliefs or lifestyle. Cultural factors may interfere with the provider's ability to understand what the patient means or needs. (MSH, 2003b).

Communicate Effectively

- Listen to **how the client describes** his or her condition.
- Learn to **ask questions appropriately.**
- Learn to **observe nonverbal behavior.**
- Ask the client for **his or her views.**
- Know when to involve **family members.**
- Know when to use **interpreters.**

(MSH, 2003b).

- **How to refer to American Indians.** Although there is no agreement about appropriate labels, when speaking generally of American Indians rather than of a specific nation, using the word *people* (Indian people, Native people, indigenous people, First Nation people) may be most appropriate. When speaking of a specific nation such as Lakota, Onondaga, or Nez Perce, use of these specific labels is generally preferable to a broader term. (Weaver, 1998).

Recommendation

When working with a specific client, ask about that client's preferred terms. Doing so communicates respect. (Weaver, 1998).

Keys to Communicating with American Indian Patients

1. **Greet** your patient warmly, smile, shake hands, and be friendly. The return handshake may feel softer or gentler than what you are used to.
2. **Eye contact** is expected at first greeting, but prolonged eye contact may be considered disrespectful.
3. **Do not appear to be in a hurry.** Your patient may have traveled a great distance at great expense to see you. If you spend only a brief amount of time, your patient may get a negative impression of the value of the visit.
4. During the visit, **avoid medical terms that may not be understood.** Do not speak “down” to your patient, however.
5. When you have finished speaking, **give your patient time to reflect** on what you have said. Do not be afraid of silence.
6. Your patient may not understand what you mean if you ask him or her to identify a specific location of pain. Rather than asking, “Where is the pain?” **ask the patient to point to the area of most intense pain.**
7. Patients may wish to perform certain **tribal healing ceremonies**, such as smudging (see the Complementary and Alternative Medicine section), even in the hospital. Try to accommodate these practices.
8. Great respect is given to the elderly. **Treat the elderly with kindness and respect** and do not appear to criticize or scold them.
9. Poverty, distance from the medical facility, and taboos against dying in the home may put a strain on the family of a patient who needs long-term or terminal care. **Discuss different care options with the family** and decide together what option is most appropriate.
10. The **extended family** plays an important role in health care decision-making. Several family members may accompany a patient when he or she arrives to be admitted to the hospital. Try to make accommodations so that family members can be close to the patient’s room or close to the hospital.
11. Work with your patients and their families to determine how best to remember to **take medications at prescribed times or return for appointments** when needed.
12. Indian culture discourages competitive behavior and encourages giving, sharing, and cooperation. **Generosity and doing things for others** are regarded highly.

(Adapted from Diversity Resources, Inc., 2001).

Communicating with Elders

- **Listening is valued over talking** by most older American Indians. Calmness and humility are valued over speed and self-assertion. (Hendrix, 2002).
- Elders frequently complain that **English speakers “talk too fast.”** (Hendrix, 2002).
- **Interrupting a person who is speaking is considered extremely rude**, especially if that person is an elder. (Hendrix, 2002).
- **Nonverbal communication.** A distance of several feet is the usual comfort zone. Body movements are minimal. Except for a handshake, touch is not usually acceptable. (Hendrix, 2002).

Suggestions

- Avoid the “invisible elder” syndrome and ask for the elder’s help in understanding the current situation and in planning the components of care to show respect for the elder’s experience.
- Adapt questions to the patient’s age and acculturation level. Slow down when communicating with an Indian elder, especially during initial encounters and when explaining treatments, medications, or health care decisions.
- Frame questions carefully to convey the message of caring rather than idle curiosity about the patient’s culture or cultural practices. (Hendrix, 2002).

Decision-making

Recommendation

Address the individual’s health problems in the context of his or her family. In many cultures, an individual’s health problems are considered the family’s problems, and it would be improper and disrespectful to exclude family members from medical interactions. Family members can provide valuable information about the patient’s diet, health behavior, daily activities, and types of alternative medications used. Their involvement in a treatment plan may be vital to the patient’s ability to adhere to the recommended treatment. Families may decide what the patient eats, when he or she takes medication, whether he or she exercises, and when he or she seeks medical attention. (MSH, 2003b).

A culturally competent provider discusses with the patient the patterns of decision-making in his or her family. Understanding and respecting the complex and often delicate interactions that exist between family members enable providers to use the patient’s family as a valuable resource, rather than seeing it as an intrusion into the provider-patient relationship. Working with the family often means working with the extended family (aunts, uncles, grandparents, etc.). (MSH, 2003b).

- **Family often extends** beyond the sphere of the traditional nuclear family. Because health care decision-making may include members of the extended family and the community, providers should consider familial influence on treatment decisions. (HRSA, 2003b).

- **Wisdom of elders.** The presence of elders is critical to the provision of culturally competent services. 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).

Diet

Encouraging Adherence to Recommended Dietary Changes

Getting a patient to change his or her diet is difficult under ordinary circumstances, but cultural factors can complicate a patient's ability to adhere to recommended changes. Diet is so closely related to culture that failure to incorporate a patient's dietary customs is a recipe for noncompliance. Many cultures follow food guidelines based on religious beliefs. Some cultures have strict beliefs about the kinds of food a woman can eat during pregnancy or after giving birth.

Ask the patient about any dietary restrictions. Get a sense of the patient's usual diet and the way foods are prepared at home. Show interest, respect, and understanding for the patient as an individual and as part of a cultural tradition, and you will be rewarded with information about dietary beliefs and traditions that will help you find suitable and appropriate ways to get the patient to make the dietary changes you propose. (MSH, 2003b).

Historical Distrust

- **Past injustices** may cause American Indian and Alaska Native patients to distrust their providers. (HRSA, 2003b).
- **Suspicion and mistrust** are natural outcomes and important survival skills for people who have experienced genocide. Practitioners and program planners who seek to work with American Indian people must realize that their helping interventions may be viewed in this context. (Weaver, 1998).

Suggestion

Patience, perseverance, and working with clients around concrete issues are ways that social workers (and health care providers) can begin to establish trusting relationships with American Indian clients. (Good Tracks, 1973).

Interpretations of Disease and Disability

- Physicians have many ideas about disability. For example, most doctors believe that treatment should include intervention and that biological anomalies should be corrected. However, **some cultures believe that the "disability" is spiritual rather than physical or that the "disability" itself is a blessing** or reward for ancestral tribulations. (HRSA, 2003b).
- Western physicians are well indoctrinated about the dangers of "invisible" diseases such as hypertension and high cholesterol, but people in other cultures may not be as willing to intervene **when there are no symptoms**. (HRSA, 2003b).

Diet

- Both diet and physical activity levels have changed for many members of American Indian and Alaska Native groups over the past several decades. **Diets are higher in fat and calories than are traditional diets;** physical activity has decreased. (NDIC, 2002).
- **Pima Indians living in Mexico who consumed a more traditional diet (less animal fat and more complex carbohydrates) had a lower prevalence of type 2 diabetes** than did Pima Indians living in Arizona. Pima Indians in Mexico also expended more calories through activity. (NDIC, 2002).
- **Westernized diet and unavailability of fresh fruits and vegetables on reservations.** Contributing to obesity is the adoption of a Westernized high-fat diet by many American Indians and Alaska Natives. Dietary counseling is generally limited or unavailable on reservations. Often, access to quality foods, such as fresh fruits and vegetables, is limited, or such foods are available only at great distance and high cost. In addition, people on reservations may rely on commodity foods furnished by the government, which are often high in fat and calories. The level of physical activity also has declined, with less reliance on hunting and farming as occupations and the adoption of more sedentary occupations. (Indian Health Service, 2000).
- **Navajos traditionally classify foods into strong and weak foods.** Strong foods such as meat, fried bread, corn, and potatoes are believed to promote health. Milk is a weak food. It is believed that it is all right for the old to drink goats' milk and for infants to drink mother's milk, but milk in general is not considered a healthful food. (Diversity Resources, Inc., 2002).
- **Today's food and traditional Northwest Indian foods.** The US Department of Agriculture (USDA) published the Food Guide Pyramid in 1992. The pyramid provides for six food categories and emphasizes eating more breads and cereals and fruits and vegetables. The following box outlines examples of traditional Northwest Indian foods, grouped under the six categories of the USDA Food Pyramid.

Suggestion: Consult with your patient and family members to determine culturally appropriate foods that are already part of the household's diet or would be possible to add to it and can be grouped under the major food categories.

Traditional Northwest Indian Foods

- **BREAD GROUP: Traditional Grains**
 - √ Indian biscuits (bannock bread)
 - √ Dried corn
 - √ Lukameen
 - √ Mush
 - √ Wild oats
 - √ Wild rice

- √ Popcorn
- **VEGETABLE GROUP: Traditional Vegetables**
 - √ Sprouts or new shoots
 - √ Peeled stems
 - √ Spring greens
 - √ Wild rhubarb
 - √ Indian celery
 - √ Wild mushrooms
 - √ Wild roots, such as bitter root, camas, cattail
 - √ Seaweed
 - √ Black tree moss
- **MEAT GROUP: Traditional Meats, Fish, Birds, Eggs, and Nuts**
 - √ Deer, elk, mountain goat, rabbit, squirrel, beaver
 - √ Seal or whale
 - √ Salmon or other fish
 - √ Oysters, clams, sea urchins, mussels, crabs, squid, octopus
 - √ Ducks, geese, pheasant, grouse, quail, chuckers
 - √ Eggs of salmon or birds
 - √ Acorns, hazelnuts, pine nuts
- **FRUIT GROUP: Traditional Fruits and Berries**
 - √ Wild berries, such as huckleberries
 - √ Chokecherries
 - √ Wild crab apples
 - √ Wild black cherries
- **DAIRY GROUP: Traditional Calcium Sources**
 - √ Breast milk for babies
 - √ Bone soup or broth
 - √ Fish head soup
 - √ Canned salmon with the bones
 - √ Cough, camas, wild carrots (in large amounts)
 - √ Oysters or clams
- **EXTRAS: FATS AND SWEETS: Traditional Fats and Sweets**
 - √ Animal fat
 - √ Fish oil
 - √ Honey

(Association of American Indian Physicians, 2001).

Complementary and Alternative Medicine

Definition

The National Center for Complementary and Alternative Medicine (NCCAM) defines CAM as follows:

“CAM covers a broad range of healing philosophies (schools of thought), approaches, and therapies that mainstream Western (conventional) medicine does not commonly use, accept, study, understand, or make available. A few of the many CAM practices include the use of acupuncture, herbs, homeopathy, therapeutic massage, and traditional oriental medicine to promote well-being or treat health conditions.

“People use CAM treatments and therapies in a variety of ways. Therapies may be used alone, as an alternative to conventional therapies, or in addition to conventional, mainstream therapies, in what is referred to as a complementary or an integrative approach.

“Many CAM therapies are called holistic, which generally means they consider the whole person, including physical, mental, emotional, and spiritual aspects.” (HRSA, 2003c).

- **Use of traditional medicine and healers.** Many American Indians continue to practice tribal religions and rely on traditional medicine. One study reported that 70% of Navajos living on the reservation used traditional healers, and another found that approximately 28% of Indians living in Milwaukee and the San Francisco Bay area continued to use traditional practitioners. (Diversity Resources, Inc., 2001).

Suggestion

Respect traditional health practices and values and integrate them with behavioral health and wellness programs.

- **Reticence.** Many Indian people who maintain traditional spiritual and healing practices will not openly discuss these practices because of their private nature, the fear of exploitation and prejudice, and a long history of persecution for their beliefs. (Weaver, 1998).
- **Consulting a traditional healer first.** A patient may consult a traditional healer to diagnose or remove the cause of a disease before consulting a Western physician to cure the symptoms. (Diversity Resources, Inc., 2001).
- **Home treatment.** Economic factors, knowledge about and access to herbs, and distance from biomedical care often influence the decision to seek home treatment. However, over-the-counter remedies are becoming more popular. (Diversity Resources, Inc., 2001).
- **Drum or sweat lodge.** American Indians may work with the drum or sweat lodge in healing. (HRSA, 2003c).

ALIGN: Improving Compliance among Patients Who Use CAM

Ask. It is reasonable to assume that clients may be using one or more CAM products or practices. Research in this area shows that the majority of clients do not mention their use of CAM practices for a variety of reasons. Asking patients about their use of CAM can provide useful information and help build rapport.

Learn. Listen to your patients and learn what you can about their alternative approaches to healing, especially their subjective experiences with perceived efficacy. In addition, there are many books, research journals, web sites, and other resources on this topic.

Integrate. As appropriate, work with patients to integrate their CAM practices into the treatment plan. This can help increase compliance by working with existing beliefs, motivational tendencies, and cultural traditions.

Grow. In many cases, the process of inquiry and integration provides an opportunity for growth for both patients and providers.

Network. As knowledge of CAM increases, it may be useful to network with other interested physicians and CAM providers. Learn about the providers and suppliers of CAM services and products used by your patients. Consider the opportunity for cross-referrals, where appropriate, to trusted healers within the community. (HRSA, 2003c).

Navajo

- The following are possible **causes of disease** according to the traditional Navajo belief system:
 - √ Soul loss.
 - √ Intrusive objects.
 - √ Spirit intrusion or possession.
 - √ Breach of taboo.
 - √ Witchcraft or sorcery. (Diversity Resources, Inc., 2001).
- **Combined use of traditional and modern medicine.** The two approaches to health and illness are viewed as distinct but complementary. It is perfectly acceptable for a person to consult a Navajo diagnostician to identify the cause of a disease and arrange a ceremony to eliminate that cause, as well as to consult a physician to alleviate the symptoms of the disease. (Diversity Resources, Inc., 2001).
- **Navajo language and the classification of illness.** Illnesses are classified by the agents believed to cause them or the ceremonies used to cure them—such as the Wind Way, the Evil Way, the Night Way, the Plume Way, and the Earth and Beauty Way—rather than by the symptoms expressed or the parts of the body affected. The ability to describe the nuances of pain and symptoms in the Navajo language is highly sophisticated, and patients can be good historians of their illnesses if they understand why the physician needs an accurate history. (Diversity Resources, Inc., 2001).

Specific Practices

- American Indian healers may burn herbs to purify people and places in a ritual called **smudging**. Smudging with sage, cedar, and sweet grass is performed to purify places before sacred events or meditation, before beginning an important meeting, or before offering help or healing. It is also used in health centers to keep the space clear and in places where unpleasant events have occurred (e.g., theft, violence). Traditionally, Native Americans would burn smudge in an abalone shell. In the alchemical process of transformation (in this case, purification), the four elements are represented: the shell for water, the match for fire, the herbs and ashes for earth, and the smoke for air. (Rainbow Nations, 2003).

Service Interventions

- A research study called the **Diabetes Prevention Program (DPP)**, which worked with American Indians who had impaired glucose tolerance (IGT) and were overweight, showed that **lifestyle changes (diet and moderate exercise) can sharply delay and possibly prevent type 2 diabetes among American Indians**. Specifically, diet and exercise resulting in a 5% to 7% weight loss lowered the incidence of diabetes (development of new cases) by 58%. The same study found that the drug metformin cut the incidence of type 2 diabetes by 31%. Although both interventions lowered fasting blood glucose levels, diet and exercise were more effective at lowering blood glucose levels two hours after a glucose drink. Also, about twice as many people in the lifestyle-change group compared with those who got standard advice regained normal glucose levels, showing that diet and exercise can reverse IGT. (NIDDK, 2002).
- **Lifestyle-change program for American Indians and Alaska Natives.** The Diabetes Wellness Connection of the Native American Diabetes Project provides a culturally appropriate program to help people eat healthy foods, exercise more, and be strong in body and spirit. In five online “meetings,” the program encourages people to exercise regularly, eat less fat and sugar, encourage one another, and stay on the path. To visit this site and learn more about the program, go to www.laplaza.org/health/dwc/nadp/index.htm.

Culturally Appropriate Encouragement to Get American Indians to Exercise More

“Getting started with exercise is much like having a garden. With our gardens, we have a plan and set a goal, to make a garden and have vegetables, even though we may not say I’m planning a garden and my goal is to have vegetables.

“Just like you plan your garden with the goal of having vegetables, you can plan your exercise with the goal of lowering your blood sugar.

“Just like your family and friends help you with your garden, by weeding and watering, family and friends can help you with your exercise goal by exercising with you, watching the children while you go for a job, and walking to the post office with you. What else can you think of?” (Native American Diabetes Project, 2003).

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