
“Doing Battle”: A Metaphorical Analysis of Diabetes Mellitus Among Navajo People

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Effective communication with patients and their family members forms the foundation of a therapeutic relationship. This is particularly important when the occupational therapist, other health professionals, and the patient are from different cultural backgrounds. This paper describes one aspect of the findings of an ethnographic study of chronic diabetes among the Navajo people (referred to here as Dine'). It focuses on the dominant metaphorical images that were used by the informants to describe their illness experiences. The data suggest that diabetes can be considered a metaphor for larger social changes in the life-style and traditions (e.g., away from sheepherding as a means of basic subsistence to obtaining urban-centered employment) of native Americans and their effects on the Dine'. Implications of our findings include the importance of metaphorical communication for perceptions of compliance, powerlessness, and patient and therapist satisfaction with the therapeutic relationship.

Cassell (1985a) described two premises for clinical medicine: (a) that all care flows through the relationship between the health care provider and the patient, and (b) that spoken language is the most important tool in medicine. Nowhere is the importance of communication more apparent than in cross-cultural situations, where an occupational therapist or other health care provider works with people from a cultural background different than his or her own. The concept of culture is central to all aspects of health care (Helman, 1990), but is especially important in complex chronic illnesses such as diabetes mellitus. The health care provider's inability to recognize and implement culturally specific knowledge contributes to noncompliance by patients and to frustration experienced by the health care provider, the patient, and the patient's family members.

This paper explores one aspect of cross-cultural communication, the use of metaphors by Navajo people to describe their experience of living with diabetes. Interview data and case vignettes are presented to help clarify and illustrate the findings.

The Dine' People

The Navajo people, who prefer to be called the Dine', live predominantly on the largest federal reservation area in the United States, encompassing 24,700 square miles in the Four Corners region of northern Arizona, western New Mexico, and southern Utah. Situated on the Colorado plateau, more than half of the land is classified as desert. Water sources are scarce, and much of the land is inaccessible. Only about one quarter of the reservation's 5,000 miles of roads are paved. Approximately 162,000 Dine' live on the Navajo reservation, and several thousand more live off of the reservation in urban areas, in-

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cluding Flagstaff, Page, and Winslow in Arizona and Gallup and Albuquerque in New Mexico.

Sociocultural and economic factors are integral to the health status of the Dine', and their access to health care. Although many of the elders in the Dine' community have retained most aspects of their traditional culture (e.g., language), many of the younger generation have been assimilated and acculturated into the Anglo culture (see Kluckhohn & Leighton, 1974, for an ethnography of the Navajo). These latter persons maintain little interest in or contact with the traditional cultural practices. Within the traditional culture, family life remains a central focus, with the extended family reinforced by the clan system, which is based on an elaborate kinship network. Rather than living in villages, most Dine' are roughly clustered in extended family groups spread over many miles. Over half of their homes are without plumbing, and many lack electricity.

The Dine' population can no longer be supported by such traditional activities as shepherding and farming. The tribe's economy is increasingly dependent on such mainstream employers as government, mines, and construction.

The primary source of health care for the Dine' is the Indian Health Service. There are several Indian Health Service agencies and clinics located in the population centers throughout the reservation in Arizona and New Mexico. In addition, one private hospital, two private clinics, and two nursing homes are located on the reservation. The tribe operates an emergency medical service and community health representative program. Emergency transport by air to Flagstaff and Phoenix, Arizona, and Gallup and Albuquerque, New Mexico, occurs frequently because of the lack of specialized medical facilities.

Non-insulin-dependent diabetes mellitus is a major health problem among the native American populations of North America (Young, Szathmary, Evers, & Wheatley, 1990). Rates for diabetes in native Americans have increased so dramatically since 1950 that it is considered epidemic in this group (West, 1974). The chronic nature of diabetes and its secondary complications, which include hypertension, cardiovascular disease, cataracts, and vascular insufficiency (Bennett & Knowler, 1984), challenge health care professionals to develop strategies that would identify those persons who are in the early stages of the disease and assist them with treatment programs. It is also important to recognize those who are at risk for diabetes and to provide educational information that could offset or eliminate the disease in the at-risk groups.

Communication Barriers

Communication barriers that arise between health care professionals and their patients account for a great deal of

conflict and dissatisfaction with prescribed treatments (Cassell, 1985a, 1985b; Kleinman, 1978). Discrepancies can exist in ideas about etiology of the illness, understanding underlying anatomical and physiological processes, management, and prognosis (Helman, 1990). Furthermore, patients and providers often hold different ideas about the meaning of illness in terms of its cause as well as its meaning or effect on individuals' lives. Discrepancies occur more often in cross-cultural settings where the patient's verbal and nonverbal communication patterns may be different from those of the provider.

Unfortunately, in the Western health care system, the burden of learning communication patterns most often falls onto the patient. Patients who come from different cultural backgrounds, such as the Dine', must first sort out those health problems that are best treated by traditional methods (e.g., hand tremblers, local herbal medicines) and those best treated by biomedicine. If a decision is made to seek biomedical consultation, it is up to Dine' clients to learn how to "linguistically and culturally translate their concerns into information that will be meaningful to health professionals" (Zambrana, 1987, p. 148).

The Dine' client with diabetes communicates with a number of providers (e.g., physicians, nurses, nutritionists, home health care aides, occupational therapists) who are non-Native American and who, for the most part, have a biomedical interpretation and perspective of diabetes. Many of the health care providers in this area of the American Southwest represent the dominant Anglo and Hispanic cultures. Few have knowledge of the Navajo language or are familiar with the Navajo culture, traditions, or basic beliefs. In addition, they are usually associated with the Indian Health Service for a relatively short time and do not have the opportunity to learn the communication patterns that are most common to the Dine'.

The responsibility for evaluating whether the treatment is congruent with culture and life-style also frequently falls on the patient (Zambrana, 1987). Dine' patients evaluate the intervention both in relation to whether they believe it will improve their health and in terms of social and cultural implications (Strauss et al., 1984). This is illustrated in a Dine' informant's comment:

We are told which foods are for us and that we should be eating those foods. But I do not follow it. We do not buy food as to be picky. The Anglo use different methods and ways of eating, and their diet is different. That is the way we are trying to be taught to use, and it is very hard for me to adjust to it. It will take time [to adjust]. That each one of us have different body build and make, and have different ideas as well. Maybe that is the big problem to make medicine for each and everyone to fit their own needs.

Regrettably, many times the health professional's view of the prescribed regimens and the patient's view are at odds. This often leads to labeling the patient as noncompliant or nonadherent. As Ternulf-Nyhlin (1990) stated, noncompliance does not mean carelessness; it simply means having a different worldview.

Differing worldviews lead to misunderstandings. One example of a communication misunderstanding is seen in the interpretation of diabetes. The biomedically trained health care professional often attempts to explain diabetes in physiological terms, which have little or no meaning for many Dine' patients with diabetes. In contrast, the Dine' perceive diabetes as a "white man's" disease that has "come upon" them in recent times. They believe that diabetes disrupts the individual's "Hohzoni," or internal balance of well-being. Many Dine' have a difficult time in interpreting and understanding problems of the body separately from the mind and from the overall balance and harmony of the individual (Adair, Deuschle, & Barnett, 1988). When this balance or harmony is disrupted, sickness or disease results. Any treatment of a disruption of Hohzoni should include those things that restore the total harmony of the individual. For many Dine', the proper treatment is a combination of "Anglo" medicine and traditional medicines. Others, however, seek out only the "Anglo way," because they see diabetes as an "Anglo disease."

Another communication difference is in the way that conversation is initiated between strangers among the Dine'. For a Dine', proper communication with a stranger begins with a discussion of family lineage and clan. This discussion is often lengthy but provides each person with a formal introduction and a way to begin a conversation. It is considered rude to begin talking about business before these formal introductions have taken place. Often Dine' people become frustrated and angry with their Anglo health care professionals for neglecting these formalities and hurrying through the communication process.

Nonverbal behavior also plays a very important role in Dine' communication. For example, it is considered rude to make direct eye contact with someone. Therefore, the health care professional and occupational therapist may view the Dine' client as uncooperative, uninterested, or reticent, because eye contact is not made.

The Dine' will rarely ask questions about their own health status or their disease, nor will they seek clarification with respect to things they do not understand about their treatment. Because the health care professionals are viewed as experts, it would be rude to question their suggested treatment. This is especially true with occupational therapists who are often in contact with patients over an extended period of time. Health care professionals who have been associated with the Dine' for a number of years have learned to ask those questions of the patient that demonstrate understanding. For example, a community health representative might ask, "Can you tell me how you take your medicine every day?"

Due to these communication difficulties, many kinds of misunderstandings contribute to frustrations for health care professionals and the Dine'. The health care providers become discouraged with those Dine' who do not adhere to specific treatment behaviors, and the Dine'

become disheartened with the apparent lack of empathy and understanding on the part of the health care providers.

The Study

In this paper we present data from an ethnographic study that described the experiences of diabetes from the perspectives of Dine' adults.¹ Ethnographic interviews and participant observation were used in this 2-year study to gather information from 20 Dine' men and women with diabetes. Participant observation focused on communication exchanges in the Indian Health Service clinics and in life-style characteristics observed in informants' homes.

Informants were located through referrals from the Indian Health Service clinics and from initial contacts through local trading posts. Many informants then referred the interviewers to others they knew who had diabetes. The informants all lived in northern Arizona, some in a town of about 40,000 inhabitants and others in isolated rural areas. Their living situations ranged from modern houses to hogans (traditional six- or eight-sided houses with sod roofs).

Navajo-speaking graduate assistants were trained to conduct the interviews, which took place in a variety of settings, including individual homes (some with family participation) and the Indian Health Service clinics. The use of interviewers for whom Navajo is their first language is important in a study of communication, because understanding metaphor is difficult through a translator. The first part of the interview was standardized; identifying data were collected on age, marital status, family context, and length of time since diagnosis of diabetes. A semi-structured interview followed that used guiding questions based on a review of the literature and on clinical experience at the Indian Health Service clinics. Examples of the questions used to guide the interview process are listed below:

- How did you discover your diabetes?
- Can you give me a definition of diabetes?
- What kinds of things have you told your family about diabetes?
- How do you feel about having diabetes?
- What kinds of treatment or help are you getting for diabetes now?
- How do you care for yourself in dealing with this illness?

Most of the tape-recorded interviews were conducted in Navajo and then translated into English by the graduate assistants. The verbatim interviews were transferred to a word processing software program for written transcription. Constant comparative analysis was used to re-

¹Complete results of this study are forthcoming. For further information, contact the first author

structure and focus questions for subsequent interviews. The ideas that emerged from earlier interviews were compared with those acquired at a later date. The content of the data was then analyzed, focusing on the informant's perspective of diabetes in relation to (a) etiology; (b) onset of symptoms; (c) pathophysiology; (d) course of illness, including the sick role; (e) treatment alternatives; and (f) communication patterns. Findings related to communication patterns are reported in this article.

Findings: Dominant Metaphorical Images

The findings presented here describe the metaphorical images that were integrated and associated with the Dine' individual's experiences with diabetes. Metaphors are important parts of communication that are used when ordinary language does not adequately express the meaning or intent of a message, that is, metaphors reflect less easily explained ways of thinking about an experience (Amarasingham, 1984). They are also used when meaning is emotion-laden and the speaker wishes to distance himself or herself from the experience enough to talk about it. The use of metaphors to explain or describe disease and illness are influenced by cultural beliefs, values, and the situational context in which the disease or illness occurs (Lakoff & Johnson, 1980).

Doing Battle

The most obvious metaphorical images used by the informants in this study were related to battles and war. They were used to describe the illness experience, particularly the difficulty that informants faced when dealing with their diabetes and the necessity of ongoing surveillance that is needed to cope with the illness. The following brief case description suggests the ongoing struggle with chronic illness and the idea of multiple incidents (battles) within the greater war

A 69-year-old Dine' went to the Indian Health Service clinic because of a large open sore on his left foot that had not responded to poultices made from local medicinal plants and over-the-counter medicine purchased from a local trading post. Because his foot was in the advanced stages of gangrene, he was admitted to the Indian Health Service Hospital, where his foot was amputated to the ankle and his condition was diagnosed as adult-onset diabetes (Type II diabetes). Two years later, the Dine' referred to his amputated foot as a "wound" and the process of coping and dealing with diabetes as "doing battle." He stated that he knows that the wound that he had on his foot was related to the diabetes and that it is a struggle and "battle" to "fight" the disease.

Other informants in this study also explained the meaning of their diabetes through the use of war- and battle-related words and accounts. They described each episode with the health care system as an individual battle within a greater war, and, although they often referred to the need to fight the battle, there was a sense that there was "no way to win the war" or cure the chronic illness.

Some informants described themselves as "victims"

or prisoners who were losing the battle with diabetes and who were held as prisoners by Western medicine. Some even identified the Anglo biomedical health care system with the enemy in the battle. A female informant said,

Approximately a year ago I was taken to the hospital for a routine checkup. I didn't want to go but they [her daughters] persuaded me that I needed to go even though I kept saying no. They told me we were going to the post and I ended up at the hospital. Back then my eyes were good and I still had my legs. Then they told me I had to be checked into the hospital and have to stay. I was a prisoner. I did not want to keep asking why? So they persuaded me again to my reluctance. I stayed about 2 days and they took me to the eye clinic. I kept saying, "I can see very well; why are you taking me to the doctor?" "Just to get a checkup," they told me. After the checkup they told me my eyes were beginning to get infected. They told me they were going to work on my eyes. They did and that is the result of my loss of vision. Again they told me it should get better, but it never has. Then they [the doctors] told me that my kidneys were infected. I was told that I needed to check back into the hospital. This time I would not go but my family made me. They gave me a shot of something. I must have passed out. Once I woke up I noticed my arm was numb and in pain and things didn't feel right. In the darkness, I began to feel my body and to my surprise I missed my legs. I was very upset at the doctors and nurses. They held me there and took my legs! There was nothing wrong with me! You have made things worse for me! I came here with good vision, you took that away. I came here with good legs, and you took those away. Next, I know what you are up to, you will take my life. After that, I didn't want to go to another hospital I will fight them.

As with the above case example, almost all of the informants described how the disease held them "captive," "prisoner," or "helpless." Information derived from the informants also suggested that the Dine' may attribute part of the cause of their degenerative changes to the intervention of the medical system, a belief that has strong implications for adherence to a treatment plan.

Weapons

The battle metaphor was also extended to describe interventions for diabetes as "weapons." Several informants stated that they asked the health care professionals, "How do you fight this disease?" and "What weapons do you use?" Some informants believed that prayer and offering daily devotions to God were helping them with their fight against diabetes. They believed that an individual needed to pray and be attentive to Christian doctrines in order to wage a successful battle and fight against diabetes. It is interesting to note that in many instances, diabetes was described as an Anglo disease and that an Anglo Christian god was used as one of the weapons to fight diabetes. Furthermore, few informants followed traditional Dine' ways in their fight against diabetes and, instead, stressed the need to follow health care professionals' instructions and to have Christian spiritual strength. This dependence on the "Anglo way" among older informants may in part be explained by the former policy of forcing Dine' children to attend residential government schools located far away from their homes. This policy resulted in the loss of traditional cultural ways and expo-

sure to Christianity and associated Anglo and Hispanic cultural practices.

Another weapon against diabetes that was identified by the informants was compliance or adherence with treatment. A commonly accepted belief was that a person must do what the physician and other health professionals say to win the war with diabetes. Many informants believed that if a person did not follow his or her diet and eat the right foods, take his or her medicine, and come into the clinic for checkups, then he or she would lose the fight. Another weapon that was mentioned was "to stay away from the old ways." This refers primarily to a lifestyle change in diet. Mutton was traditionally a mainstay for many Dine' and was an important component of their diet along with a bread fried in heavy lard. Diets based primarily on such foods are known to be detrimental to controlling diabetes. Although the importance of sheep has somewhat diminished, many Dine' retain sheep herds and use the wool for trade blankets and rugs and the meat for food.

Diabetes as a Metaphor

Analysis of the interview data also suggests that diabetes is seen as a metaphor for the social changes that have resulted from increasing integration of the Dine' into mainstream American society. In her book *Illness as Metaphor* (1978), Sontag argued that throughout history, poorly understood and ineffectively treated illnesses became metaphors for larger unnatural or amoral phenomena in society. She noted how cancer has been seen as a metaphor for evil, with the individual possessed by uncontrollable cancer cells. Likewise, Helman (1990) described how illnesses can come to have more than just clinical meaning.

In the case of the Dine', the change in diet and loss of the pastoral life can be seen as a metaphor for greater social or moral issues, such as the breakup of families as members leave the reservation to pursue urban employment. The loss of quality of life for this population is evident in the fact that all major social, physical, and mental health status indicators of the majority of native Americans are remarkably lower than that of non-native Americans. For example, life expectancy for native American men and women is significantly lower than that of the non-native American population. Incidences of infant mortality, suicide, substance abuse, and antisocial behavior among native Americans are some of the highest of any minority group. These problems are linked to the lifestyle associated with poverty, which is fostered by unemployment rates of up to 85% in some communities. Furthermore, large government-controlled projects, such as those that control water supply through canals and dams, and roads, are disrupting traditional sources of food, dislocating communities, and creating environmental health hazards. (Overviews of the current status of native Ameri-

cans and native Canadians can be found in Adair, Deuschle, & Barnett, 1988; and Young, 1988.)

This current way of life is seen by many Dine' as a result of domination of their people by non-native Americans. For example, most of the informants stated that diabetes was a "white man's" disease and that it was unknown to their ancestors. As one woman explained,

All the time it is eat and watch T.V. That's the white man's idea. They give us things that aren't good for us, then they complain about our health problems. Our children eat junk food and want white man things it is their disease and they gave it to us.

The previously cited case of a female informant also suggests a feeling of powerless against the social changes that have occurred.

Diabetes has not only become a battle for the Dine' against a white man's disease but also is seen as a metaphor for the battle to prevent assimilation into the mainstream American culture. Many Dine' are frustrated with having to deal with the influences of the white culture. Pressured only a few years ago to "be like the Anglos," many native Americans are now being told to adopt behaviors from "the old days," such as eating traditional foods (e.g., mutton) and doing the extensive walking that was associated with their pastoral life-style.

Caught in transition between cultures, many Dine' feel "torn apart." A 50-year-old woman commented about mixed communication and feelings of loss of control that symbolize diabetes as a metaphor for the influence of non-native Americans on the life-style of the Dine':

I was told I was near starvation or not enough fluid in my body or something like that. They told me to eat more but I have no desire to eat now. I can't keep it [food] down most of the time, and, besides, they tell me not to eat too much. So I am in the middle of things with all my surroundings pulling me apart from all directions.

For some, the loss of traditions has been complete and is irretrievable. An informant noted:

So I think our young people will lose a battle with health because we don't know what to do traditionally. Nowadays when young ones are told these old ways, they don't take them seriously. They would rather put on their tapes and not care. This is probably what is the cause of our culture to lose so many battles.

Five hundred years after contact with Europeans, native Americans still wage a battle to survive as a traditional group. Diabetes can be seen as a metaphor for this battle for cultural survival and for the poverty and marginalization that plague the Dine' way of life.

Implications for Practice

The metaphors used by the informants in this study illustrate the difference between the disease that health care professionals may be treating and the illness that the Dine' person is experiencing. *Disease* has a biological connotation, referring to changes in structure and function in the body. *Illness* describes the personal meaning

of that disease, that is, the devalued changes in being and in social functioning (Kleinman, 1978). An example of difficulty created by different perceptions of diabetes is that a person in the early stages of diabetes may have obvious biochemical changes indicative of the disease but may not feel unwell, complaining only of increased thirst. Nonadherence to treatment plans is often the result of not clearly connecting the disease to the patient's ideas. If properly examined and used in communication, metaphors help the health professional and especially the occupational therapist respond not just to his or her ideas about the disease but also to the patient's ideas about the illness. For example, the occupational therapist might stress the importance of daily exercise as a weapon to fight the complications of diabetes.

Furthermore, by attending to communication patterns and being aware of descriptive metaphors, health care professionals are better able to establish rapport, to identify the treatment needs and the priorities of these needs, and to facilitate adherence to the treatment and satisfaction of the patient and concerned family members. This is particularly important in the cross-cultural setting where the therapists must establish not only rapport with individual patients but also with the community as a whole.

The cases presented here suggest that the Dine' informants feel powerless, which is the perception of the individual that one's own actions will not greatly affect an outcome (Miller, 1983). Not only are persons powerless against the "war with diabetes," but some feel that they are powerless against "the system." Wieringa and McColl (1987) identified this same situation among Cree and Ojibway tribes of northern Canada where lack of mutual understanding and shared values can cause a sense of powerlessness among the native minority. Because diabetes is an illness that requires skillful and continual care, communication patterns that signify powerlessness (e.g., that there is nothing that can help them) are important in alerting the health care professional to a situation where the value of the prescribed treatment is judged differently by the patient. Rather than labeling the behavior as "non-compliant," the therapist needs to reexamine the regimen and establish an understanding of the patient's worldview regarding the treatment plan. Learning to ask appropriate and culturally sensitive questions, such as, "Can you describe to me what kinds of things you would like us to help you with?" can promote understanding of the patient's worldview and perception of his or her illness.

Helman (1990) suggested that health care providers acquire knowledge of the language and communication patterns that are associated with patients and use them so that diagnosis and treatment make sense to the patient. When patients' metaphors are incorporated in patient teaching, the information is more meaningful and relevant to them. Presenting protective footwear as "a pow-

erful weapon in the fight," for example, might increase the chances that the patient will wear them. In addition, taking prescribed medication as directed might also be presented to patients as "weapons" used to "win the battle against diabetes."

From a broader perspective, diabetes as a metaphor for major social issues has implications for health care professionals. Health care professionals must go beyond the view of the individual patient with diabetes and assess the larger context, that is, the social and economic factors that contribute to the origin, presentation, and prognosis of the patient with diabetes. Health education alone will not fix the fundamental issue of lack of resources. Poverty and its health care implications are problems that need to be addressed by all health care providers. ▲

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