Culturally Relevant Diabetes Patient Education in Home Care

During the past 2 years I have had the honor of working with the Keweenaw Bay Indian Community in northern Michigan on a project to reduce the devastating effects of diabetes in their community at all age levels. Throughout this interesting project I have learned many things from the people, especially the importance of listening and respect while teaching. Culturally relevant and developmentally appropriate approaches are essential in all educational interventions and are more effective in promoting a positive outcome in health behavior.

In the home care population we serve, age, ethnicity, and family history are predictors of diabetes risk, as are life-style factors such as smoking, weight, physical activity, and compliance with medications. Most of the patients we see in home care are within the high-risk categories for diabetes or prediabetes. Impaired glucose tolerance and impaired fasting glucose are an intermediate stage in the development of diabetes mellitus. From 10% to 15% of adults in the United States have one of these conditions. Patients with impaired glucose tolerance or impaired fasting glucose are at significant risk for diabetes and thus are an important target group for prevention efforts (Rao et al., 2004).

As National Diabetes Information Clearinghouse (NDIC, 2005a) statistics substantiate, we have reached a point of unprecedented escalation in rates of diabetes and obesity in our nation. Among the wider population, Native Americans, African Americans, Latin Americans, and Asian-Pacific Islanders are at increased risk for diabetes.

- The incidence of diabetes has tripled during the last 30 years
- The Centers for Disease Control (CDC) predicts one of three American children born since 2000 will have diabetes develop.
- About 15% of American Indians and Alaska Natives have received a diagnosis of diabetes.
- Both diet and physical activity have changed for many people, especially American Indian and Alaska Native groups, during the past several decades.
- Overall, the risk for death among people with diabetes is about twice that of people without diabetes of similar age.
- 1.5 million new cases of diabetes were diagnosed in people 20 years or older in 2005.
- Of the more than 18 million people who have diabetes in the United States, 90% to 95% have type 2 diabetes.
- Cardiovascular disease is the chief cause of death among patients with either type 1 or type 2 diabetes

In light of these sobering statistics, aggressive assessment and educational interventions should be included for all of our “elders” to identify those at risk. Life-style changes and improved glycemic control can delay or reduce the risk of diabetes, and in patients who have diabetes, reduce the effects of serious complications (Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications [DCCT/EDIC], 2005). Hearing the stories of all of our patients, each a unique human being, and truly listening to their needs may open the door to meaningful interventions.
Certain barriers to health-care, many of which are interrelated, are common to historically oppressed people who are disproportionately represented among people with diabetes (Satterfield & Mitchell, 1997). For example:

- Low income/poverty and the need to cope with corresponding stress and difficulties
- Lack of health insurance
- Limited knowledge of healthcare and entitlement systems
- Distrust of those systems and of some healthcare providers
- A native language other than English
- Low literacy skills
- Longer distance to care but limited or no transportation
- Reliance on emergency room and public hospitals, limiting care to acute episodes
- Low adherence to prescribed regimens because of the cost of supplies and treatment
- Words and terms related to diabetes and its treatment have different meanings in different languages and cultures

Overcoming barriers in our teaching interventions requires innovative and creative approaches. Storytelling and familiar language and imagery reflect awareness of the culture and seek to integrate cultural values into a healthy life-style. We should be attentive to culturally sensitivity issues and respect beliefs and practices of all of our clients; for example, American Indians may be hesitant to answer questions about traditional healing remedies because that information is sacred, and we should honor that.

The traditional wisdom of healthy foods and an active lifestyle are often taught within the context of Native American stories and legends of cultural foods and activities. One example of this is told in the story of “The Traditional Diet & American Indian Health” from Mazi-na’igan: A Chronicle of the Lake Superior Ojibwe (Hanson, 2003).

Key concepts from this story include:

- Long ago, people worked hard for the food they harvested from the earth and from the waters.
- Later, they began to eat those “white” foods—white rice, white flour, white sugar, white lard, white salt.
- Many became fat, had bad teeth, and became sick with diabetes and heart disease.
- Now we know if we want to feel good and be well, we should eat properly and be active.

- Eating properly and making use of Mother Nature’s bounty is a duty of mankind and has always been a part of Native American tradition.

Putting good life-style practices into the context of intergenerational wisdom and community health may make it more meaningful and motivat-
Blacks in America are also at high risk for diabetes. Teaching methods in every population we serve need to address issues of relevance to the individuals we care for. In a creative program in rural South Carolina, nurse researchers implemented a culturally sensitive diabetes education program called “Soul Food Light” (Anderson-Loftin et al., 2005). Recognizing that food is of central importance in African American traditions and food preferences are strongly linked to their culture, educational strategies were designed to fit the beliefs, values, customs, language, and literacy of the target population.

Dietary self-management was the most important issue identified by the participants, so the interventions focused on culturally appropriate strategies for planning, purchasing, and preparing healthful meals, and teaching sessions included sample foods. After 6 months, body mass index and dietary fat behaviors were significantly lower and weight decreased for the experimental population. Health-care providers who conveyed respect and sensitivity to the needs of the patients and found common ways of communicating new knowledge were held in high esteem and trust, and their advice was valued.

Honoring Health in Diabetes Education
In designing diabetes education programs, the emphasis is on self-management in terms that are relevant and important to the patient. Life-style changes are the most effective measures in treating and preventing diabetes, and providing the tools for achieving lasting behavioral change is essential. Basic information about diabetes should be presented in simple, descriptive explanations, appropriate to the literacy and learning style of the person. All of the important components to include are beyond the scope of this article, but essential skills to teach include blood glucose testing and understanding the numbers, medication knowledge and compliance, complication signs and symptoms, and life-style behaviors for self-management. Examples of concepts include the following.

What Is Diabetes? What Is Prediabetes?
Diabetes is a disease in which blood sugar levels are higher than normal. High blood sugar can cause heart attack, stroke, kidney disease, nerve damage, and vision loss. Type 2 diabetes is the most common form of diabetes.

Before people get type 2 diabetes, they usually go through a prediabetic stage. People with prediabetes have a high risk of getting diabetes. They also are more likely to have a heart attack (Rao et al., 2004).

Who Is at Risk for Getting Prediabetes and Diabetes?
You are at risk for getting prediabetes or diabetes if:

- You are overweight or obese.
- You have a parent, brother, or sister with diabetes.
- You experienced diabetes during pregnancy or had a baby who weighed more than 9 pounds at birth.
- You belong to any of the following ethnic groups: African American, Native American, Latin American, or Asian/Pacific Islander.
- You have high blood pressure (above 140/90 mm Hg).

What Can I Do to Prevent Diabetes?
By making changes in your life-style, you can lower your risk of getting diabetes. If you are overweight, losing 5% to 7% of your total body weight can help. Losing weight also will lower your blood pressure and cholesterol levels.

Exercise of any kind can lower your risk of getting diabetes. Your exercise routine should include 30 minutes of moderate physical activity at least five times a week. Be sure to stay at an exercise level that your doctor says is safe for you.

Following a healthy diet also can help. Eat foods such as salads, vegetables, fruits, whole grains, fish, beans, poultry, and other meats. Do not eat a lot of white sugar, honey, or molasses. Eat foods made with whole grains instead of white flour.

Can Diabetes Medicines Help Prevent or Delay Diabetes?
Diabetes medicines are not as effective as diet and exercise. Your doctor might prescribe a diabetes medicine if you are at high risk for diabetes and have other medical problems, such as obesity, a high triglyceride level, a low HDL cholesterol level, or high blood pressure. To survive, people with type 1 diabetes must have insulin delivered by injections or a pump. Many people with type 2 diabetes can control their blood glucose by following a healthy meal plan and exercise program, losing excess weight, and taking oral medications.
Make Wise Food Choices Most of the Time
What you eat has a big impact on your health. By making wise food choices, you can help control your body weight, blood pressure, and cholesterol. Take a hard look at the serving sizes of the foods you eat. Reduce serving sizes of main courses (such as meat), desserts, and foods high in fat. Increase the amount of fruits and vegetables. Keep a food and exercise log. Write down what you eat, how much you exercise—anything that helps keep you on track. When you meet your goal, reward yourself with a nonfood item or activity, such as watching a movie.

Be Physically Active Every Day
Regular exercise addresses several risk factors at once. It helps you lose weight, keeps your cholesterol and blood pressure under control, and helps your body use insulin. If you are not very active, you should start slowly, talking with your doctor first about what kinds of exercise would be safe for you. Make a plan to increase your activity level toward the goal of being active for at least 30 minutes a day most days of the week. Choose activities you enjoy (NDIC, 2005b).

Many of our elderly patients are isolated and worried about their future. The news of their prediabetes or diabetes and the challenge of learning how to manage it may sound overwhelming to them. As home care patients, they have invited us into their homes and allowed us to ask personal questions, sharing their stories and hoping that we are trustworthy. In return, our culturally sensitive interventions can make the difference in improving health outcomes through honoring health and our elders.

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REFERENCES