

Disparity in Diabetes Care: Learn Cultural Competence

Diabetes complications are disparate across ethnicities and devastating in every population.

BY KEVIN H. MCKINNEY, MD

Physicians and health care providers alike are aware of the rising incidence of diabetes — primarily type 2 diabetes — in the United States and worldwide. We are also aware of the childhood diabetes epidemic (Table 1). In some communities, the diagnoses of type 2 diabetes may represent up to 46% of all diagnoses of diabetes among adolescents.¹ See *related articles beginning on page 16*.

What is increasingly recognized is that much of this rising incidence is occurring among diverse ethnicities. This has tremendous implications for society as a whole, as it is known that birth and immigration rates are higher among non-whites,² and that most recent immigrants come from Latin America. In California, Texas, New Mexico and Hawaii no one ethnic group is a majority.

In general, the rise of diabetes prevalence mirrors the increasing prevalence of obesity.³ The reasons for this increasing trend include sedentary lifestyle; decline in exercise and other aerobic activity; increased access to unhealthy foods; and larger food portions. These trends apply to the general US population, and similar trends are found in other parts of the globe.

DISPARATE COMPLICATIONS

The complications due to diabetes are problematic among all ethnic groups. This has been linked to a delayed type 2 diabetes diagnosis (approximately 4 to 7 years) in comparison to type 1 diabetes.⁴ The result is a longer duration of diabetes where devastating complications are more likely to be present at the time of diagnosis. Because of the rise in childhood diabetes, more complications in patients will occur in prime productive years. This will have economic productivity implications in the not-too-distant future.

The rise in the prevalence of diabetes mirrors the rise in the prevalence of obesity.

There are clear disparities in complications among diverse ethnic groups of the United States. The prevalence of diabetic retinopathy, the leading cause of blindness in the United States, is 46% higher in blacks and 86% higher in Mexican Americans than in whites.⁵ It is also known that blacks, Mexican Americans and Native Americans have three to four times higher rates of renal failure than whites, which can be linked to diabetes and hypertension.⁶ It is also known that the incidence of diabetic neuropathy-related leg and foot amputation is two to three times higher in blacks and Mexican Americans than in whites.⁷

DEADLY COMBINATION

We know that the combination of diabetes, hypertension and hyperlipidemia leads to cardiovascular disease and stroke in many patients. It should be noted, however, that even though the incidence of myocardial infarction and stroke among blacks, Asian Americans and Hispanic Americans are the same or lower than in whites, the mortality rates from these conditions are disproportionately higher in these populations.⁸

It is evident that we need to more effectively screen for diabetes. In general, adults aged ≥ 45 years should be screened with a simple fasting blood sugar, rechecking it at 3-year intervals. Our focus should be on overweight individuals — those with a body mass index (BMI) of 25

TABLE 1. CDC INITIATIVES FOR CHILDHOOD DIABETES

In response to the growing public health concern associated with type 2 diabetes in childhood, the CDC and the NIH funded a 5-year, multicenter study. SEARCH for Diabetes in Youth examined the current status of diabetes among children and adolescents in the United States.

Cooperative agreements were awarded to six sites to establish a multicenter registry system that will cover over 6% of the children and adolescents in the United States. The main objectives of the study are to assess the magnitude and burden of diagnosed diabetes and to develop criteria to differentiate between the types of diabetes among young people in the United States.

The study includes a data coordinating center and a central laboratory and has two phases:

- to develop a uniform protocol to identify children and adolescents with diabetes; and
- to implement the uniform protocol to identify cases of diabetes in children in the areas covered by the six study sites.

Source: www.cdc.gov/diabetes/projects/cda2.htm

to 30 kg/m². Obese patients (BMI >30.0 kg/m²) and non-whites should be screened at an earlier age and more frequently. Children with a BMI >85% of those in their age group should be screened at age 10 years and every 2 years thereafter.

SETTING DIABETES CARE STANDARDS

Patient management should be held to the rigorous standards of our profession, such as those advocated by the American Association of Clinical Endocrinologists (www.aace.com) and the American Diabetes Association (ADA; www.diabetes.org). The International Diabetes Federation's global guidelines for type 2 diabetes is another international resource (www.idf.org). See the article, "Global Guidelines for Type 2 Diabetes: Targeting Management, Setting Standards for Diabetes Care," November/December 2005 issue, pages 16 to 17 for more information.

Diabetes management must consist of an individualized plan for each patient. The plan must include diabetes education, nutritional counseling, activity enhancement, home blood glucose monitoring and medication — including aspirin. Blood pressure and cholesterol must be controlled, and detrimental habits like tobacco usage and excessive alcohol must be curtailed. We face challenges to deliver

care according to such guidelines. One of the foremost challenges is the fear of death with insulin therapy. Some patients are scared to initiate injections, perhaps due to a loved one who passed away after recently starting injections. It must be stressed that scientific advancements make aggressive diabetes control easier than in the past.

DIET/EXERCISE REGIMENS

Dietary changes due to diabetes management can lead to hardships at home. First, there is an increased cost of purchasing appropriate foods, and second the household cook may lack knowledge on how to prepare this new cuisine. Patients may also become too focused on a quick fix or fad diets. These patients do not realize that diabetes is a chronic, progressive disease.

The need for underprivileged people to work multiple jobs may lead to the inability of finding time for physical activity. Many of our inner-city communities also face multiple environmental challenges to improved activity including the lack of operable sidewalks, limited park and track space, crime and multiple at-grade railroads bisecting neighborhoods. Additionally, some patients have a religious fatalism and distrust Western medicine. These patients are overreliant on faith healers for their care.

What can we do to improve the care of diabetes in our communities and reduce the health disparities? We can and should improve cultural competence in the medical profession. This needs to start in medical schools and continue throughout residency.

HOW CAN I START?

Established physicians can take advantage of voluntary continuing medical education (CME) programs. The Department of Health and Human Services' Office of Minority Health has developed online training modules administered by state Quality Improvement Organizations for use by physicians. They may be used for CME credit.⁹ Practice improvement tools that are useful for reducing health care disparities include usage of the electronic medical record that allows for data gathering, and certification by quality improvement programs like that offered by the National Committee for Quality Assurance in conjunction with the ADA (for diabetes, www.ncqa.org/dprp) and the American Heart Association (for cardiac care, www.ncqa.org/hsrp).

Physicians must individually and collectively advocate for access to medical translators, and appropriate reimbursement must be provided for their usage. We must also advocate for access to and reimbursement for diabetes education programs. Physicians and organizations are able to take advantage of health literacy programs

TODAY'S PRACTICE

such as those offered by the American Medical Association Foundation (www.ama-assn.org/ama/pub/category/8115.html).

It goes without saying that the United States must expand health care access to the uninsured. Community intervention programs are offered by the ADA (eg, Project Power and Feria de la Salud in Houston) and by the National Medical Association (Community Diabetes Education Program). Many local community organizations coordinate health fairs where physicians are welcome to participate.

SCHOOL PROGRAMS

To decrease the epidemic of childhood obesity, school nutrition programs must be improved. Unhealthy foods and drinks must be removed from vending machines, and physical education must be restored in all school levels. The US Department of Agriculture's food pyramid must be made both age appropriate and culturally appropriate.

Patients are ultimately responsible for their own diabetes care, however we must do our part to dispell the myths in diabetes and medical care and involve the family in health care and lifestyle choices. We know that disparities exist in diabetes care and in patient outcomes. Community and patient interventions can close this gap, and medical institutions and practitioners can take steps to improve quality in diabetes care. ■

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