Meeting the Challenges: Diabetes Care in Special Settings

Preface

Sue McLaughlin, RD, CDE, Guest Editor

Imagine . . . a 4:00 a.m. phone call to a worried mother. The voice on the other end of the line is that of her son, who is attending college 700 miles away. In a quivering voice, he explains that he has made a poor choice. He and roommates were celebrating his 21st birthday with a little party at their apartment. The combination of alcohol, marijuana, and loud music resulted in a bust by the police, landing him in the correctional facility in Anytown, U.S.A. He has type 1 diabetes and is on an insulin pump. During transportation to the local jail, his infusion set became dislodged and he can see the insulin dripping from the end of the tubing. He does not have any diabetes management supplies with him, and he has just made his only allowable phone call.

Imagine . . . a Vietnam veteran who has been suffering from posttraumatic stress disorder since returning from active duty more than 25 years ago. During his tour, he was exposed to Agent Orange. Recently, he was diagnosed with type 2 diabetes. He smokes two packs of cigarettes a day, binge drinks up to a 12-pack of beer three times a week, and is 30 lb heavier than when he graduated from high school. Several days ago, he noticed blood on his right sock. Upon inspection of the inside of his shoes, he found a thumb tack, which he had been unable to feel, lodged near the front of the right shoe.

Imagine . . . a 75-year-old woman with type 2 diabetes, coronary heart disease, hypertension, gout, osteoarthritis, incontinence, and a history of recurrent urinary tract infections. She is widowed and lives alone. She is to be released today from the local hospital after being treated for hyperosmolar hyperglycemic state. If not for a neighbor who had stopped by to check on her several days ago, she might not still be alive. Paramedics responding to the neighbor's 911 call were unable to obtain a fingerstick blood glucose reading because of the woman's severe dehydration. The woman later learned that her blood glucose in the emergency room had been 1,000 mg/dl. An earlier decision not to refill prescriptions for her antibiotic and diabetes medications (because of financial constraints) had precipitated this life-threatening event.

Imagine . . . a 7-year-old girl with type 1 diabetes who is wandering through the halls of her grade school alone and in search of the nurse's office. She has been told to report there to "have her blood sugar checked" because she seems to be "having trouble concentrating" in her math group.

Unfortunately, these scenarios do not require much of a stretch of the imagination. Many of us have had patients, family members, and friends who have had similar experiences. We know that our patients live their lives in a multitude of surroundings, some more secure than others, some that promote desirable diabetes care, and some that do not. Similarly, diabetes educators and clinicians often work in a variety of settings, some more traditional, some less so, but all offering the opportunity for continual improvement in the quality of care provided.

This From Research to Practice section focuses on the challenges to diabetes management encountered both by people with diabetes and by their health care providers in less traditional settings. The authors provide their knowledge, insight, and considerations regarding how to provide care that promotes safety, health, and the highest quality of life possible regardless of setting and circumstances.

Webster's Dictionary defines challenging as "arousing competitive interest, thought, or action" and as "invitingly provocative or fascinating."[1] Although most of us would hesitate to describe the difficulties our patients face as "fascinating," the truth is that diabetes educators and clinicians do tend to rally at opportunities to address diabetes head-on in an effort to make life less burdensome for all affected by it. Successful diabetes management requires a tireless and focused effort and is challenging even in the best of conditions.

In *Practical Psychology for Diabetes Clinicians*, Glasgow and Eakin[2] note that multiple factors and their various levels of influence combine to determine self-management in ways that are unique to each individual. Although the patient perspective is at the center of one's sphere of influence, they note that the health care team, patient's family and friends, the community, and the media are also relevant to greater or lesser degrees.

In the first article of our research section (p. 146–151), Linda L. Edwards, RN, MHS, CDE, provides an inside look at diabetes care in correctional facilities and enables us to envision a day in the life of a person with diabetes who is incarcerated. Because so many factors are beyond one's control in this setting, providing the skills, materials, and personnel to manage diabetes effectively is challenging. Barriers to care include but are not limited to inadequate care delivery systems, the prison culture, budget constraints, recruitment and retention of nursing staff, and staff perceptions of appropriate diabetes management.

Although correctional facilities are moving toward improved care, they have not yet achieved the standards of care recommended by the American Diabetes Association (ADA). If you have not read the ADA position statement titled "Diabetes Management in Correctional Institutions,"[3] Edwards' article may entice you to do so. We are including a full reprint of that statement in this section (p. 151–158).

The Veterans Health Administration (VHA) has been providing medical care to eligible patients for > 30 years. In 2002, ~ 4.5 of 26 million living veterans (17%) had received services from this medical system.[4] These individuals were reported to have a higher prevalence of major chronic conditions compared to veterans who were non-VHA users, with diabetes being the third most common VHA diagnosis.[5–7] Using computerized patient data, initial results from the national VHA Diabetes Epidemiology Cohorts registry suggest that there are an average of 500,000 VHA patients with diabetes per year. These data indicate that nearly 20% of the total VHA patient population has diabetes and nearly 25% of those VHA patients who are of a racial or ethnic minority have the disease. Prevalence rates continue to increase, and the incidence is estimated at ~ 2% per year.[8]

An influx in the number of veterans seeking services, the aging population, a growing incidence of diabetes in this country as a whole, and other social and political factors will continue to challenge the ability of the VHA to meet the needs of its constituents. In this research section (p. 159–162), Linda B. Haas, PhC, RN, CDE, and Sharon A. Watts, ND, RN-C, CDE, describe eligibility requirements for VHA benefits and describe how this valuable system has been effective in providing care to millions of veterans with diabetes. For further information on this topic, readers are referred to a recent supplement of the journal *Diabetes Care*[9] that focused on diabetes in the VHA.

According to data from the National Home and Hospice Care Survey,[10] ~ 1,355,300 patients were receiving home health care services from 7,200 agencies when the survey was completed in 2000. Seventy percent of those patients were ≥ 65 years of age. Most patients received skilled nursing services (75%), followed by personal care (44%) and therapeutic (37%) services. The most prevalent diagnoses at admission to home health care for these patients were heart disease (11%), diabetes (8%), cerebral vascular disease (7%), congestive heart failure (4%), osteoarthritis and allied disorders (4%), fractures (4%), and hypertension (3%). The average length of service from admission was 312 days; however, this varied widely depending on admission diagnosis. Patients with pneumonia had the shortest length of service (111 days), and those with hypertension had the longest length of service (515 days).

As Caryl Ann O'Reilly, RN, BSN, CDE, MBA, notes in her article on diabetes in home health care settings (p. 162–166), hospitalized patients in recent years have been discharged to home after increasingly shorter lengths of stay in acute care facilities and rehabilitation centers. This factor, as well as the presence of comorbid conditions, psychosocial issues (e.g., financial constraints and lack of support systems), declines in functional ability, and lack of previous diabetes self-management training, may result in the need for an extension of skilled care and home health care services. Home health care case managers can provide vital information to other members of the diabetes team regarding patients' medical progress and ability to perform the tasks of diabetes self-management.

In the next article in our series (p. 167–173), Mary Halvorson, RN, MSN, CDE and her associates discuss the multitude of factors to be considered when implementing an effective plan of care for pediatric patients and their families. The case studies, considerations for growth and development, and age-specific challenges illustrate the complexities and rewards of working with the pediatric diabetes population.

Additional resources for working with children and their families are available at the ADA website (www.diabetes.org) in its section called "For Parents and Kids," which includes resources for teens, a "Youth Zone," and information for schools. The latter portion contains information about what diabetes is, students' rights, diabetes management at school, and the roles and responsibilities of students, family members, and school personnel.

We conclude this From Research To Practice section with two case studies presented by Kris Ernst, RN, CDE (p. 174–176). She illustrates how diabetes care and management choices are often limited for those with low or fixed incomes and little or no health insurance coverage.

Data from the Behavioral Risk Factor Surveillance System for 1995–1996 was analyzed by the Centers for Disease Control and Prevention and showed that for individuals over the age of 18 years, 16.3% of respondents were uninsured, 6.8% were underinsured, and 76.9% were adequately insured.[11] The uninsured are typically < 64 years of age because Medicare covers most individuals > 65 years of age.[12] The predominant risk factor for health insurance status is low income. Also at higher risk are those between

the ages of 19 and 24 years (who no longer qualify for their parents' insurance and assume they will remain healthy), those aged 55–64 years (who are affected by a decline in employer-based coverage for retirees), unmarried adults or single parents, Hispanic or black individuals, those working for small businesses or who are self-employed, and those working part-time or in the retail, construction, or agricultural industries. Even for individuals who qualify for Medicare, coverage is often inadequate. In addition to the increased morbidity and mortality affecting individuals with diabetes, absent or inadequate health care coverage places a tremendous toll on society.

So what is our single overarching goal amid all of these challenges? It is, plain and simple, to advocate for our patients regardless of the setting in which we work. Advocacy in its true sense is synonymous with support. Our patients depend on us to advocate for their effective care and well-being everyday, in all of life's diverse and often unexpected situations. To learn more about the ADA's advocacy efforts and find additional advocacy resources, visit the advocacy section of the ADA website (www.diabetes.org/advocacy) or call 1-800-DIABETES.

References

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