

# Diabetes and Men's Health Issues

## Preface

Leonard Jack, Jr., PhD, MSc,  
Guest Editor

Across a broad range of indicators, men report poorer health than women.<sup>1</sup> In 2000, diabetes mellitus was ranked as the sixth leading cause of death among men in the United States.<sup>1</sup> Researchers postulate that a complex set of causal and interrelated sex-specific factors contribute to this high rate of mortality. These sex-specific factors include socioeconomic status (e.g., poverty), poor personal health practices,<sup>2</sup> deconstructive norms of masculinity (e.g., invincibility),<sup>3</sup> maladaptive stress management skills,<sup>4</sup> and inadequate health care-seeking behaviors.<sup>5</sup>

Studies in diabetes care reveal that regardless of patients' sex, several factors influence health status and quality of life. These include biological (e.g., hemoglobin A<sub>1c</sub> [A1C]), psychological, social, and financial issues. In addition, however, sex influences several aspects of medical management (e.g., adhering to medication, changing diet, and self-monitoring blood glucose; establishing new life roles regarding family, friends, and employment; and mastering new skills to manage feelings of anger, fear, depression, and guilt).<sup>6</sup> Because patients' sex influences various aspects of diabetes care, health outcomes are also likely to differ between the sexes.

Many published studies have examined women's health issues in terms of diabetes.<sup>7,8</sup> These studies have examined various aspects of psychological functioning (e.g., self-efficacy and coping skills), behavioral skills (e.g., blood glucose monitoring and physical activity), diabetes knowledge (e.g., basic procedures to manage hypoglycemia), and social support (e.g., sources and quality of emotional support), primarily among women.<sup>9</sup> A paucity exists, however, of similar

published research examining men's health issues in terms of diabetes.

Male-focused diabetes research is scarce because study participants in large diabetes research trials have been primarily female, and few studies have exclusively targeted male participants. Diabetes-related health issues from a male perspective have been either inadequately investigated or not investigated at all. Thus, more epidemiological, anthropological, behavioral, and clinical studies are needed. Further research would help identify less-understood causal pathways that influence intermediate outcomes (e.g., diabetes knowledge, psychological, and behavioral effects), short-term outcomes (e.g., physiological and quality-of-life measures), and long-term outcomes (e.g., morbidity and mortality) among men.<sup>10,11</sup>

The goal is to identify sex-appropriate educational and clinical interventions that health care providers, patients, and families can use collaboratively to better manage diabetes. Said another way, health care providers can better respond to the needs of their male patients if they understand these patients' worldview; the effect of diabetes on their mental well-being; their ability to self-manage diabetes; the availability, quality, and sustainability of their social support networks; their perceptions of patient-provider relationships; and the impact of diabetes on sexuality.

According to Lodewick, Biermann, and Toohey<sup>12</sup> in *The Diabetic Man*, "Diabetes is a bear in every sense of the word. Deny its existence, pretend it isn't there, walk right through it, and you can wind up mauled and destroyed. Unrealistic though this approach may be, it's exactly the approach a number of men take

toward diabetes.” This From Research to Practice section is dedicated to addressing diabetes and men's health issues in an effort to help men adopt more optimistic views and effective management skills for diabetes.

The following four articles are written by nationally recognized experts in psychology, health education, anthropology, public health, epidemiology, and medicine. These articles address the epidemiological perspectives of type 2 diabetes; depression affect among four ethnic groups; views on diabetes self-management, coping, and social support among African Americans; and the epidemiology, pathophysiology, and treatment of erectile dysfunction (ED). Each article offers health care providers timely and current research findings supplemented with practical clinical recommendations.

The first article, “An Epidemiological Perspective of Type 2 Diabetes Among Adult Men,” by Hardy and Bell (p. 208) discusses the prevalence and incidence of diabetes. The researchers point out that the prevalence of diabetes is higher among African Americans, Mexican Americans, American Indians, and Alaska Natives than among their white counterparts. According to data from the National Health and Nutrition Examination Survey collected from 1997 to 2000, the incidence of diabetes increased for both men and women, but the rate of increase was higher for men.<sup>13</sup> The researchers conclude with a discussion about the need for preventive measures to reduce the risk of cardiovascular disease, along with better primary and secondary prevention of diabetes.

Depression is a complex disease, the etiology of which is poorly understood.<sup>14</sup> It is clear, however, that patients with diabetes have double the risk of experiencing depression compared with individuals who do not have diabetes.<sup>15</sup> In their article, “Depressive Affect Among Four Ethnic Groups of Male Patients with Type 2 Diabetes,” Fisher et al. (p. 215) emphasize that depression has a negative impact on diabetes management. The four ethnic groups they discuss include European Americans, Hispanics, Chinese Americans, and African Americans.

Fisher et al. collected data on a variety of demographic, disease-related, and social-context measures. They recorded data about depression using the Center for Epidemiological

Studies—Depression scale. The researchers performed a multiple regression analysis for each ethnic group to determine whether demographic, disease-related, and social-context measures were linked to depressive affect. Social-context measures emerged as the single best predictors of depressive affect for each of the four ethnic groups. In addition, demographic and disease-related measures were significantly related to depressive affect among the study participants.

The researchers conclude with a timely discussion about the roles of family, culture, income, and education on depressive affect among male patients. They offer suggestions on culturally appropriate methods and protocols that health care providers can use to improve diabetes care.

The article by Liburd et al., “Views from Within and Beyond: Illness Narratives of African-American Men With Type 2 Diabetes” (p. 219), builds on the importance of understanding how culture mediates health care decision making and the adaptation of medical recommendations among men. The authors used SUDAAN software to analyze clinical outcomes (e.g., A1C and cholesterol) among African-American males with diabetes. The authors report that clinical indexes exceeded the recommended levels, and they explore why this population has difficulty achieving good metabolic control.

Qualitative data analysis of interviews revealed that the African-American men in general believed that poor diet caused their diabetes, and they also struggled to maintain healthy eating habits. When the participants felt dissatisfied with their diabetes management plan, they would change to a self-prescribed care plan that often involved the use of over-the-counter drugs or herbs. Some men felt that diabetes affected their self-esteem and sexual attractiveness.

The researchers encourage health care providers to work collaboratively with patients to establish trust and understanding. They also state the need for additional research examining the role of masculinity in diabetes care.

Our section concludes with the article, “Erectile Dysfunction in Diabetic Patients” by Penson and Wessells (p. 225). A common complication associated with diabetes, ED (or impotence) is a medical condition characterized by the inability to

achieve or maintain an erection sufficient for satisfactory sexual performance. The investigators discuss the epidemiology of ED, its pathophysiology, and its effect on quality of life.

The authors note that prevalence estimates for ED in cross-sectional studies of diabetic men range from 20 to 71%. Several complications increase the risk of developing ED; the researchers report on the organic or mixed etiology of ED in diabetic men. In conclusion, they discuss treatment options, including phosphodiesterase type 5 inhibitors, vacuum erection devices, intraurethral suppositories, intracavernosal injection therapy, and penile implant surgery.

These four articles provide a wealth of current information that can greatly enhance our understanding of the epidemiology of diabetes among men; the effects of demographic, disease-related, and social-context measures on depression; perceptions regarding causes of diabetes and the role of masculinity in self-care; and the epidemiological burden, etiology, and treatment of ED. Translating and consistently using the findings and recommendations provided in this research section will improve patient-provider interactions and increase effective use of specific educational and clinical interventions for men.

Taken together, these articles reinforce the importance of health care providers' establishing trust with their patients. Building trust requires health care providers to have a nonjudgmental posture in their interactions with patients. This attitude is important because discussions about social isolation, depression, body image, and sexual dysfunction are emerging as difficult topics for men to discuss.

## References

- <sup>1</sup>Minino AM, Arias E, Kochanek KD, Murphy SL, Smith BL: Deaths: final data for 2000. *Natl Vital Stat Rep* 50:1-120, 2002
- <sup>2</sup>Health, United States, 2001, With Urban and Rural Health Chartbook. Washington, D.C., National Center for Health Statistics, 2001
- <sup>3</sup>Courtenay WH: Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Soc Sci Med* 50:1385-1401, 2000
- <sup>4</sup>Almeida DM, Kessler RC: Everyday stressors and gender differences in daily distress. *J Pers Soc Psychol* 75:670-680, 1998
- <sup>5</sup>Tudiver F, Talbot Y: Why don't men seek help? Family physicians' perspectives on help-seeking

behavior in men. *J Fam Pract* 48:47–52, 1999

<sup>6</sup>Arsham G: Diabetes in men (Preface). *Diabetes Spectrum* 11:80–81, 1998

<sup>7</sup>Owens MD: Diabetes and women's health issues (Preface). *Diabetes Spectrum* 16:146–147, 2003

<sup>8</sup>Beckle GLA, Thompson PE (Eds.): *Diabetes and Women's Health Across the Life Stages: A Public Health Perspective*. Atlanta, Ga., United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation, 2001

<sup>9</sup>Norris SL, Engelgau MM, Narayan KM:

Effectiveness of self-management training in type 2 diabetes: a systematic review of randomized controlled trials. *Diabetes Care* 24:561–587, 2001

<sup>10</sup>Jack L Jr.: Diabetes self-management education research: an international review of intervention methods, theories, community partnerships and outcomes. *Dis Manag Health Outcome* 11:415–428, 2003

<sup>11</sup>Norris S, Messina P, Caspersen C, Glasgow R, Engelgau M, Jack L Jr., Isham G, Snyder S, Carande-Kulis V, Garfield S, Briss P, McCulloch D, and the Task Force on Community Preventive Services: The effectiveness of disease and case management for people with diabetes: a systematic review. *Am J Prev Med* 22:15–38, 2002

<sup>12</sup>Lodewick PA, Bierman J, Toohey B: *The Diabetic Man: A Guide to Health and Success in All Areas of Your Life* 3rd edit. Lincolnwood, Ill., Lowell House, p. 81

<sup>13</sup>Centers for Disease Control and Prevention: Prevalence of diabetes and impaired fasting glucose in adults—United States 1999–2000. *MMWR Morb Mortal Wkly Rep* 52:833–837, 2003

<sup>14</sup>de Groot M, Anderson R, Freedland KE, Clouse RE, Lustman PJ: Association of depression and diabetes complications: a meta-analysis. *Psychosom Med* 63:619–630, 2001

<sup>15</sup>Harris MD: Psychosocial aspects of diabetes with an emphasis on depression. *Curr Diab Rep* 3:49–55, 2003