Understanding "Masculinity" and the Challenges of Managing Type-2 Diabetes among African-American Men

Leandris C. Liburd, PhD, MPH, MA; Apophia Namageyo-Funa, MPH; and Leonard Jack Jr., PhD, MS

Financial support: Research for this project was funded by the Division of Diabetes Translation, Centers for Disease Control and Prevention, Atlanta, GA.

African-American men bear a greater burden of type-2 diabetes and its associated complications. The purpose of this analysis was to explore in greater depth themes that emerged in illness narratives of a small sample of African-American men living with type-2 diabetes. The primary theme that is the focus of this article is the lived experience of black manhood and masculinity and its intersection with the challenges of diabetes self-management. In-depth interviews with 16 African-American men who had established type-2 diabetes yielded thematic analyses of four questions: 1) What do you fear most about having diabetes? 2) In what ways have people in your life treated you differently after learning you have diabetes? 3) In what ways has knowing you have diabetes affected the way you see yourself? and 4) What are some reactions when you tell people you have diabetes? This preliminary study suggests that the requirements of diabetes self-management often run counter to the traditional sex roles and learned behaviors of African-American men, and this can contribute to nonadherence to medications and poor glycemic control. Gender identity is a key cultural factor that influences health-related behaviors, including how men with type-2 diabetes engage with the healthcare system and manage their diabetes. Understanding African-American men's gender identity is an important component of cultural competency for physicians and can be consequential in patient outcomes.

Key words: diabetes ■ African Americans ■ men's health ■ patient–physician relationship

© 2007. From the Division of Adult and Community Health (Liburd) and Division of Diabetes Translation (Namageyo-Funa; Jack, formerly), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta, GA; and School of Health Sciences, Jackson State University, Jackson, MS (Jack, associate dean). Send correspondence and reprint requests for J Natl Med Assoc. 2007;99:550–558 to: Dr. Leandris C. Liburd, Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 4770 Buford Highway NE, Mailstop K-30, Atlanta, GA 30341; phone: (770) 488-5426; e-mail: le11@cdc.gov

INTRODUCTION

¬rom 1980–1998, the age-adjusted prevalence of diagnosed diabetes for men and women was similar. However, in 1999, the prevalence for males began to increase faster than that for females. From 1980-2003, the age-adjusted prevalence of diagnosed diabetes increased 50% for men and 37% for women.¹ African-American men bear a greater burden of type-2 diabetes. In 2003, 7.0% of African-American men had diagnosed diabetes compared with 5.1% of white men, according to the Centers for Disease Control and Prevention (CDC).² Moreover, African-American men experience poorer levels of glycemic control and higher rates of diabetes-related complications, such as lowerextremity disease, visual impairment and end stage renal disease.^{1,3} The successful management of type-2 diabetes requires daily attention to a complex constellation of behaviors such as healthy eating, medication adherence, stress management, glucose monitoring and testing, management of hypoglycemia, physical activity and foot care.4 Traditional diabetes self-management education appears to be effective in achieving the needed behavior changes in the short term but have not proved beneficial in sustaining these multiple and overlapping behaviors over time.⁵

While all people with type-2 diabetes are challenged by the long-term demands of managing their disease, little "male-centered" research has been done with men in general or African-American men in particular, i.e., we know little about the behavioral, psychosocial and cultural contexts in which men experience and manage type-2 diabetes. Such efforts could identify the unique social and cultural realities that either facilitate or impede men's ability to control type-2 diabetes.6 We argue that a greater understanding of how "masculinity" mediates the illness experience of type-2 diabetes is an important area for inquiry if we are to improve health outcomes for African-American men. A large and growing body of literature is examining associations between masculine gender identity, male sex roles and health-related behaviors.7-13 Such research has been conducted with men who have chronic diseases, such as prostate

and testicular cancer, multiple sclerosis and coronary heart disease. 14-16 However, when research on masculinity and health is carried out with African-American men, the focus is more often HIV/AIDS, violence, homicide and substance abuse.8,11

A full examination of the broader sociocultural dimensions of disease management for people with diabetes is not feasible in the time frame typically allotted for patient encounters. Therefore, this research is important for physicians interested in not only providing the highest-quality clinical care but also understanding more holistically the toll that type-2 diabetes exacts on the minds, bodies and social relationships of their African-American male patients. In this paper, we examine the transcripts of in-depth interviews conducted with a small sample of African-American men with established type-2 diabetes for common threads associated with "masculinity" and posit how diabetes self-management is affected. We describe the sometimes paradoxical relationship between the requirements of diabetes self-management and the social and internalized expectations of black masculinity as revealed in the illness narratives of our study participants. According to Riessman,

The illness narrative, a form of case study, emerged in response to biomedicine's focus on disease (not illness) and consequent neglect of patient experience. ... [It] recognizes the importance of subjective reality in adaptation to chronic illness: how the disease is perceived, enacted and responded to by 'self' and others ... [and]

provides a way for sufferers to explain and contextualize their interrupted lives and changing relationships with the social world.15

We conclude with recommendations that encourage physicians to consider this knowledge in the care and counseling of their African-American male patients with type-2 diabetes and to connect these patients with community-based public health programs for ancillary behavioral interventions.

African-American Men and Masculinity

Gender identity is a key variable in decisions about health behaviors, including how to engage with the healthcare system. Competing ideologies and discourses of black masculinity defy the articulation of a monolithic masculine gender identity for African-American men. Indeed, there are complex theoretical debates within black masculinity studies, and a comprehensive review of these debates is beyond the scope of this paper. We also have no interest in perpetuating stereotypes of African-American men. However, in the interest of framing our thematic analyses and interpretations of the illness narratives, we synthesize some of the prevailing sociocultural perspectives of black masculinity.

"Masculinity" reflects a shared understanding of what it means to be a man: what one looks like, how one should behave and so forth.¹⁸ The rules that guide gender behavior—and in this instance, masculinity—are culturally constructed and shift over time and place. Issues of

Table 1. Brief profile of participants

Simon Smith, 71, retired. Has had diabetes for 5 years. Lloyd Dixon, 43, is on disability. Has had diabetes 4– Pain associated with finger stick makes monitoring diabetes difficult.

Marcus Jones, 46, property manager. Has had diabetes for 25 years. Limited income affects his diabetes management.

Tom Hill, 55, single, owns a cleaning company. Has had diabetes for 2.5 years.

Randy Taylor, 53, religious leader, single, lives alone. Has had diabetes for 15–20 years and has complications.

William Brown, 57, unemployed, lives with wife. Has had diabetes for 20 years.

Michael West, 39, self-employed, married, cares for his son, does not have health insurance. Has had diabetes for 8 years.

John Ingram, 47, married, quality control check engineer. Has had diabetes for 2 years.

Jason Doe, 47, married, is a document specialist and reads about diabetes self-management. Has had diabetes for 8 years.

5 years and has not been managing his diabetes.

Percy Holmes, 45, caterer. Has had diabetes for 15–16 years and has heart disease. Is only recently attentive to his diabetes.

Vincent Washington, 52, is on disability. Has had diabetes for 15 years.

Allen Christian, 53, building inspector, lives with diabetic wife, is well read on diabetes and medications. Has had diabetes for 9 years.

Joe Williams, 67, married, construction worker. Has had diabetes for 12–15 years.

Donald Owens, 52, single. Has had diabetes for 2 years. Does not exercise because he does not want to lose weight.

Neil Gun, 70, retired, married. Has had diabetes for 4-5 years.

George Crowe, 69, retired, married and believes diabetes is an eating disorder. Has had diabetes for 12 years.

class, age, ethnicity and sexual differentiation are also relevant in the construction of black masculinities.¹⁹ "Black masculinity" and what some scholars describe as "hegemonic masculinity"13 are mutually constituted. In other words, during specific historical periods, black and white men have valued similar ideologies about manhood, but institutionalized racism has kept many black men from achieving the same privileges and attributes of manhood as white men.20 Economic, social and political independence, citizenship, honor, power and sexual prowess, for example, have all characterized manhood in the United States at different historical eras. Black men, however, have historically and to the present had to confront and overcome a legacy of lynching, disenfranchisement(s), segregation, economic alienation, and stereotypes of uncivilized and beastly sexuality in their quest for this manhood.²⁰ Unlike their white counterparts, African-American men have been denied the message from family, school and the larger society that "power and control are their birthright."21 This is best evidenced by their economic marginality, high rates of incarceration, overrepresentation in hazardous occupations and prevalence of substance abuse. 8,11,12 Over centuries of resistance to the denial of their manhood, black masculinity still emerges in diverse social constructions as equated with physical strength and endurance, pride and control.

A range of investigations of African-American manhood and masculinity have identified domains of manhood among African Americans to include self-determinism and accountability, family connectedness, pride, spirituality and humanism, and relationships with others.²² In their qualitative examination of "manhood meaning" among a sample of 152 African-American men residing in five metropolitan areas in five states,

Hammond and Mattis found 15 categories of meaning that coded manhood.²² For example, almost 50% of the respondents indicated that manhood means being responsible and accountable for one's actions, thoughts and behaviors, and this responsibility-accountability extends beyond the self to include one's family and community. In addition, manhood was associated with being independent; self-governing; and able to manage one's life, including having the power and freedom to execute decisions. Being able to provide for oneself and family in ways that extend beyond economic provisions was also an important category of manhood. Lastly, of particular note, achieving personal growth and maturity across the life span was important in African-American manhood as well as having focus and stability across the multiple domains of one's life.22

According to Williams,

Beliefs about masculinity and manhood that are deeply rooted in culture and supported by social institutions play a role in shaping the behavioral patterns of men in ways that have consequences for health. Men are socialized to project strength, individuality, autonomy, dominance, stoicism and physical aggression, and to avoid demonstrations of emotion or vulnerability that could be construed as weakness.¹²

In the healthcare arena, this can mean infrequent encounters with the healthcare system, delayed attention to symptoms, poor medication compliance and an unwillingness to talk openly about health concerns. ¹² The masculine response has both positive and negative aspects that can be channeled to either support or undermine diabetes self-management. How is diabetes self-management negoti-

Table 2. Topics and major themes across groups

- 1. What do you fear most?
 - Loss of independence
 - Shortened life span
 - Compromised quality of life
- 2. In what ways have people in your life treated you differently after learning you have diabetes?
 - They have been accepting
 - They have provided social support
 - They have rejected me
- 3. In what ways has knowing that you have diabetes affected the way you see yourself?
 - Have recognized [new] physical limitation(s)
 - Am more anxious about [effects of] the disease
 - Haven't experienced any [negative] perceptions in self image
 - Haven't experienced any limitations or changes in lifestyle
- 4. What are some reactions when you tell people that you have diabetes?
 - Empathy
 - Surprise
 - Curiosity

ated within a framework of black masculinity? Additional research on the positive and negative masculine responses to the challenges of diabetes self-management among African-American men is desperately needed.

METHODS

The initial illness narratives study sought to explore cultural aspects of diabetes self-management among a small sample of African-American men living with type-2 diabetes.²³ This analysis is a thematic elaboration of data collected as part of the initial study. The questions asked in the initial study did not directly address masculinity and its relationship to diabetes self-management, but through the inductive process of ethnographic and phenomenological research, themes associated with "masculinity" emerged.24 Sixteen African-American men with established diabetes living in Raleigh, NC, participated in in-depth, semistructured interviews within an illness-narrative framework. The men were selected from the participant roster of Project DIRECT (Diabetes Intervention: Reaching and Educating Communities Together), a community diabetes demonstration project sponsored by CDC and previously described in this journal.25-26 Additional details of the sampling and data collection methods and analysis are outlined elsewhere.²³ This article reports results on four questions from the interview guide²³ interpreted from the theoretical stance of masculinity: 1) What do you fear most about having diabetes? 2) In what ways have people treated you differently after learning you have diabetes? 3) In what ways has knowing that you have diabetes affected the way you see yourself? Finally, 4) What are some reactions when you tell people you have diabetes? Findings from this qualitative, ethnographic study cannot be generalized to the larger community of African-American men with type-2 diabetes because of the geographic location of the study, the sample size and the breadth of meanings associated with the lived experience of "black masculinity."

RESULTS

This analysis is an elaboration of the major theme of masculinity that emerged in the larger illness narratives study that is reported elsewhere.²³ A brief profile of the study participants is provided in Table 1. Topics and major themes that emerged from the four questions we identified from the in-depth interviews are outlined in Table 2. Consistent with usual procedures in reporting ethnographic research, we incorporated direct quotes from the transcribed interviews of respondents into the cultural analysis and interpretation of findings.²⁷ Actual names are replaced with pseudonyms.

What Do You Fear Most about Having Diabetes?

African-American men with diabetes living in southeast Raleigh have poorer glycemic control, more frequent complications, greater functional impairment and higher rates of complications than their white counterparts.²⁸ Braithwaite argues that, "Men tend to be hesitant to acknowledge fear in any capacity." The majority of men in this study, however, appeared very open in the interview about their fears related to complications of uncontrolled diabetes. Mr. Ingram, 47 years old and diagnosed with diabetes for two years, explains it this way:

Black men have always had a problem in admitting things are not going right in their life. That's the way it was a long time ago, and that's going to be the way it's going to be in the near future until we start coming together as men [and] being able to confide in someone. It's hard to find someone to confide in because no sooner than we say keep it to yourself, we can't even get a block down the street before somebody's telling."

Among other men in the study, these fears were deeply embedded in their subconscious. For example, Mr. Washington shared, "Well, I keep dreaming I am going to lose some limbs." Only one respondent, Mr. Hill, said "I don't fear nothing. I worry more. If I have a worry, it's more about hypertension than diabetes."

The range of fears expressed by the men included: "death behind diabetes," "possibly losing a limb or eyesight," "taking the shots," "not being able to control my eating to the point where my sugar is just going sky high," and "what may be happening inside that I can't see." Taken together, their greatest fear was a loss of independence. Mr. Taylor described it this way:

The greatest fear that I have is that I don't want to become an invalid. I don't want to have an amputation of my limbs and I don't want to get to the point that I can't take care of myself, and someone else will have to take care of me.

Mr. Ingram added to his response to this question that he did not have any fears about having diabetes "because if you fear, it tends to change the way you live and that fear tends to turn into stress, and the stress can actually become more problemsome than the disease itself."

In What Ways Have People in Your Life Treated You Differently after Learning You Have Diabetes?

Overwhelmingly, the men in this study have not been treated differently or ostracized by family members, friends or others in their social networks. They typically receive outpourings of social support, given the pervasiveness of diabetes in this African-American community. Mr. Jones, who has been diagnosed with diabetes for 25 years, remarked:

Once they know [I have diabetes], they're probably more helpful. They're supportive. They'll say, "I know it's 12:00 [noon]. Do you need to stop and get something to eat?" So, I'm thankful for that sort of stuff."

Within this supportive environment, however, the men still work to retain control over their bodies and diabetes self-management. When they feel that well-intended advice becomes badgering, they quickly remind people, "I know what I'm doing."

In describing how his relationships with his male friends have been affected by diabetes, Mr. Brown, who has had diabetes for 20 years, commented,

So the people I hang out with seem straight [okay] with it [the diabetes]. But they're still bike riding and stuff and invite me to go ... and they don't encourage me to drink no liquor or alcohol, so I get along with my friends really good.

Mr. Brown used to ride a motorcycle and consume alcohol with his friends. In the interest of his health, he declines to participate in these activities, but he is not made to feel "less of a man" in their eyes. Similarly, Mr. Brown added that his wife helps him with controlling the disease by "cooking according to my diabetes."

She tries to help me on both diabetes and weight. She does the cooking and cooks right. Sometimes the food has no taste, and she stopped cooking the saucy stuff. But I don't always do my part like eating the right portion or eating late at night and then laying down on it, so I was gaining weight.

In one instance, however, a participant in the study shared that his short marriage ended in divorce after his wife learned of his erectile dysfunction. Even those men who were in stable and long-term intimate relationships expressed frustration and dismay over the negative impact diabetes had on their sexual functioning. For example, one participant commented:

I'd like for sex to be like it was before I had it [diabetes]. We've been married for 39 years, and I had sugar mainly during that time. Now, when I attempt to have sex I don't get it right all the time. It's stressful to me sometimes, but my wife is understanding. I ain't going to say it's been a problem between us two, but it's been a problem to me.

For both of these men, the inability to adequately satisfy themselves and their partners sexually affected their comfort levels with this most intimate aspect of their relationships.

In What Ways Has Knowing That You Have Diabetes Affected the Way You See Yourself?

The way one sees oneself is a part of the personal and interpersonal significance of having diabetes. In other words, how the African-American man with type-2 diabetes perceives himself is mediated by how others see him. Mr. Smith, a 71-year-old diabetic man with advanced neuropathy in his right leg, commented that when people learn he has diabetes, "They are horrified! They think you're really sick." Yet, his response to our question was that having diabetes had not affected the way he sees himself. He was "just trying to figure out how best to handle it."

Mr. Holmes, diagnosed with diabetes for 15 years, replied that he sees himself "not really [in] any way—because I'd say nobody knows I've got major complications except myself, because I mean, the way I carry myself, people don't even know I have diabetes." It is important to Mr. Holmes to maintain his public appearance of strength, pride and mastery over his circumstances. The consequence of the primacy of his public persona is that he neglected to adhere to a treatment regimen to control his diabetes for 15 years. After suffering two heart attacks and neuropathy in one of his legs, he decided to "be a better manager" of his body.

Depression is a common problem among African-American men with type-2 diabetes.³¹ Depression negatively affects diabetes self-management, glycemic control and quality of life.^{32,33} Moreover, depression is too often underdiagnosed and undertreated in black men generally and black men with diabetes in particular.³¹ Diabetes and depression are doubly alienating and threatening for black men. Mr. Owens acknowledged,

Sometimes, knowing that I am diabetic and that I am limited, sometimes if I'm not careful, it can cause depression. It can cause a feeling that I'm different from everyone else, to the point that I can't do some of the normal things I used to; so at times it do create depression.

The men who expressed feelings of anxiety about having diabetes said they were depressed and worried because they could not see what was happening to their bodies. They felt a loss of control over what was happening to them. As one man noted, "I don't know. Sometimes if I'm not feeling well, I think, I don't know how much damage diabetes is doing to my heart and blood vessels that I can't see." In particular, the men felt that in living with diabetes they no longer have control over activities that require physical effort, which in turn leads them to view themselves in a negative light. Not all men felt that living with diabetes limited them physically, and some indicated that they were capable of carrying out their routine activities. Paradoxically, some of the men who stated there was no difference in their self-image

admitted to having a physical limitation as a result of diabetes, yet they presented an upbeat attitude about it and did not look at the physical limitation as limiting what they were capable of achieving.

What Are Some Reactions when You Tell People You Have Diabetes?

In this study, it was clear that the men received some unexpected reactions. The way people react to the announcement of diabetes reveals whether or not diabetes is considered a culturally marked disorder in the community—specifically, how common or normative is diabetes in this community? This question also exposes the misinformation in local knowledge about diabetes onset, behavioral risk factors and disease management. Mr. Dixon stated, "I'm finding out now more and more and more people have it. And that I had nothing all these years to be ashamed [of]. A lot of people got diabetes." A majority of the responses were empathetic or surprised, and a few reflected curiosity about the disease and its clinical manifestation. The men who received empathetic reactions said the people they were telling had family members with the disease, and they understood what the men were going through. They offered encouragement by admonishing the men to take care of themselves and complimented them by saying the men "did not look sick." As Mr. Christian stated, "They be like, 'Oh man, really?" They say, 'But you don't look like it. You look different. Well are you taking care of yourself?" The men who received surprised reactions said the people they were telling could not believe that a person who physically looked like themselves had diabetes. The men who received curious reactions said the people they were telling knew of someone with diabetes, and they wanted to obtain information that might help that friend better manage the disease. As one man stated, "They listen. People are now trying to become more educated about diabetes."

DISCUSSION

A diagnosis of diabetes can have a profound effect on a man's self-image. At the point of diagnosis, the patient is jarred by the awareness of having moved from a perceived physical state of "health" to one of "sickness." The expression of manhood as autonomy and nondependence is threatened by the potential loss of body parts, the ability to work and the ability to get around without assistance. The domino effect of these diabetes-related complications can result in the loss of considerable family freedom and flexibility. The entire family system is affected because sex roles shift; income is often reduced; living standards are subject to change; and specialized care for the diabetic man places added demands on the emotional, physical and financial resources of family members. If family resources are already stretched to the limit, a lower-extremity amputation, kidney dialysis or blindness can be devastating for the household. Manhood as "waymaking" for self and others is reconstructed in the face of diabetes-related complications. These concerns ground much of the fear associated with having type-2 diabetes.

Prevailing meanings of "masculinity" among African-American men can pose challenges to good diabetes management on several levels. For example, in wanting to maintain control over their own care to the extent possible, the men in this study set up boundaries around the social support they were willing to accept from their wives, family members and friends. Such coping skills where black men assert their agency to confront and manage the stresses associated with having type-2 diabetes were believed to position them for better health outcomes and quality of life. They were generally receptive to gestures that helped them control their diabetes, but they were opposed to being "policed" by even wellintentioned loved ones and friends. It seemed essential to them that they maintain at all times control over their bodies regardless of the clinical implications. Overall, the men in this community were not treated differently in any negative way because of diabetes, which is important to manhood as giving and receiving respect as well as being involved in one's community.²²

According to Braithwaite,

Men have traditionally been socialized that they should not cry, that they should be cavalier about certain things that affect them, that it is weak to show pain, and that it is cowardly to run from danger.¹¹

We observed this in the men's responses to how diabetes has affected the way they see themselves. In this study, for example, the younger the men were at the time of diagnosis, the more dismissive they appeared in attending to the disease. These men continued to engage in behaviors that undermined good diabetes management even though they were putting their long-term wellness at stake—for example, drinking alcohol and eating foods they found pleasurable. If they were not feeling bad or hindered from accomplishing their daily obligations, the men continued to pursue their personal interests and desires, or as one man put it, "I went on with my life." Healthy eating, one of the cornerstones of good diabetes self-management, is particularly challenging for African-American men given that food, meal planning and preparation and other concerns of nurturance have traditionally rested in the purview of women. In addition, there are fewer options for healthy food choices for the men in this and other urban communities given the saturation of fast-food restaurants and convenience stores.

Erectile dysfunction among diabetic men is common and was an expressed concern of several men in this study as well.²⁹ Regardless of the causes of sexual dysfunction, the inability to achieve or maintain an erection sufficiently rigid for sexual intercourse, ejaculation or both can greatly affect not only male patients but also

their partners, as was the case for several participants in this study. Sexual dysfunction is an organic sequela of diabetes that should be treated but is unfortunately underdiagnosed.²⁹ Underdiagnosis and undertreatment often occurs because either patients or healthcare providers find it difficult to talk about sexual health.³⁰

Another example of tension among the performance of masculinity, how men see themselves and diabetes self-management among men in this study is in the area of physical activity. From childhood, they usually associated physical activity with participation in competitive team sports and male bonding. Learning to engage in physical activity for reasons other than the love of a game and the bragging rights for winning has been a challenge. Team sports can mean pounding, pushing and physical contact that is no longer appropriate for the man with type-2 diabetes. As the men aged and participated less in team sports, it became difficult for them to become interested in solitary and noncompetitive options such as walking. One of the men in the study also linked any type of "exercise" with weight loss, and he did not want to lose any weight. Therefore, he refused to participate in any type of physical activity. What are safe, accessible, team or group sport activities that would appeal to urban, working-class African-American men? This is an important question for physicians to investigate with their male patients who have type-2 diabetes.

Lastly, most of the men in this study were either unemployed, underemployed or on a fixed income. They did not always have the financial means to purchase medications and other diabetic supplies. Poorly tolerated side effects from certain prescription drugs were also common. In some instances, the men reported these concerns to their doctor, but more often than not, they "took matters into their own hands" and adjusted medication dosages or replaced prescription drugs with herbal medicines or other over-the-counter drugs. Physicians are encouraged to talk with their male patients about changes they may have made to the prescribed regimen, and to negotiate with them more appropriate or affordable drug regimens when possible. Clearly, an appropriate response will require optimal clinical care that recognizes the role of masculinity and how masculinity shapes male diabetes self-management behaviors and healthcare-seeking behaviors. Public health programs are also needed to complement clinical care with community-based interventions that are designed to embrace cultural norms and support social norms that bond masculinity and health.

As for reactions from others when the people reveal they have diabetes, the disproportionate burden of diabetes experienced by the larger African-American community generally structures an environment of social support and empathy. A diagnosis of diabetes does not have to be "a death sentence," as one man commented. One can delay, and in many instances prevent, the development of diabetes-related complications and en-

joy a full life. Men can take control of diabetes rather than diabetes taking control of them. If we continue to educate the community about the causes of diabetes and strategies for prevention, we can eliminate the misinformation and what one participant called "shame" associated in some circles with having this disease.

Fortunately, efforts to improve health among black men in the United States are emerging, such as the partnership between Morehouse School of Medicine and The 100 Black Men Inc. Together, these partners designed and implemented The 100 Black Men's Health Challenge, a healthy lifestyle program that seeks to promote the adoption of a personalized nutrition and physical activity plan and to encourage black men to establish and maintain a relationship with their primary care provider. Results from The 100 Black Men's Health Challenge will provide insight into how the leadership of national minority organizations can help institutionalize health-promoting social norms around diet, physical activity and healthcare-seeking behaviors.

Diabetes is an invisible but formidable foe. Men are rarely taught how to fight an enemy that they cannot see or touch, and thus must engage in a performance of masculinity that diabetes can erode. The participants in this study appeared at times to approach diabetes self-management like "shadow boxing"—jabbing and shuffling but never really knowing if they were defeating this opponent. Later, when they developed complications of uncontrolled diabetes, the outcome of a match that lasted for 15-20 years became clearer. In African-American communities where the prevalence of diabetes is high, many people come to believe that its negative outcomes—such as loss of limbs and independence, renal failure and blindness—are imminent and inevitable. The men in this study observed the devastation of diabetes in the lives of family members, friends and in their extended social networks, and feared like outcomes for themselves. Physicians can replace these fears with power by equipping men with the skills and knowledge needed to prevent these complications.

The study of gender can be considered the study of relationships—those between men and women, men and men, and women and women, and their relationships with the entire society. The formation of gender identities begins at birth and is learned through many channels, including families and social networks, community and government institutions, and the media, to name a few. Future efforts to prevent and control diabetes among African-American men will likely require the full participation of healthcare providers, medical institutions, national men's organizations, national diabetes organizations, diverse media and entertainment outlets, the African-American community and society at large. These combined commitments are necessary to nurture and reinforce a social context for manhood as health promoting particularly among African-American men with and at risk for type-2 diabetes.

ACKNOWLEDGEMENT

This study would not have been possible without the support of the Executive Committee for Project DIRECT in Raleigh, NC. We are deeply grateful to the men who participated in this study and for their willingness to share openly their personal experiences with type-2 diabetes.

REFERENCES

- 1. Centers for Disease Control and Prevention (CDC). National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005. Atlanta, GA: U.S. Dept. of Health and Human Services; 2005. www.cdc.gov/diabetes/pubs/factsheet05.htm.
- 2. Centers for Disease Control and Prevention. National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005. Atlanta, GA: U.S. Dept. of Health and Human Services; 2005. www.cdc. gov/diabetes/statistics/prev/national/tableraceethsex.htm.
- 3. Harris MI, Eastman RC, Cowie CC, et al. Racial and ethnic differences in glycemic control of adults with type-2 diabetes. *Diabetes Care*. 1999; 22(3):403-408.
- 4. American Diabetes Association. Standards of medical care in diabetes. Diabetes Care. 2004;27(suppl 1):S15-S35.
- 5. Jack Jr L. Diabetes self-management education research: An international review of intervention methods, theories, community partnership and outcomes. Disease Management and Health Outcomes. 2003;11(7):415-428.
- 6. Jack L. Diabetes and men's health issues. Diabetes Spectrum. 2004;17(4):206-208.
- 7. Sabo D, Gordon DF. Men's Health and Illness: Gender, Power, and the Body. Thousand Oaks, CA: Sage Publications; 1995.
- 8. Staples R. Health among Afro-American males. In: Sabo D and Gordon DF, Eds.. Men's Health and Illness: Gender, Power, and the Body. Thousand Oaks, CA: Sage Publications; 1995:121-138.
- 9. Jack L. Toward men's health research agenda in health education: examining gender, sex roles, and health-seeking behaviors in context. Am J Health Edu. 2005;36(5):309-312.
- 10. Forrester DA. Myths of masculinity: impact upon men's health. Nurs Clin North Am. 1986;21(1):15-23.
- 11. Braithwaite RL. The health status of black men. In: Braithwaite RL, Taylor SE, eds. Health Issues in the Black Community, 2nd ed. San Francisco, CA: Jossey-Bass Publishers; 2001:62-80.
- 12. Williams DR. The health of men: structured inequalities and opportunities. Am J Public Health. 2003;93(5):724-731.
- 13. Courtenay WH. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. Soc Sci Med. 2000;50:1385-1401.
- 14. Gordon DF. Testicular cancer and masculinity. In Sabo D and Gordon DF, eds. Men's Health and Illness: Gender, Power, and the Body. Thousand Oaks, CA: Sage Publications; 1995:246-265.
- 15. Riessman CK. Performing identities in illness narrative: masculinity and multiple sclerosis. *Qualitative Res.* 2003;3(1):5-33.
- 16. Helgeson VS. The effects of masculinity and social support on recovery from myocardial infarction. *Psychosom Med.* 1991;53(6):621-633.
- 17. Summers MA. Manliness and Its Discontents: the Black Middle Class and the Transformation of Masculinity, 1900–1930. Chapel Hill, NC: University of North Carolina Press; 2004.
- 18. Edley N, Wetherell M. Masculinity, power and identity. In Mac an Ghaill M, ed. Understanding Masculinities. Buckingham: Open University Press; 1996:97-113.
- 19. Marriott D. Reading black masculinities In Mac an Ghaill M, ed. Understanding Masculinities. Buckingham: Open University Press; 1996:185-201.
- 20. Estes S. I am a Man!: Race, manhood, and the civil rights movement. Chapel Hill, NC: The University of North Carolina Press; 2005.
- 21. Rybarczyk B. Diversity among American men: the impact of aging, ethnicity, and race. In: Kilmartin CT, ed. The Masculine Self. New York, NY: Macmillan Publishing; 1994:113-131.
- 22. Hammond WP, Mattis JS. Being a Man About It: Manhood Meaning Among African American Men. Psychology of Men & Masculinity.

2005;6(2):114-126.

- 23. Liburd LC, Namageyo-Funa A, Jack L, et al. Views from within and beyond: Illness narratives of African-American men with type 2 diabetes. *Diabetes Spectrum*. 2004;17(4):219-224.
- 24. Morse JM, Field PA. Qualitative Research Methods for Health Professionals, 2nd ed. Thousand Oaks, CA: Sage Publications; 1995.
- 25. Herman WH, Thompson TJ, Visscher W, et al. Diabetes mellitus and its complications in an African-American community: Project DIRECT. *J Natl Med Assoc.* 1998;90:147-156.
- 26. Engelgau MM, Narayan KM, Geiss LS, et al. A project to reduce the burden of diabetes in the African-American community: Project DIRECT. J Natl Med Assoc. 1998; 90(10): 605-613.
- 27. Hammersley M, Atkinson P. Ethnography: Principles in Practice. 2nd ed. London: Routledge; 1995.
- 28. Gregg EW, Geiss LS, Saaddine J, et al. Use of diabetes preventive care and complications risk in two African-American communities. Am J Prev Med. 2001;21 (3):197-202.
- 29. Penson DF, Wessells H. Erectile dysfunction in diabetic patients. Diabetes Spectrum. 2004;17(4):225-230.
- 30. Jack Jr L. A candid conversation about men, sexual health, and diabetes. *Diabetes Educ.* 2005;31(6):810-817.
- 31. Fisher L, Laurencin G, Chesla CA, et al. Depressive affect among four ethnic groups of male patients with type 2 diabetes. *Diabetes Spectrum*. 2004;17(4):215-224.
- 32. Anderson RJ, Freedland KE, Clouse RE, et al. The prevalence of comorbid depression in adults with diabetes. *Diabetes Care*. 2001;24(6):1069-1078.
- 33. Lustman PJ, Anderson RJ, Freedland KE, et al. Depression and poor glycemic control. Diabetes Care. 2000;23:934-942. ■

C A R E E R O P P O R T U N I T Y



Touro University College of Medicine

Advancing health care through science and humanism

Touro University College of Medicine is a newly-created private allopathic medical school located in northern New Jersey. Multiple positions are currently available that provide exceptional opportunities for involvement in the creation of a unique, creative, and innovative medical school.

Applications are now being accepted in the following areas:

- Administration
- Biomedical Science Education
- Clinical Science Education
- Educational Design and Technology

For more information visit our web site at: www.touromed.touro.edu

Applicants should submit a letter of interest and current CV to touromed@gmail.com Interest may be expressed confidentially.

Touro is an equal opportunity employer.