African-American Men's Perceptions of Health: A Focus Group Study

Joseph E. Ravenell, MD, MS; Waldo E. Johnson Jr, PhD; and Eric E. Whitaker, MD, MPH
Dallas, Texas and Chicago, Illinois

Financial support: This project was supported by a grant from the Department of Trauma at the John H. Stroger, Jr. Hospital of Cook County.

Presented in part at the 23rd Annual Meeting of the Society of General Internal Medicine, May 4–6, 2000, Boston, MA and the 27th Annual Meeting of the Society of General Internal Medicine, May 12–15, 2004, Chicago, IL.

African-American men are disproportionately affected by preventable medical conditions, yet they underutilize primary care health services. Because healthcare utilization is strongly dependent on health beliefs, the purpose of this qualitative study was to identify and explore African-American men's perceptions of health and health influences. We conducted eight focus group interviews with select subgroups of African-American men, including adolescents, trauma survivors, HIV-positive men, homeless men, men who have sex with men, substance abusers, church-affiliated men and a mixed sample (N=71). Definitions of health, beliefs about health maintenance and influences on health were elicited. Participants' definitions of health went beyond the traditional "absence of disease" definition and included physical, mental, emotional, economic and spiritual well-being. Being healthy also included fulfilling social roles, such as having a job and providing for one's family. Health maintenance strategies included spirituality and self-empowerment. Stress was cited as a dominant negative influence on health, attributed to lack of income, racism, "unhealthy" neighborhoods and conflict in relationships. Positive influences included a supportive social network and feeling valued by loved ones. This study provides insight into African-American men's general health perceptions and may have implications for future efforts to improve healthcare utilization in this population.

Key words: African Americans ■ men's health ■ primary care ■ qualitative research

 Send correspondence and reprint requests for *J Natl Med Assoc.* 2006;98:544–550 to: Dr. Joseph E. Ravenell, Hypertension Division, Department of Internal Medicine, University of Texas Southwestern Medical Center; phone: (214) 648-9128; fax: (214) 648-7902; e-mail: joseph.ravenell@utsouthwestern.edu

BACKGROUND

African-American men have the highest age-adjusted, all-cause mortality rate and arguably have the worst health status of any race-sex group in the United States. The higher death rates seen in African-American men are largely accounted for by deaths attributable to cardiovascular disease, cerebrovascular disease, diabetes, HIV and cancer. These deaths are in many cases preventable and amenable to primary care intervention.[1-3] Some authors have suggested that racial disparities in health may be partially due to smaller proportions of minority populations receiving primary care and preventive services.[4-6] African-American men are less likely to visit primary care physicians and, furthermore, are less likely to have any physician contact than other groups.[7] Underutilization of primary healthcare services is related to access and insurance status, as African-American men are more likely to lack health insurance than Caucasian men.[8-10] However, even among insured African-American male cohorts, underutilization of primary care services is a significant problem. One recent study found that blacks were significantly less likely to have received healthcare in physicians' offices and outpatient settings compared to nonblacks, even after controlling for age, insurance status, education, household income and residence.[7] Thus, those focused on eliminating health disparities are faced with a difficult paradox: the group of men that might benefit from primary care the most is the group which interacts with primary care physicians the least.

Many studies have shown that having a regular source of medical care consistently predicts access to and receipt of preventive health services and procedures, including blood pressure screening and treatment, cancer screening and HIV testing.[11-14] Furthermore, persons who report having a usual clinician are nearly twice as likely to have had choles-

terol screening as those without a usual clinician.[12] Because many disease prevention and management interventions are provided by primary care providers and require face-to-face patient–provider interactions, efforts to decrease the impact of preventable conditions on African-American men must address the issue of how to improve primary care health services utilization in this population.

Health services utilization can be thought of as a complex health behavior and has been framed as such in the behavioral model of health services utilization developed by Andersen, Aday and others.[15-17] In the behavioral model framework, health services use is a function of people's predisposition to use services, factors that facilitate or impede use, and people's need for care. Central to one's disposition to use services is his/her health beliefs. According to Andersen, health beliefs include attitudes, values and knowledge about health and health services that might influence perceptions of need and subsequent use of health services. Understanding health beliefs of African-American men may be important in developing interventions that seek to improve health services utilization among African-American men. Despite the potential importance of African-American men's health beliefs, there are relatively few studies that specifically investigate African-American men's general health beliefs and perceptions. The aim of our study was to identify and explore African-American men's general perceptions of health and health influences.

METHODS

Design

We conducted a qualitative study of African-American men's perceptions of health using focus groups. Focus groups offer many advantages that were ideal for our study. These include provision of a protected forum for marginalized voices to be heard, an economical and time-efficient way to probe the perceptions and attitudes of many participants at once, and an opportunity to explore and clarify complex topics through the interaction of the participants with each other in addition to the interaction of the participants with the researchers.[18-21] As the goal of focus groups is to explore and understand a particular group's point of view, it was the ideal vehicle to achieve the goals of our study, which were to explore African-American men's health perceptions.

Setting and Participants

Focus groups were conducted from July 1997 to September 1997 in the Woodlawn community, a low-income neighborhood in Chicago, IL. Ninety-five percent of Woodlawn's residents are African-American, and 64% of the Woodlawn community is 200% below the poverty line. The all-cause mortality in Woodlawn is 1.5 times higher than in the city of Chicago, while the mortality rate from cardiovascular disease is 35% higher than in the city of Chicago. Deaths from HIV/AIDS occur at three times the rate of the rest of Chicago.[22] To insure that we elicited the views of a large spectrum of African-American men, we utilized a purposive sampling strategy with the aim of recruiting several different clinical subpopulations. The subpopulations of African-American men included adolescents (age 16–18), trauma survivors, HIV-positive men, homeless men, men who have sex with men (MSM), substance abusers, church affiliated men and a mixed sample. Each subpopulation comprised a focus group.

Recruitment

Participants were primarily recruited from the community using alliances with community-based organizations (i.e., youth organizations, men's shelters, churches). We purposively sampled and recruited men for each focus group, targeting the specific population we wanted for each focus group. For each focus group, participants were recruited from sites that would yield a high number of desired participants. For example, the trauma survivors' focus group was recruited from the trauma clinic of a public hospital. Research assistants sat in the trauma clinic waiting room and approached men at random until the target number for the focus group (10–15 participants) was reached. We also enlisted the assistance of several community organizations, many of which catered to our populations of interest and contained a high concentration of key informants for a given population. For the HIV-positive focus group, we recruited from an HIV halfway house. For the church group, we recruited from a large local African-American church. The adolescent group was recruited from the Boys and Girls Club of Chicago.

Human Subjects Protection

The institutional review boards of the Cook County Hospital/Cook County Bureau of Health Services and School of Social Service Administration of the University of Chicago approved the study protocol, recruitment materials and consent forms. Informed consent was obtained from all adult participants in the study. Parental consent was additionally obtained for participants in the adolescent group.

Data Collection

Focus groups were moderated by trained, African-American male focus group leaders, typically in a nonclinical, community setting. Moderators

participated in a one-day training session led by the authors. With one exception, all of the moderators were nonphysicians. The interview guide contained open-ended questions with additional probes for deeper exploration. Topics addressed by the questions included definitions of health, strategies for staying healthy and health influences. In each group, participants were asked: "What does being healthy mean to you?", "What do you do to keep healthy?" and "What factors influence African-American men's health?" All group interviews were audiotaped, transcribed verbatim and checked for accuracy. A research assistant took notes on interpersonal dynamics and nonverbal communication among participants that could not be captured by audio recording. All participants were served refreshments and received $20 at the conclusion of the interview.

Data Analysis

Transcribed group interviews were formally analyzed using constant comparative analysis, a standard qualitative analytic strategy that involves taking one piece of data (one focus group in our case) and comparing it with all others to examine similarities and differences in order to obtain a picture of the possible relations between various pieces of data.[23,24] Line-by-line analyses were used to generate codes, which were subsequently assigned labels to represent preliminary concepts. As concepts accumulated, categories to organize the concepts and their unifying relationships were developed. Categories were examined for the properties and dimensions that might link them to other categories and subcategories.

Throughout the analytic process, the authors conferred to discuss varying interpretations of the content and meaning of participants' responses as well as to refine and agree upon concepts, categories and emerging themes. The formal analysis and development of taxonomy was completed primarily by the lead author (JER) and corroborated by the other two (WEJ, EEW). The Ethnograph V5.08™ for Windows® software program was used to facilitate data management.[25]

RESULTS

Seventy-one African-American men participated in the study and ranged in age from 16–75 years. Each group interview averaged nine participants (range 7–11) and lasted about 90 minutes. We grouped and categorized responses within each of the three major topic areas of defining health, health maintenance strategies and factors influencing health across all groups.

Defining Health

Categories of responses related to definitions of health included health domains, physical independence and role functioning. In response to the question, "What does being healthy mean to you?," participants cited the absence of physical ailments as an important part of health. However, physical well-being was just one domain of health. Being healthy also included mental and emotional well-being, economic stability and a sense of spirituality, as one patient summarized:

> *Being healthy, if I'm healthy, I'm going to concentrate on being spiritually fit. I want to be spiritually healthy, I want to be mentally healthy, I want to be emotionally healthy, and I want to be economically healthy. But, first, I got to have a healthy body and a healthy mind to lead me into all of those things.*

Among older men particularly, being healthy included being able to take care of one's own needs without assistance and physical independence:

> *Being healthy is to be able to get up each morning, to be able to breathe, to be able to function on your own without any help.*

Being healthy also included being able to fulfill social roles, such as holding a job, providing for family, protecting and teaching their children, and belonging to a network. With the exception of the church group, all groups cited the various domains of health and valued them equally. The church group placed slightly more emphasis on the spiritual domain of health than the other groups.

Health Maintenance Strategies

Participants identified several strategies to maintain health, including healthy lifestyle changes, managing stress, prayer, seeking healthcare, self-empowerment and social support.

Healthy lifestyle and managing stress. Healthy behaviors, such as eating healthy foods; regular exercise; and abstinence from tobacco, drugs and alcohol were the lifestyle changes mentioned most often across the groups. One participant said,

> *I get the proper amount of sleep, take my medication and eat right, and exercise. I do a lot of walking for my heart. I cut out drugs in my life. So now if I can cut out cigarettes, I can be much healthier. And, I try to keep a lot of stress off of me, because stress will tear the body down. So I am trying to reduce stress in my life, get the proper rest, eat and exercise.*

This participant underscored a key point and

prevalent theme that managing stress was as important as the lifestyle changes in maintaining health.

Prayer. Prayer, spirituality and trust in a "higher power" were important health maintenance strategies among the church and HIV groups. One participant noted "to keep myself healthy, I pray a lot. I keep my life in the Lord's hands." These two groups agreed that "in order to take care of your mental and physical needs, you have to have a spiritual grounding ... some way to clear your mind and get in touch with your spirit."

Seeking healthcare. The older participants additionally cited going to see physicians as a means of staying healthy: "We need to follow up with our doctors. We need for them to show us what we need and don't need concerning ourselves." In general, younger members of the focus groups and the adolescent focus group in particular rarely cited doctors as having a regular role in health maintenance. Instead, within this younger cohort, doctors were only utilized as urgent solutions to physical problems:

The only time I go to the doctor is when something is really hurting, when I'm injured or something, but otherwise, I don't even know my doctor's name, seriously.

The trauma survivors and HIV-positive groups were notable exceptions to this trend. For these groups, seeing doctors and following their advice was vital to staying healthy. One trauma survivor said:

As long as I do as my doctor say, I will stay healthy; it ain't too much I can really do to stay healthy but listen to my doctor.

Self-empowerment. Self-empowerment was frequently touted as an important health maintenance strategy and facilitator across the groups, through self-education and being involved in one's own healthcare. One participant said:

You have to feed your brain, take in knowledge—you'll know how to keep your body healthy and your brain by taking in knowledge.

A participant in another focus group said:

You have to be up on it (educate) yourself. If you don't understand something, have your doctor explain it in laymen's terms.

Education was particularly important for the HIV group, since "education is what keeps people from getting infected." Learning how to take care of one's health, including learning about some of the lifestyle changes previously mentioned, such as eating healthy:

You know I'm reading more about the things to eat and what not to eat ... you should read a lot so you understand the food you eat and a lot of stuff you eat is not good for you.

In addition to learning from doctors and reading materials, participants also lauded the importance of learning from peers and the elders of the community: "communicating and spreading knowledge to each other."

Social support. Various forms of social support including family, friends and social groups facilitated health maintenance across the groups. Having positive social interactions was viewed as vital to their health and a meaningful existence. A 26-year-old participant said:

All my family members—even some of my associates—I feel it can help my health a lot. Just them being positive towards you and you being positive towards them.

Being a valued part of a group or community was also important part of being healthy. One of the trauma survivors explained:

You need to feel wanted, whether it be your family or your church members or your associates ... without that, we basically couldn't make it ... we need each other to exist.

While all the groups valued being part of a community, the role of membership and social support in maintaining health was valued most by the trauma survivors group and HIV group.

Factors Influencing Health

Responses to the question, "What factors influence African-American men's health?," fell into two major categories: negative influences and positive influences on African-American men's health. Across all groups, psychological stress was cited as a dominant negative influence on both physical and mental health. Participants agreed, "Mentally, when you have stress, it affects the body, it affects you physically." Furthermore, stress was felt to influence African-American men's health specifically: "In this culture we live in, it's just a stressful society for black men." Stress was attributed to four major sources: lack of income, experiences of racism, "unhealthy" neighborhoods and conflict in relationships. Positive influences included a supportive social network and feeling valued by loved ones.

Stress: lack of income. Regarding lack of income, participants said:

> *No income causes high stress because you have lots of bills ... underemployment and unemployment are great stresses—clearly that impacts your health.*

Lack of employment was specifically linked to health through lack of insurance and inability to afford quality medical care. One participant said, "If you are unemployed, you may not have insurance to help your healthcare needs."

Stress: racism. Racism was viewed as a source of stress and therefore a negative influence on health as well as a real obstacle to receiving healthcare. Participants delineated experiences of racism in distinct settings, including at work, in the community and portrayed in the media:

> *One of the problems of racism that puts a deep mental illness in the community is that we don't know how to deal with it. I think that racism in this country has been so prevalent and we want to act like it's not around and don't know how to confront and deal with it. We see it in the media and we get upset but we don't really know what to do. We see it in our work places and we don't know how to respond and I think that that has caused a lot of mental illness and also it's just not a healthy environment to be in.*

Stress: unhealthy neighborhoods. Living in "unhealthy" neighborhoods was viewed as a significant source of stress. Neighborhoods were designated unhealthy because they were unsafe, resulting in the stress of having to look over one's shoulder for fear of being a crime victim or a victim of police harassment.

> *If you're scared to walk around your neighborhood, that's not good health right there because you in the house a lot.*

Such neighborhoods were also unhealthy because they were not conducive to healthy habits, such as eating healthy food:

> *The stores that do exist in our neighborhoods ... only serve foods that are high in salt, high in fat."*

Stress: conflict in relationships. Stress within intimate relationships was cited across groups as an important health influence. Younger participants in particular felt that:

> *Your personal relationship with your significant other has a lot to do with your health ... if you haven't resolved your problems ... it brings on stress.*

Among MSM, the issue of domestic violence emerged in this context. In addition to the stress of possible intimate partner violence, there was also the belief that domestic violence within the African-American MSM community was not taken seriously by the media or law enforcement:

> *African-American men who are gay identified in very destructive relationships and a lot of domestic violence and people have died in those situations, but it is never reported; just another black man that died ... not a lot of police reports and never an investigation."*

Positive health influence: social support. Finally, while relationships characterized by stress and violence were viewed as dominant negative influences on health, supportive relationships were cited by all the groups as having a positive influence on health. Supportive and nurturing relationships were felt to impact all aspects of health. As one participant summarized:

> *... if you have a positive, nurturing, supportive, helpful relationship with whoever, if it's your family, your friends or your significant other, if those things are going well, then it has a beneficial effect of your physical and mental health. You're going to take better care of yourself because you want to keep enjoying those experiences, you want to get better as time goes on. So, it affects how you feel and how you want to feel.*

DISCUSSION

Using a sample of African-American men in Chicago, we conducted an exploratory qualitative study to understand African-American men's perceptions of health. Our findings indicate that African-American men have a very broad and inclusive definition of health that corresponds to the World Health Organization definition, which describes health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[26,27] For healthcare providers, meeting African-American men where they are in terms of conceptualizing health in this broader context may be an important and imperative step to changing healthcare utilization patterns and health within this population. For example, an African-American man in our sample might

be more inclined to visit a healthcare center if he believed providers would cater to more than just his physical health concerns. Providers who are capable of addressing health as defined by our participants during those crucial moments when African-American men do interface with the healthcare system may lead to improved patient satisfaction, an important consideration in long-term healthcare utilization.

Participants of all ages in our study identified traditional strategies for health maintenance, including diet, exercise and smoking cessation. Our study suggests that healthy lifestyle advice is effectively reaching the spectrum of African-American men. The men in our study also identified self-empowerment through education and communication as an important health maintenance strategy. Public health pioneer and health educator Mayhew Derryberry pointed out that "to communicate successfully with people, we must know their goals, interests and requirements as perceived by them."[28] Thus, our finding that African-American men value health education and health maintenance suggests that they are in fact interested in their health, and may be receptive to prevention and health promotion interventions.

Other reports have supported our finding that prayer and spirituality are important to African-American MSM and HIV-infected men. Malebranche notes that despite reports of homophobia and condemnation of homosexuality within African-American churches, church and spirituality play a key role in the lives of many African-American MSM.[29] With HIV still a major health issue for African-American men, increasing collaboration between the healthcare community and communities of faith may be an important strategy for future health maintenance and prevention efforts in this population of African-American men.

Psychological stress emerged as an important health influence for the men in our study. Additionally, the participants believed stress uniquely impacted the health of African-American men. Several authors have written about the higher levels of stress experienced by African-American men compared to other groups.[30-32] The stressors reported in our study were multidimensional and included unemployment and racism in several settings. Given that African-American men are twice as likely to be unemployed compared to Caucasians,[33] it is no surprise that unemployment impacted the participants in our study. However, the men in our study went beyond simply reporting unemployment as a stressor. They correctly perceived an association between unemployment and poor health, confirmed by research findings that unemployment is associated with elevated stress and poor health as well as lack of healthcare benefits.[31] Unfortunately for many African-American men, being employed does not offer much of a health advantage over being unemployed. African-American men are disproportionately represented among lower-skilled and lower-income jobs, which are more likely to have work conditions that lead to elevated stress and poor health.[31,34,35]

Our finding that racism at work is perceived as a major stressor and negative influence on health supports what other studies have found. James et al., in a landmark study, found that African-American male workers who perceived race-based discrimination at work had higher diastolic blood pressure.[36] The Metro Atlanta Heart Disease Study found that perceived stress after race-based discrimination at work predicted blood pressure for African-American workers.[37] Because stress is perceived to have negative health consequences by the African-American men in our study and has been solidly shown to have untoward long-term health consequences, stress may be a reasonable target for interventions seeking to improve the health of African-American men.

There are several limitations to our study. We conducted a qualitative study using a purposive sampling method that yielded a series of convenience samples. While the sampling strategy may limit the generalizability of our results, we were able to elicit the thoughts and perceptions of a diverse group of men by targeting groups that compose the spectrum of African-American men. Our study by no means captured all of the communities of African-American men, but we did make an effort to sample some of the key groups that may suffer most from underutilizing healthcare services. The current study was conducted in one midwestern metropolitan area, yet many of our findings are confirmed by other studies conducted in geographic locations distinct from our study location.

Despite these limitations, the results of this study have important implications. African-American men are clearly interested in health and believe they must empower themselves to participate in maintaining their health. It is incumbent on the healthcare community to align our priorities with health priorities of the men we hope will be our primary care patients. As noted above, these priorities include more than the "hard" clinical endpoints on which physicians tend to focus. In the context of Andersen's behavioral model of health services utilization, understanding African-American men's health-related priorities, attitudes, values and knowledge is just a first step. Further research needs to assess the specific barriers that keep African-American men from using primary healthcare services and what would entice them to utilize primary care centers.

ACKNOWLEDGEMENTS

The authors acknowledge the department of trauma at the John H. Stroger, Jr. Hospital of Cook County for its financial and administrative support of this project.

REFERENCES

1. Freid V, Prager K, MacKay A, et al. *Chartbook on Trends in the Health of Americans*. 2003; Hyattsville, MD: National Center for Health Statistics.

2. Rich J, Ro M. A Poor Man's Plight: Uncovering the Disparity in Men's Health. Battle Creek, MI: W.K. Kellogg Foundation; 2002.

3. Rich JA. Primary care for young African American men. *J Am Coll Health*. 2001;49:183-186.

4. Bliss EB, Meyers DS, Phillips RL Jr, et al. Variation in participation in health care settings associated with race and ethnicity. *J Gen Intern Med*. 2004;19: 931-936.

5. Schneider EC, Cleary PD, Zaslavsky AM, et al. Racial disparity in influenza vaccination: does managed care narrow the gap between African Americans and whites? *JAMA*. 2001;286:1455-1460.

6. Schneider EC, Zaslavsky AM, Epstein AM. Racial disparities in the quality of care for enrollees in medicare managed care. *JAMA*. 2002;287:1288-1294.

7. Dunlop DD, Manheim LM, Song J, et al. Gender and ethnic/racial disparities in health care utilization among older adults. *J Gerontol B Psychol Sci Soc Sci*. 2002;57:S221-S233.

8. Brown E, Ojeda V, Wyn R, et al. Racial and Ethnic Disparities in Access to Health Insurance and Health Care. Los Angeles, CA: UCLA Center for Health Policy Research and The Henry J. Kaiser Family Foundation; 2000.

9. McCaig LF, Burt CW. National Hospital Ambulatory Medical Care Survey: 2001 emergency department summary. *Adv Data*. 2003;1-29.

10. Satcher D. Overlooked and underserved: improving the health of men of color. *Am J Public Health*. 2003;93:707-709.

11. Lambrew JM, DeFriese GH, Carey TS, et al. The effects of having a regular doctor on access to primary care. *Med Care*. 1996;34:138-151.

12. Merzel C, Moon-Howard J. Access to health services in an urban community: does source of care make a difference? *J Urban Health*. 2002;79: 186-199.

13. Moy E, Bartman BA, Weir MR. Access to hypertensive care. Effects of income, insurance, and source of care. *Arch Intern Med*. 1995;155:1497-1502.

14. Shea S, Misra D, Ehrlich MH, et al. Predisposing factors for severe, uncontrolled hypertension in an inner-city minority population. *N Engl J Med*. 1992;327:776-781.

15. Aday LA, Andersen R. A framework for the study of access to medical care. *Health Serv Res*. 1974;9:208-220.

16. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? *J Health Soc Behav*. 1995;36:1-10.

17. Phillips KA, Morrison KR, Andersen R, et al. Understanding the context of healthcare utilization: assessing environmental and provider-related variables in the behavioral model of utilization. *Health Serv Res*. 1998;33: 571-596.

18. Krueger R. *Focus Groups: A Practical Guide for Applied Research*. 1994; Thousand Oaks, CA: Sage.

19. Peters DA. Improving quality requires consumer input: using focus groups. *J Nurs Care Qual*. 1993;7:34-41.

20. Sim J. Collecting and analysing qualitative data: issues raised by the focus group. *J Adv Nurs*. 1998;28:345-352.

21. Vaughn S, Schumm J, Sinagub J. *Focus Group Interviews in Education and Psychology*. 1996; Thousand Oaks, CA: Sage.

22. Chicago Department of Health. Chicago Community Health Profile: Woodlawn. 2004. Chicago Health and Health Systems Project.

23. Strauss A, Corbin J. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage; 1998.

24. Thorne S. Data analysis in qualitative research. *Evidence-Based Nursing*. 2000;3:68-70.

25. The Ethnograph V5.08. www.qualisresearch.com; 2001.

26. Saylor C. The circle of health: a health definition model. *J Holist Nurs*. 2004;22:97-115.

27. World Health Organization. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, June 19–22, 1946; signed on July 22,1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on April 7, 1948. 1946.

28. *Derryberry's Educating for Health: A Foundation for Contemporary Health Education Practice* 2004; New York, NY: Jossey-Bass.

29. Malebranche DJ. Black men who have sex with men and the HIV epidemic: next steps for public health. *Am J Public Health*. 2003;93:862-865.

30. James SA. John Henryism and the health of African-Americans. *Cult Med Psychiatry*. 1994;18:163-182.

31. Williams DR. The health of men: structured inequalities and opportunities. *Am J Public Health*. 2003;93:724-731.

32. Williams DR, Neighbors HW, Jackson JS. Racial/ethnic discrimination and health: findings from community studies. *Am J Public Health*. 2003;93:200-208.

33. Holzer HJ, Stoll MA, Wissocker D. Job Performance and Retention among Welfare Recipients. *Soc Serv Rev*. 2004;78:343-369.

34. Karasek R, Theorell T. *Healthy Work*. New York, NY: Basic Books; 1990.

35. The Council of Economic Advisers for the President's Initiative on Race. Changing America: Indicators of Social and Economic Well-Being by Race and Hispanic Origin. Washington, DC, Government Printing Office; 1998.

36. James SA, LaCroix AZ, Kleinbaum DG, et al. John Henryism and blood pressure differences among black men. II. The role of occupational stressors. *J Behav Med*. 1984;7:259-275.

37. Din-Dzietham R, Nembhard WN, Collins R, et al. Perceived stress following race-based discrimination at work is associated with hypertension in African-Americans. The metro Atlanta heart disease study, 1999–2001. *Soc Sci Med*. 2004;58:449-461. ■