

STRESS AND COPING OF THE AFRICAN-AMERICAN PHYSICIAN

Douglas M. Post, PhD, and Wilburn H. Weddington, MD

Columbus, Ohio

The purpose of this qualitative study was to examine the nature of work-related stress and coping experienced by African-American family physicians. Ten African-American family physicians across the state of Ohio were interviewed using a standardized open-ended format. Interview data were analyzed through an "editing" technique and QSR Nud*ist, a qualitative software program. Patterns and themes common to the interviews were identified. Stressors presented by research participants included experiences with racism in medicine, doubt, and a strong desire to prove oneself in the medical environment. Distinctive coping strategies involved spirituality, kinship, and the development of strength and perseverance in the face of adversity. Responses to general questions on stress and coping indicated difficulties with the shift toward managed care and use of "time for self, away from medicine" types of coping strategies. Results underscored the importance of culture and race in stress and coping processes, and suggested that programs and policies addressing the specific pressures faced by African-American physicians in training and practice need to be developed. (*J Natl Med Assoc.* 2000;92:70-75.)

Key words: stress ♦ stress management
♦ African American physicians

Much has been written about the impact of occupational stress on physicians.¹⁻⁵ Several negative consequences of stress have been identified, including depression, burnout, substance abuse, anxiety, and suicide.⁶⁻⁹ More recently, investigators have turned to an examination of the types of coping methods physicians use to manage the stress that seems inherent to medical practice. Strategies such as self-awareness, sharing of feelings and responsibilities, developing a positive perspective, accessing multiple sources of support, and self-care techniques have been identified as stress management tools used by practicing physicians.^{10,11}

Minimal research attention has been devoted to the impact of cultural and racial factors on physi-

cian stress and coping. Studies examining this area have compared African-American and white physicians in training and practice. Strayhorn^{12,13} indicated that African-American medical students encounter a higher level of stress due to insensitive treatment. Post and Weddington¹⁴ suggested that an "Africentric" versus "Eurocentric" perspective influenced the nature of stress and coping experienced by practicing physicians. African-American physicians were more likely to present family-related values and coping strategies, as compared to white physicians, reflecting their cultural heritage emphasizing family and kinship.

A recent study suggested the likelihood of significant stress-related problems in African-American physicians. Weaver¹⁵ examined mortality data from the alumni offices of Howard, Meharry, Drew, and Morehouse medical schools, and compared the incidence of premature death between African-American and white physicians. He discovered that African-American physicians were 300 times more likely to suffer a premature death, defined as death before the age of 65, than were white physicians.

© 2000. From the Department of Family Medicine, The Ohio State University, Columbus, Ohio. Requests for reprints should be addressed to Douglas M. Post, PhD, Department of Family Medicine, Ohio State University, Columbus, OH 43210.

Table 1. Interview Questionnaire

1.	Start by focusing on demographic questions. What is your gender?
2.	How old are you?
3.	What is your present relationship status?
4.	Do you have children? Ages?
5.	How would you describe your ethnic/cultural background?
6.	Would you describe the kind of training and education you've received up to this point? Where did you go to medical school? Where did you do your residency?
7.	Would you describe the nature of your medical practice? Type of practice, number of hours per week, number of patients per week, number of fellow physicians and staff in your practice?
8.	What factors led you to choose medicine as a career?
9.	What factors led you to choose family medicine as a specialty?
10.	On your job, what job-related factors cause the most stress for you?
11.	How do you know when you're under stress? What happens to you physically, mentally, emotionally?
12.	What do you do to cope with your work-related stress?
13.	What is the relationship between being African-American and your experience of stress?
14.	What is the relationship between being African-American and coping with the stress you experience?
15.	Anything else on this topic?
16.	Would it have made any difference to this interview if I was African-American?

This data, as well as the lack of research specifically focusing on African-American physicians, suggest a strong need exists to explore the nature of stress and coping experienced by African-American physicians. The present investigation was designed to meet this need.

METHODS

Qualitative research strategies are necessary when studying complex phenomena, when the goal of the research is an examination of subjective experience, and when the research subject is a relatively unknown entity.¹⁶ Two qualitative techniques were used to enhance the findings of this study: use of knowledgeable informant and maximum variation sampling techniques.¹⁷ The knowledgeable informant, the second author of the paper, is an experienced African-American family physician whose work has entailed considerable networking with practicing African-American family physicians. He identified prospective research participants to provide meaningful information on their experiences with stress and coping.

Maximum variation sampling refers to the selection of a sampling group with varying characteristics. A small diverse sample was designed to yield the following types of findings: 1) rich detailed descriptions of the uniqueness of each case and 2) meaningful core patterns shared by the research participants. The sample was varied across a range of ages, practice types, and locations.

Every African-American physician who was contacted agreed to participate in the study. The first author generally traveled to the physician's office to conduct the interview. All interviews used a semi-structured process. They were worded in a predetermined fashion and were also flexible, so that certain topics could be further explored or new lines of inquiry opened.

Questions centered on values and other factors that led the research participants to choose medicine as a career and family medicine as a specialty, the types of work stress they encountered, and the coping strategies they used to manage their stress. Specific questions on the relationship between belonging to an African-American culture and experience with stress and coping were also posed to the group. The format of the interview is presented in Table 1. All interviews were transcribed.

A three-person research team consisting of a male non-African-American Family Medicine faculty person (principal investigator), a female African-American faculty person outside of medicine with an expertise in qualitative methods, and a male African-American medical student were involved in the data analysis phase of the study. The medical student's primary responsibility involved the development of the coding framework for exploration of the interview text through the QSR Nud*ist software program (Sage Publications Inc., Thousand Oaks, CA).¹⁸

The female African-American faculty person

served as peer reviewer for the study and met over several sessions with the principal investigator. Peer reviewing sessions involved meetings to examine various aspects of the study that were deemed relevant and important. During these meetings, sections of text were highlighted by each individual, and prominent issues within each interview were discussed. Themes evolved over time during this "editing" phase of the analysis, and consensus was reached on areas designated as important.¹⁹ The principal investigator sent the initial analysis to the physicians for review and requested feedback on the results of the study. These responses were then included in the dataset.

It was deemed important that different members of the research project were African-American, considering that the principal investigator was not. Including African-Americans professionals in the project was an intentional design strategy used to check any cultural biases or discomforts of the principal investigator that may have surfaced.²⁰

RESULTS

Ten African-American physicians participated in the study. Eight of the ten were male, six were married, three divorced, and one single, with nine having children. Ages ranged from the mid 30s to late 60s. Six of the research participants worked in a group practice and the other four were solo practitioners. Most worked a 50- to 60-hour week. Two of the physicians worked in southern Ohio, three in western Ohio, and five in central Ohio.

The staffing of the medical offices was an interesting mix, with most of the physicians having an MA, PA, or NP integrated into their practices. The predominant medical training of the interviewees was through a traditional white-majority midwestern medical school, with the exception of one Howard University graduate.

Interviews averaged 24 double-spaced typed pages in length. An analysis of the text revealed distinct themes on the experiences of stress and coping in this group of African-American family physicians. These themes emerged in response to questions on the relationship between belonging to an African-American culture and experiences with stress and coping. The relationship between stress and their African-American heritage centered on three factors: racism, doubt, and the need to prove oneself in the medical environment.

Research participants described a long history of experiences with racism and discrimination in their lives. One physician described skin color as "That's the first thing they see. That's the badge you wear, and they make their initial assessment based on that." Within medicine, the most pernicious reports were incidents in medical school. One participant indicated that "There was resentment, obvious resentment, for black students and residents in being with the white counterparts."

Another stated that "There's always a 'but,' that you always feel that people are looking at you as, well, a non-minority person could have done just as good if not better than you. Or, the reason you're doing as well as you're doing is because somebody is trying to hold you up as being an example, like 'Here's our token minority that we have.' So, they pull you out of the closet and say, 'We've got a minority, too' . . . It's like 'This is our boy, he's so good.'"

Racist treatment by colleagues, patients, HMOs, office staff, the community, and police were also described. Living in this hostile environment produced significant stress and strain. One participant described the consequence of childhood experiences with racism as: "Sometimes you feel humiliated [or have] feelings of shame, when you don't really have anything to be ashamed about . . . You feel like you don't belong, like you're not even part of the planet."

Doubt was a second theme. This was expressed in two ways: as uncertainty toward the racial issue and as experiencing doubt from others. Doubt on the racial issue produced a burden of constantly second-guessing oneself: "Sometimes you're denied certain things and you wonder. Am I being denied because I don't deserve it, or because of my color? And sometimes you're not sure. You may never know, you may never know what's in the other person's heart. That by itself generates a certain amount of stress."

Doubt from others concerning the African-American physicians' capacity for success also produced stress: "When you're in a professional school like a medical school and residency when you're going through your training, it makes you wonder. How does that other person think of me? Do they feel that I am just as competent as they are, or do they think that I just got in because of Affirmative Action and I'll probably goof up somewhere down the line?"

Sometimes those kind[s] of things just float through your mind.”

Descriptions of efforts to prove oneself in this environment of resentment and doubt were frequent, and described as stressful: “You’re always striving not to be the best but to be better than the best, to somehow discount the stigma that kind of follows you around as a minority.” Or the following: “Sometimes you don’t know if they’re looking at you in a certain light that, since you’re a minority physician, maybe that’s why you’re not educated about this . . . Again, I think that’s why I attempt to stay on top of it as much as I can. I don’t want situations like that happening. But that’s stressful for me, in that you’re always afraid you’ll be perceived that way.”

The relationship between being African-American and coping strategies was described in terms of spirituality, kinship, and character development. Involvement with the church was viewed as the center of life, and as therapy. One participant remarked: “I’ve been very prayerful and rely on my faith a great deal . . . I think that’s part of all of us, and I think no matter what the situation it will help one through.” Another stated that “There’s a good psychological value that comes out of church service. Church service is good . . . Church is like a therapy, just like therapy. It gives you hope, something to look forward to beyond this. It plays a very important role.”

Coping through kinship occurred through family and community connections. Family influences and family support were very significant to the research group. The choice to become a physician was very often tied to family and helping others, and family was the means of support that was presented most often. One research participant stated that “I told him (his father) before he died, I told him that everything I have today, everything I am today, I owe to him.” This research participant described how his acceptance into college occurred because his father completed a college application and secured financial aid for him, without his knowledge, and that “my wish from high school was to graduate, get a job, get a car, and get out of the house.”

Family was often tied to community. Giving back to the community, helping people in the community, and serving as a community role model were described as meaningful activities: “And if you move away, what does that leave in the neighborhood? What does that leave in your community? The people that are trapped there. The people that can’t get away. And those people that are trapped become

the role models for the children in the neighborhood . . . So that’s all you (the children) aspire to be.”

Another theme tied to being African-American related to the impact of dealing with the adversities of racism and discrimination. One physician stated that “the stress improved my character, made me stronger . . . I no longer question myself.” Qualities of perseverance and fortitude were presented as necessities to survive hostility and adversity: “The way I see it now is, I can get around everything. If everything collapsed around me now, I would still survive. I have a way of surviving. I guess I was born like that. I was brought up like that.” This led to feelings of self-confidence and esteem: “That if me and the white guy both got here, maybe I’m a little better than he is to have made it.” Another remarked that “I’m really happy I’m African-American and I’m going to make the most of it.”

General questions on stress and coping were also presented to the research participants. Responses to questions on work-related stress centered on the changes which have occurred in the practice of medicine. Strong feelings were expressed about the amount of time that the physicians devoted to paperwork and other bureaucratic business, which took time away from the patient care side of their work. A second stress-related issue was related to medical decision-making: “I’ve spent 25 years almost in training, and then all of a sudden a person who doesn’t know anything about medicine is telling me how to practice medicine, how long to keep a person in the hospital, how to treat that person in the hospital. That’s frustrating.” Participant stress attributed to changes in medical practice are similar to reported experiences of non-African-American physicians.⁶

Responses to general coping questions centered on “time for self, away from medicine” types of self-care strategies: “Actually leave town, whether it is just for a weekend, two or three days, or whether it’s a week or seven days, or whatever. But I relax so much better, I relieve stress when I’m out of town much better than when I’m in town.”

DISCUSSION

The results of this study support a cultural model of stress and coping. Research participants clearly presented stressful experiences related to being an African-American physician in the medical environ-

ment. Distinct coping choices tied to their African-American heritage were also discussed. Coping was often tied to kinship, through relationships with family, the community, and the church. Elements of group needs and values were tied to family influences in their career choice, mechanisms of support, and decisions to give back to the community and serve as role models for African-American youth.

It was interesting that these interview responses did not emerge until direct questions on the relationship between being African-American and stress and coping were presented. In checking back with the physicians after the initial analysis and requesting feedback on the results of the study, the research participants stated that the findings closely fit the nature of their experiences.

In reflecting on the research process of this investigation, the findings were somewhat surprising to the principal investigator. Specifically, the consistent presentation by research participants of racist experiences in medicine and the response of proving oneself in a hostile environment were not expected. These realities, however, fit the lives of the African-American faculty consultant and medical student and were not unexpected results to them.

The issue of the principal investigator not being African-American was examined throughout the study. The physicians were asked whether or not it made a difference that the interviewer was not African-American. One remarked that it did, one stated he was not sure, and the others noted that it did not make a difference. One physician stated that "There might have been some things that I would explain to you in detail that I wouldn't explain to an African-American. I'd just say, you know how that is, and go on. Because he's experienced it. And you, I have to explain. I can't say, you know how it is, and then keep going. I couldn't say that, because you *don't* know how it is. I'd have to tell you how it is." One way to look at this remark is that having a white interview African-American physicians may have generated greater detail and description in the interview.

Considering this, one potential limitation of this study could be that the principal investigator was not African-American. In reviewing the transcripts, both the principal investigator and peer reviewer were, at times, struck by the fact that certain topics were not pursued during the interview. The question of interviewer defensiveness was raised as a

possibility during the 'editing' discussions. It was also noted that these occasions could have reflected a cautious attitude toward taking away valuable patient care time from the physicians, in that most of the interviews occurred in the physicians' offices. Most likely, both factors were present.

A second potential limitation involved the nature of the sample. This was a group primarily from the midwest who were trained at traditional white-majority midwestern medical schools. There could be regional differences in African-American culture, such as the midwest compared to the south or west. Also, the experiences with racism and discrimination in medical school would probably not have been described and/or characterized quite differently by a sample population trained at Howard, Morehouse, or other African-American majority medical schools. The physician whose education occurred at Howard did not describe the type of racist treatment in medical school presented by other research participants.

However, considering the dearth of studies that have examined stress and coping in African-American physicians and the strong possibility of impairment risk in this population, it is suggested that these results are important to pursue. It would be a helpful addition to the research base to use a large-scale quantitative or combined qualitative/quantitative design to advance this investigation and remedy its shortcomings. Also, observational studies of African-American medical students could help specify the nature of racism in medicine and clarify perceptions by individuals who experience discrimination.

CONCLUSION

Generally, the findings of this study and future research can be used to create effective and culturally sensitive stress reduction programs and support policies for African-American physicians, residents, and medical students. Also, a second potential benefit of these results is to sensitize non-African-American physicians to issues of racism in the medical environment. In the end, both would prove advantageous to African-American physicians in training and practice, their families, their colleagues, their patients, and their communities.

ACKNOWLEDGMENTS

Grant support from American Academy of Family Physicians and Ohio Academy of Family Physicians. Project

support from Dr. Beverly Gordon, Dr. Daniel Bloch, Marland Chancellor III, Ohio State University. Manuscript support from Dr. Valerie Gilchrist, NEOUCOM and the African-American physicians interviewed for this study.

REFERENCES

1. McCue JD. The effects of stress on physicians and their medical practice. *N Engl J Med.* 1982;306:458-463.
2. Simpson LA, Grant L. Sources and magnitude of job stress among physicians. *J Behav Med.* 1991;14:27-41.
3. Lewis CE, Prout DM, Chalmers EP, Leake B. How satisfying is the practice of internal medicine? A national survey. *Ann Int Med.* 1991;114:1-5.
4. Arnetz BB. Physicians view of their work environment and organization. *Psychother Psychosom.* 1997;66:155-162.
5. Bowman MA, Allen DI. *Stress and Women Physicians.* 2nd ed. New York: Springer-Verlag; 1990.
6. Deckard G, Meterko M, Field D. Physician burnout: an examination of personal, professional, and organizational relationships. *Med Care.* 1994;32:745-754.
7. Lemkau J, Rafferty J, Gordon R. Burnout and career-choice regret among family practice physicians in early practice. *Fam Pract Res J.* 1994;14:213-222.
8. May HJ, Revicki DA. Occupational stress, social support, and depression. *Health Psychol.* 1985;4:61-77.
9. Bauman K. Physician suicide. *Arch Fam Med.* 1995;4:672-673.
10. Post DM. Values, stress, and coping among practicing family physicians. *Arch Fam Med.* 1997;6:252-255.
11. Quill TE, Williamson PR. Healthy approaches to physician stress. *Arch Int Med.* 1990;150:1857-1861.
12. Strayhorn G. Perceived stress and social supports of black and white medical students. *J Med Educ.* 1980;55:618-620.
13. Strayhorn G, Frierson H. Assessing correlations between black and white students' perceptions of the medical school learning environment, their academic performances, and their well-being. *Acad Med.* 1989;64:468-473.
14. Post DM, Weddington W. The impact of culture on physician stress and coping. *J Natl Med Assoc.* 1997;89:585-590.
15. Weaver L. Incidence of Premature Death in African-American Physicians. Presented at the International Conference on Physician Health. Victoria, British Columbia, Canada, 1998.
16. Searight HR, Young R. Qualitative research and family systems medicine: a natural fit. *Fam Syst Med.* 1994;12:117-131.
17. Patton MQ. *Qualitative Evaluation and Research Methods.* 2nd ed. Newbury Park, CA: Sage; 1990.
18. Weitzman EA, Miles MB. *Computer Programs for Qualitative Data Analysis.* Thousand Oaks, CA: Sage; 1995.
19. Crabtree BF, Miller WL. *Doing Qualitative Research.* Newbury Park, CA: Sage; 1992.
20. Mio JS, Iwamasa G. To do, or not to do: that is the question for white cross-cultural researchers. *Counsel Psychol.* 1993;21:197-212.