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The Health and Health Behaviors of a Sample of African American Pastors

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Abstract

There is growing concern for the health status of clergy in light of recent studies showing high rates of chronic health conditions and obesity. This manuscript examined the health and health behaviors of South Carolinian African Methodist Episcopal (AME) pastors (n=40). A majority of pastors were overweight or obese (93%) with hypertension (68%); half had two or more chronic health conditions, 35% had high cholesterol, 30% arthritis, and 20% diabetes. On average, pastors had a waist circumference that put them at an increased risk for disease. Yet, with the exception of fruit and vegetable consumption (mean=3.4 ±4.0 cups/day), pastors generally engaged in positive health behaviors. Understanding where the greatest needs lie is the first step in developing programs that can improve pastor health, which may ultimately improve the health of their congregations.

Keywords

Pastor; health status; health behaviors; African Americans

Early studies focusing on longevity suggested that clergy were healthier than the general population as indicated by lower mortality rates.¹ However more recently, studies have defined health more broadly, as *well-being*.² Although stress has been studied extensively among members of the clergy,^{3,4} few studies have examined their physical health.^{2,5} The handful of studies reporting on the physical health of clergy thus far highlight an at-risk population, with high rates of obesity^{2,4,6–8} and chronic health conditions.^{2,4,6}

The respected position of clergy, and their discipline in the realm of spirituality, may lead people to assume they are also disciplined when it comes to health behaviors.⁹ In addition to

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the challenges associated with living a healthy lifestyle that the general population faces, clergy may encounter additional, unique barriers as a result of the sheer nature of their work. A study with United Methodist pastors found that the inability to set boundaries and the perception that the pastor is available 24 hours a day negatively affected their self-care practices (e.g., physical activity).⁹

Although there is some evidence that clergy are more physically active than the general population,^{2,4,7,10} a large percentage are still not getting sufficient amounts of physical activity. Less is known about dietary habits, although a couple of studies have examined fruit and vegetable consumption and found comparable² to superior⁷ consumption among clergy than the general population. In any case, the high prevalence of obesity and chronic health conditions substantiate the need for improved physical activity and dietary behaviors among clergy, as both are established risk factors for chronic health conditions.¹¹ Additional studies with African American clergy are particularly needed, as most studies thus far have relied on samples predominantly of White clergy to explore the physical health conditions and health behaviors of clergy.^{4,6,7,8}

Churches have been studied as settings to deliver health promotion programs, particularly in racial/ethnic minority populations. Results from faith-based programs targeting African Americans have shown promise for improving health behaviors such as physical activity, dietary behaviors, cancer screening, weight loss, and smoking cessation.¹² A common theme across faith-based programs targeting African Americans is the importance of the pastor in supporting program efforts. Many studies have emphasized the importance of pastor support in successful faith-based initiatives.^{13–17} Many pastors believe they have influence and/or authority over their congregation in promoting health,^{18,19} and some believe they serve as role models to their congregations when it comes to health-related issues.^{19,20} However, pastors who do not practice healthy behaviors themselves may not feel comfortable in preaching what they do not practice²¹ or may not want to change traditional practices in their church (e.g., serving high-fat foods at church events). Therefore the health behaviors and practices of pastors may hold significant influence in whether health promotion efforts are supported and/or promoted within the church environment.

Studies examining the health of clergy overall are limited, while studies examining subgroups of clergy including African Americans are particularly lacking.⁵ Such studies will provide insight into the state of the health of African American pastors, provide insight into where health promotion efforts should take place, and ultimately, because pastors are so influential, assist in improving faith-based health promotion efforts targeting church members' health. The purpose of this manuscript is to examine the physical health and health behaviors of a sample of African Methodist Episcopal (AME) pastors whose churches were recruited to take part in a physical activity and dietary intervention, the Faith, Activity, and Nutrition (FAN) program.^{22,23}

Methods

The Faith, Activity, and Nutrition (FAN) program was a 15-month physical activity and dietary intervention implemented in 74 AME churches in South Carolina. The intervention

was developed using a community-based participatory research approach²⁴ and targeted organizational and environmental changes within the church, consistent with the structural ecological model.²⁵ The primary goals of FAN were to increase moderate to vigorous intensity physical activity and fruit and vegetable consumption.²²

Church recruitment and measurement sessions

A more detailed description of the FAN methods has been previously published.^{22,23} In short, presiding elders from four of the geographically-defined AME districts in South Carolina sent pastors a letter introducing the FAN program and inviting participation. Program staff made follow-up telephone calls to pastors to provide more details about the FAN program and to answer questions. Pastors from interested churches typically appointed a liaison from their church to assist program staff to schedule and coordinate measurement sessions.

Liaisons from interested churches recruited members of their congregation to take part in a measurement session at baseline, prior to randomization. At each session, participants completed an informed consent form approved by the Institutional Review Board at the University of South Carolina and by the FAN planning committee. Upon providing consent, trained staff took physical assessments and participants completed a comprehensive survey. Because this study only used baseline data, details of the intervention are not described in this study. While pastors were not required or requested to take part in the measurement session, pastors from 40 of the 74 churches took part, and are included in this manuscript.

Measures.

Sociodemographic and health-related variables.—Participants self-reported their age, gender, whether they smoked, and rated their health from poor to excellent.

Screening behaviors.—Participants reported if they had seen their health care provider in the past 12 months (yes/no). Participants were also asked if they had ever had their blood pressure and blood sugar checked by a health professional; if they had ever had a prostate-specific antigen (PSA) test (men only); and if they had ever had a mammogram and Pap test (women only). Participants answering *yes* were asked to report if they had been screened within the past year, two years, five years, or more than five years.

Chronic health conditions.—Self-reported presence of diabetes, hypertension, high cholesterol, and arthritis was assessed by asking participants, “Have you ever been told by a doctor, nurse, or other health professional that you had.....?” Resting blood pressure was also taken using standard procedures.⁵² Participants with a systolic blood pressure >140mmHg or diastolic blood pressure >90mmHg or who answered *yes* on the self-report question were classified as having hypertension.

Body mass index (BMI).—Height to the nearest quarter inch and weight to the nearest 1/10 kilogram were obtained by trained staff. BMI was calculated as kg/m² using standard procedures.

Waist circumference.—Waist circumference to the nearest 0.1 cm was measured by trained staff by locating the narrowest part of the torso, located between the participant's ribs and the iliac crest. A waist circumference >94 cm (men) and >80 cm (women) was used as a cut point for increased health risk and >102 (men) and >88 (women) was used as a cut point for substantially increased risk.²⁶

Perceived stress.—A four-item version of the Perceived Stress Scale^{49,50} measured the degree to which situations in one's life are appraised as stressful.

Fat and fiber intake.—The Fat and Fiber-Related Behavior Questionnaire²⁷ assessed fat- (27 items) and fiber-related (14 items) dietary behaviors over the past three months. These summary scores have shown strong psychometric properties.^{27,28}

Fruit and vegetable intake.—The National Cancer Institute (NCI) Fruit and Vegetable all-day screener measured FV consumption (cups/day) in the past month.²⁹ Nine of the original 10 items were used (french fry consumption was excluded).³⁰ This instrument has shown acceptable psychometric properties.^{31,32}

Physical activity.—A 36-item modified version of The Community Health Activities Model Program for Seniors (CHAMPS) questionnaire³³ assessed the frequency and duration of leisure-time moderate to vigorous physical activity “in a typical week during the past four weeks.” This measure has been shown to have strong psychometric properties.^{33,34} Hours per week of leisure-time moderate to vigorous PA (≥ 3.0 METs, household and related activities removed) was calculated.

The ActiGraph accelerometer was used to objectively measure physical activity in a randomly selected subsample of participants. Participants were instructed to wear the ActiGraph on their right hip during all waking hours (except in water) for five to seven consecutive days. A 60-second epoch was used. Data were only included in analyses if participants wore the monitor for a three or more days and for 10 or more hours per day. ActiGraph data recording zeros consecutively for 60 minutes or longer were removed from the analyses; we assumed the monitor was not being worn during this time.^{35,36} Mean daily minutes of moderate to vigorous intensity physical activity, defined as counts of 1952 or higher, were calculated.³⁷

Statistical analyses.

Health and health behavior characteristics of the entire sample of pastors, and for men and women separately were examined. Differences between genders were examined with chi-squares and one-way ANOVAs.

Results

Pastors from 40 churches (n=29 men and n=11 women) completed baseline measures. Sixteen of the 40 pastors wore an accelerometer and met the wear time criteria described above. The mean age of the sample was 53±7 years and a majority of the pastors were married (73%) and college graduates (90%). The health characteristics of the pastors are

shown in Table 1. There were no significant differences between male and female pastors in any of the variables examined. A majority of pastors were overweight or obese (93%), had hypertension (68%), and rated their health as at least good (90%). Half of all pastors had at least two chronic health conditions, 35% had high cholesterol, 30% arthritis, 20% diabetes, 5% angina, and 5% myocardial infarction. The mean BMI was $32 \pm 6 \text{ kg/m}^2$ (obese), the mean waist circumference was $98 \pm 10 \text{ cm}$ (increased risk for men, substantially increased risk for women), and the mean systolic and diastolic blood pressures were $128 \pm 17 \text{ mg Hg}$ and $75 \pm 11 \text{ mg Hg}$.

Screening behaviors of the pastors are shown in Table 2. There were no significant gender differences in the screening behaviors of pastors. A majority of pastors (98%) had seen a health care professional and had their blood pressure (95%) and blood sugar (88%) screened by a health professional in the past year. Among men, of those 45 years of age, 74% of pastors had a PSA test within the past year, and 9% had the test within the past two years. Among women, 90% of pastors had a mammogram within the past year and 10% had one in the past two years; 55% had a Pap test within the past year and 46% had a Pap test within the past two years.

The health behaviors of the pastors are shown in Table 3. A majority of pastors did not smoke (98%), consumed 3.4 ± 4.0 cups of fruits and vegetables per day, had average fat- (2.7 ± 0.5) and fiber- (2.7 ± 0.6) related behavior scores and had lower than average stress scores (2.0 ± 0.7). Pastors engaged in 5.9 ± 6.8 hours of self-reported leisure time physical activity per week (CHAMPS) and 17.9 ± 13.1 minutes of objectively measured moderate to vigorous intensity physical activity each day (Actigraph). The only significant gender difference in health behaviors that emerged was for objectively measured physical activity; female pastors engaged in significantly more moderate to vigorous intensity physical activity per day (29.1 ± 14.4 minutes/day) than male pastors (14.2 ± 10.8 minutes/day; $p = .045$).

Discussion

Stress³ and burnout³⁸ have been shown to be a problem among clergy. Pastor burnout often puts pastors in a state of frustration, especially when they feel that the work they are doing is not getting the results they intended. Pastors are likely more susceptible to burnout than individuals from other occupations because of the numerous and diverse roles they have in the church and community. There is also growing concern for the health status of clergy in light of the higher rates of chronic diseases, particularly obesity, reported in recent studies.^{6,8} There is a gap in the existing literature examining the health status of African American pastors.⁵ Because African Americans typically have higher disease rates and worse health behaviors than whites in general,^{39–41} it is reasonable to assume that the same may be true for pastors. This study examined the health and health behaviors of a sample of AME pastors from South Carolina. The results highlight that African American pastors, including both men and women, may be a high-risk population with regard to health conditions, and one that should be targeted in future health initiatives.

The health of any organization's employees, including the church, is central to its overall success and productivity.² Following the footsteps of companies, many dominations are

beginning to examine the health of their clergy.² Improving the health of pastors may assist them in successfully managing and carrying out the numerous and diverse responsibilities they have within the church. Pastors are expected to be administrators, caregivers, preachers, teachers, healers, confidants, and leaders of workshops, worship services, Bible studies, and church retreats, among many other things;³⁸ the ministry is a “twenty-four/seven” calling for most pastors.³ It would be nearly impossible to successfully carry out each of these responsibilities if one is not in reasonable physical health. A majority of the pastors in this study were overweight or obese, hypertensive, had at least two chronic health conditions, and had waist circumferences that put them at an increased risk (men) or substantially increased risk (women) for disease. A significant percentage (20–35%) of pastors also had diabetes, arthritis, and high cholesterol.

The church has traditionally served a significant role in providing health information and health care to the African American community,⁴² and has been a setting for delivering health promotion programs to African Americans.¹² The degree to which clergy themselves demonstrate healthy behaviors may shape the social norms around health and weight.⁶ The health behaviors of the pastors in this study were promising; only one pastor smoked, they had above average fat -and fiber-behaviors, had lower than average perceived stress, and a majority of pastors saw a healthcare professional in the past 12 months and completed health-related screenings. However, fruit and vegetable consumption was lower than current recommendations. Although self-reported data indicated that pastors engaged in adequate amounts of physical activity, data from the subset of pastors wearing the accelerometer painted a different picture, one that suggests pastors, particularly male pastors whom engaged in significantly less moderate to vigorous intensity physical activity compared to female pastors, do not engage in sufficient physical activity.

Caution should be taken when interpreting the health behaviors as all, with the exception of physical activity in a subset, were assessed with self-report measures. The discrepancy in self-reported verses objectively measured physical activity suggests that pastors may have felt obligated to report that they were engaging in healthy behaviors (i.e. social desirability bias). Alternatively, pastors are no doubt very busy individuals; as reported in another study with African American women,⁴³ it is possible that they equated being “busy” with being physically active. Unfortunately we did not assess dietary intake with either food frequency questionnaires or 24-hour dietary recalls. Thus, we are unable to report on dietary practices that we would expect to relate to overweight and obesity such as total caloric intake and fat intake. Given the high prevalence of chronic health conditions and anthropometrics described above, pastors could benefit from improvements in all of these health behaviors.

Churches have acknowledged the importance of support from the pastor in implementing health promotion programs,^{13–17} have asked pastors to preach about health topics in sermons,^{22,44–46} and have even encouraged pastors to serve as role models for engaging in healthy behaviors such as physical activity and healthy eating.²² Although many pastors believe it is appropriate to talk about health-related topics in sermons or in one-on-one settings with congregants,⁴⁷ pastors who live unhealthy lifestyles may not feel comfortable preaching what they do not practice²¹ or may not want to change traditional practices in their church (e.g., serving high-fat foods at church events). Therefore, encouraging pastors to

engage in healthy lifestyle behaviors may not only benefit themselves, but may also benefit their congregations.

Although pastors are often included as “participants” of faith-based health promotion interventions, the findings from this study underscore the need for health promotion initiatives that specifically target faith leaders alone. Efforts to improve the health and well-being of United Methodist Clergy in North Carolina are currently being undertaken through The Duke Clergy Health Initiative’s Spiritual Health program.^{48,49} This program is a holistic health and wellness program for clergy that includes resources for stress management, mindful eating and exercise, and spiritual renewal, as well as coaching and support.⁵⁰ It also includes health screenings and surveys that will track participants’ health throughout the program. Programs like this may not only assist in improving the health status of pastors, but also in improving the health status of their congregation. Such programs would give pastors an opportunity to make changes to their own lifestyle which may lead them to be more comfortable in serving as a role model to their congregants and in encouraging their members to improve their own health behaviors. Programs targeting faith leaders should take into consideration the hectic and busy lives pastors live; qualitative data via interviews or focus groups with the targeted population will be invaluable in developing a program that pastors can realistically participate in and benefit from.

Despite the suboptimal health of the pastors in our manuscript, most pastors rated their health positively, indicating a disconnect between objective and subjective health. This finding is in line with other reports of clergy who found that despite less than ideal physical health (e.g. high BMI), self ratings of health were quite positive.^{7,19} Although a number of factors contribute to individuals’ health rating,⁵¹ our findings suggest that pastors may not be aware of the negative state of their physical health, or perhaps they are aware, but do not feel it’s serious or of concern. Alternatively, it is possible that they view “health” more broadly to include emotional and spiritual health, and these aspects have considerably more influence when rating their health. Although pastors could benefit from programs aimed at improving their physical health, the positive health ratings, despite high rates of obesity and health conditions, may pose a challenge to convincing pastors that such programs are necessary and worthwhile.

In the AME church specifically, health is among its many ministries, and the church works to improve the health and well-being of their congregations. There are 603 AME churches in South Carolina with approximately 275,000 members, providing a great opportunity to reach and improve the health of a large number of African American pastors and congregants. AME churches in South Carolina have had a long-standing partnership with local universities; together they have delivered programs aimed at improving the health of its members.^{22,46} Recognizing the support of the pastor,⁴⁶ the most recent collaboration²² included an intervention training for the pastors and intervention activities that specifically targeted pastors as change agents. Although useful and necessary, future studies may also want to consider delivering a pastor-focused health promotion intervention prior to initiation of the program targeting the entire church (i.e. “pre-intervention”). Improving the health of pastors and the confidence they have in making healthy lifestyle changes during this “pre-

intervention” may strengthen their ability and self-efficacy in carrying out their role in delivering health promotion programs to their congregants.

Pastors have discussed a deep tension between their numerous church responsibilities and the time needed to care for their own health.⁵² This tension is supported by the substantial rate of chronic health conditions of faith leaders, including the African American pastors in our study. Although this study only includes a small sample of AME pastors, it provides insight into the health status of pastors in AME churches in South Carolina. Understanding where their greatest needs lie is the first step in developing programs that can improve pastor health, and ultimately maybe even the health of their congregation.

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Table 1.**Health Status and Conditions of African American Pastors**

	Total Sample (n=40)		Men (n=29)		Women (n=11)	
	N	Mean (SD) or %	N	Mean (SD) or %	N	Mean (SD) or %
Systolic Blood Pressure, mm Hg	39	128.0 (16.6)	28	125.9 (15.5)	11	133.6 (18.7)
Diastolic Blood Pressure, mm Hg	39	74.6 (10.8)	28	75.3 (9.8)	11	72.8 (13.4)
Waist Circumference, cm	40	97.6 (10.2)	29	98.4 (10.2)	11	95.5 (10.4)
BMI, kg/m ²	40	31.6 (5.7)	29	31.2 (6.2)	11	32.6 (3.8)
Weight status	3	7.5	3	10.3	0	0
Normal weight	13	32.5	10	34.5	3	27.3
Overweight	24	60.0	16	55.2	8	72.7
Obese						
Chronic Health Conditions, %	27	67.5	18	62.1	9	81.8
Hypertension	8	20.0	5	17.2	3	27.3
Diabetes	14	35.0	11	37.9	3	27.3
High cholesterol	12	30.0	9	31.0	3	27.3
Arthritis	2	5.0	1	3.5	1	9.1
Angina	2	5.0	2	6.9	0	0.0
Myocardial Infarction	0	0.0	0	0.0	0	0.0
Osteoporosis						
Chronic conditions, total #	40	1.7 (1.2)	29	1.7 (1.3)	11	1.8 (1.0)
0	7	17.5	7	24.1	0	0.0
1	13	32.5	8	27.6	5	45.5
2	9	22.5	5	17.2	4	36.4
3	7	17.5	6	20.7	1	9.1
4	4	10.0	3	10.3	1	9.1
Self-rated health, %	4	10.0	4	13.8	0	0.0
Excellent	14	35.0	8	27.6	6	54.6
Very good	18	45.0	14	48.3	4	36.4
Good	4	10.0	3	10.3	1	9.1
Fair	0	0.0	0	0.0	0	0.0
Poor						

Health-related Screening Behaviors of African American Pastors by Health Professionals

Table 2.

	Total Sample (n=40)		Men (n=29)		Women (n=11)	
	N	Mean (SD) or %	N	Mean (SD) or %	N	Mean (SD) or %
Saw health professional in past 12 months, % yes	39	97.5	28	96.6	11	100.0
Blood pressure screening						
Never	1	2.5	1	3.5	0	0.0
Within past year	38	95.0	27	93.1	11	100.0
Within past two years	1	2.5	1	3.5	0	0.0
Blood sugar screening						
Never	4	10.5	4	13.8	0	0.0
Within past year	35	87.5	24	82.8	11	100.0
Within past two years	1	2.5	1	3.5	0	0.0
Prostate-Specific Antigen test (PSA) ^a						
Never		N/A	3	13.0		N/A
Within past year			17	73.9		
Within past two years			2	8.7		
Within past 5 years			1	4.4		
Mammogram						
Within past year		N/A		N/A	9	90.0
Within past two years					1	10.0
Pap test						
Within past year		N/A		N/A	6	54.6
Within past two years					5	45.5

^a 9 pastors were <45 years of age and thus not included

Table 3.

Health Behaviors of African American Pastors

	Total Sample (n=40)		Men (n=29)		Women (n=11)	
	N	Mean (SD) or %	N	Mean (SD) or %	N	Mean (SD) or %
Smoker, yes	1	2.5	29	0.0	1	9.1
Moderate to vigorous intensity physical activity, min/day (Actigraph) ^{a,b}	16	17.9 (13.1)	12	14.2 (10.8)	4	29.1 (14.4)
Leisure-time physical activity, hours/week (CHAMPS)	40	5.9 (6.8)	29	5.8 (7.0)	11	6.0 (6.7)
Fruit and vegetable consumption, cups/day	40	3.4 (4.0)	29	3.9 (4.3)	11	3.5 (3.0)
Fat-related behaviors ^c	40	2.7 (0.5)	29	2.7 (0.6)	11	2.6 (0.4)
Fiber-related behaviors ^c	40	2.7 (0.6)	29	2.7 (0.6)	11	2.7 (0.4)
Stress ^d	40	2.0 (0.7)	29	2.1 (0.7)	11	1.8 (0.7)

^a Not all pastors were invited to wear an Actigraph, therefore, the sample size is smaller

^b Significant difference between genders

^c Range 1–5, lower score indicates less stress

^d Range 1–4, lower more favorable fat- and/or fiber-related behaviors