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Health Behaviors and Preventive Healthcare Utilization Among African–American Attendees at a Faith-Based Public Health Conference: Healthy Churches 2020

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Abstract

Unhealthy eating habits and physical inactivity along with lack of access to quality healthcare contribute to the marked health disparities in chronic diseases among African–Americans. Faith-based public health conferences offer a potential opportunity to improve health literacy and change health behaviors through health promotion within this population, thereby reducing health disparities. This study examined the self-reported health behaviors and preventive healthcare utilization patterns of 77 participants at a predominantly African–American faith-based public health conference, Healthy Churches 2020. A self-administered questionnaire was distributed to a sample of attendees to assess their health behaviors (diet and physical activity), preventive healthcare utilization (annual healthcare provider visits), and health-promoting activities at their

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Ethical Standards All procedures performed in studies involving human participants were in accordance with the ethical standards of the institution and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

places of worship. The results indicate that attendees of a faith-based public health conference have adequate preventive healthcare utilization, but suboptimal healthy behaviors. Our findings support the need for ongoing health-promoting activities with an emphasis on diet and physical activity among this population.

Keywords

Health disparities; African–American churches; Clergy; Health promotion; Health behaviors; Health ministries; Healthcare utilization; Faith-based organizations

Introduction

African–Americans continue to suffer from a myriad of health disparities such as lack of access to quality healthcare and healthy food options and delayed diagnosis and treatment of chronic diseases. More specifically, they experience disproportionately higher mortality rates from chronic diseases such as cardiovascular disease, stroke, diabetes and cancer as their life expectancy is 4 years less than White Americans (Centers for Disease Control and Prevention 2017). The origins of health disparities are multifactorial and are reflective of interconnected determinants of health including individual health behaviors, health literacy, access to health services as well as socioeconomic, environmental and psychosocial factors (US Department of Health and Human Services 2018). Religiosity, a major social influence in the lives of many African–Americans, has also been associated with their health behaviors (Holt et al. 2014). According to the 2009 Pew Forum US Religious Landscape Survey, 87% of African–Americans belong to a religious group and their weekly religious service attendance exceeds all other racial groups (Lugo et al. 2008). There are a plethora of studies highlighting the religion–health connection (Levin et al. 2005; Lucchetti and Lucchetti 2014) with several showing a broad protective relationship between religious participation and mortality from chronic diseases (Levin et al. 2005; Koenig 2015; Li et al. 2016; VanderWeele et al. 2017). Thus, faith-based organizations, such as the Black Church, are influential institutions to combat health disparities within the African–American community.

The Black Church has served as a consistent pillar for the spiritual, social, physical and overall well-being of its “constituents.” It is unrivaled in its influence on progression and social justice in the African–American community (Austin and Harris 2011; Baruth et al. 2013; Harmon et al. 2013; Lumpkins et al. 2013; Odulana et al. 2014; Rowland and Isaac-Savage 2014). Historically, it has played a vital role in addressing the sociocultural needs of the African–American community as well as the provision of health services and health promotion activities to underserved groups (Gross et al. 2017). Hence, it is logistically positioned to serve as a focal point for education and health promotion programs due to social stability and prominence among African–Americans (Whitt-Glover et al. 2014). DeHaven and colleagues have shown the effectiveness of faith-based health programs given their significant increases in health literacy, preventive screening awareness and optimal health behaviors in African–American communities (DeHaven et al. 2004).

In recognition of the exceptional influence of the Black Church within the African–American community, The Balm in Gilead, Incorporated (Inc.) has partnered with African–

American faith-based organizations to promote health and wellness through culturally relevant programs and services to improve health literacy and reduce health disparities in underserved communities. Founded in 1989, The Balm in Gilead, Inc. is a nonprofit organization which initially focused on HIV/AIDS prevention among African-Americans by increasing community awareness and promoting HIV prevention and screening (The Balm in Gilead Incorporated 2017). In 2014, their efforts expanded to other chronic diseases with the creation of the Healthy Churches 2020 National Conference. This conference serves as a national platform for health ministries to learn and share best practices in healthy lifestyle promotion within the African-American faith community. Since its inception, the conference has continued to expand and diversify, as the 2016 conference attendees represented 22 states and 17 national denominations with access to over 2.5 million African-Americans by their faith-based organization affiliations (Healthy Churches 2020 2017). Therefore, this conference creates a unique environment of clergy, health ministry leaders, public health experts and the medical community in one setting with the overarching goal of empowering and equipping the attendees to disseminate health information and implement health promotion programs in their local communities.

Several studies have examined the lifestyle practices including healthy diet and regular physical activity of African-American clergy and their influence on the health and wellness of their congregations (Baruth et al. 2013; Harmon et al. 2013; Lumpkins et al. 2013; Webb et al. 2013; Baruth et al. 2014; Rowland and Isaac-Savage 2014; Baruth et al. 2015; Lindholm et al. 2016). However, there is a paucity of studies examining the health behaviors and preventive healthcare usage of church and health ministry leaders within the African-American faith community. These gaps in literature are concerning since optimal health and wellness of these individuals—key role models and change agents of their communities—is essential to alleviating the chronic disease burden among African-Americans. The purpose of this study is to examine the health behaviors and preventive healthcare utilization patterns of attendees at a predominantly African-American faith-based public health conference, Healthy Churches 2020, which could provide additional knowledge on the role of such conferences in health promotion within African-American faith communities.

Materials and Methods

Partnership Development Through Community Engagement

In an effort to increase community engagement and research efforts to address health disparities within the African-American community, Mayo Clinic team members from all three destination practice sites (Rochester, Minnesota; Scottsdale, Arizona; and Jacksonville, Florida) attended the 2015 Healthy Churches 2020 National Conference. The teams consisted of clinicians, researchers and selected Mayo Clinic-affiliated community partners significantly involved in community-engaged research focused on chronic disease health disparities (Colon-Otero et al. 2012; Brewer et al. 2014; White et al. 2015; Brewer et al. 2017a, b). Other goals for attending were to glean best practices from other community-based organizations and medical experts on healthy lifestyle promotion in underserved communities and to encourage future research collaboration between the geographically separated investigators.

After attending the 2015 conference, there was a collective interest by all three Mayo Clinic sites to better understand the healthy lifestyle practices of the conference attendees given their high potential for impacting health disparities within their respective faith communities through health promotion. Over the next year, rapport was established between Mayo Clinic investigators and leadership of The Balm in Gilead, Inc. (P.S.) and the organization was approached about a potential collaborative research study to assess the health behaviors and preventive healthcare use of its annual Healthy Churches 2020 National Conference attendees. After reviewing the objectives of the proposed research, The Balm in Gilead, Inc. joined in a partnership as the study aligned with their mission of addressing health disparities and provided a means for the organization to gain introspective insight into how it could better support the health promotion needs of conference attendees.

Study Design and Participants

This cross-sectional study aimed to probe the health behaviors and healthcare utilization patterns of faith-based leaders actively involved in delivering health services and health education programming in predominately African–American congregations. A brief survey was administered by Mayo Clinic staff in collaboration with The Balm in Gilead, Inc. during their Healthy Churches 2020 National Conference held in Charlotte, North Carolina, in November 2016. There were 286 registered conference attendees representing 22 states and 17 faith-based organizations that were eligible to participate in this on-site cross-sectional study.

Procedures

The surveys were distributed to conference attendees over the 3-day conference sessions. Attendees were invited to participate in the survey as they visited the Mayo Clinic-sponsored booth in the conference exhibit hall and during conference session breaks within the main conference hall. Instructions for voluntary consent to participate in research by completing and submitting the anonymous survey were provided to all participants. The purpose and voluntary nature of the survey was explained to the individuals, and all questions on its components were addressed by a Mayo Clinic team member. Upon completion of the survey, participants were provided with an appreciative incentive (Mayo Clinic tote bag).

Survey Design and Content

An 11-item survey was developed collaboratively by Mayo Clinic clinical investigators and affiliated community members across three Mayo Clinic sites with the intention of distributing to attendees of the 2016 Healthy Churches 2020 National Conference. All survey items were devised by the study team and were not based on previously validated instruments. The survey included items to assess demographics (e.g., age, gender, race, marital status, medical insurance status, and profession/ministry position), the effect of race on health and opinion of Mayo Clinic as a medical and academic institution, medical history (e.g., prescription medication use, recent emergency department visits and hospitalizations in the past 12 months), health behaviors (diet and physical activity) and preventive healthcare utilization (annual healthcare provider visits). The survey was reviewed and approved for cultural sensitivity, readability and understanding for the African–American

faith community by The Balm in Gilead, Inc. leadership, the Mayo Clinic Office of Health Disparities Research and Mayo Clinic Institutional Review Board.

Measures

Health Behaviors

Diet was assessed by self-reported percentage of weekly meals consisting of mostly fruits, vegetables and lean meats with a healthy diet defined as greater than 80% of weekly meals containing these components. Participants were specifically asked: What percentage of your weekly meals would be considered healthy (mostly vegetables, fruits, lean meats)? Selections were the following: (a) greater than 80%, (b) 50–80%, (c) less than 50%. Physical activity was assessed by self-reported frequency of weekly participation in moderate-intensity physical activities such as brisk walking, dancing or low-impact aerobics for at least 30 min with regular physical activity defined as engaging in physical activity three times or more per week. Participants were specifically asked: How many times a week do you perform moderate physical activities (like brisk walking, dancing or low-impact aerobics) for at least 30 min? Selections were the following: (a) 0, (b) 1–2, and (c) 3 or more.

Preventive Healthcare Utilization

A “yes” or “no” response was asked for whether participants visited their healthcare provider on an annual basis.

Other Survey Measures

Additional items queried (by “yes” or “no” response options) whether participants were a part of a church with active congregation engagement in health promotion activities (by pastor or church leader or functioning health ministry) as well as whether they were part of a church which had prior outreach from academic entities such as medical organizations, colleges or universities for partnerships.

Statistical Analyses

Descriptive statistics for participant demographic, health behaviors and preventive healthcare utilization data were summarized as means with standard deviation (SD) for continuous variables and numbers with percentages for categorical variables. Associations between categorical variables were evaluated using the Chi-square test, and 95% normally approximated confidence intervals were constructed. All analyses were performed using SAS 9.4 (SAS Institute, Cary NC). p values < 0.05 were considered statistically significant.

Results

Demographics

Of the 77 surveys distributed, 77 attendees completed the survey (100% completion rate) which represents 27% of the 286 conference attendees. The majority of study participants were female (74%), pastors or health ministry leaders (52%), married (54%), and African–American (87%) (Table 1). Over half (58%) of participants felt that race influenced their

health. Of those participants, 65% felt that race negatively influenced their health. Three-fourths of participants had a positive opinion about Mayo Clinic.

Health Behaviors and Preventive Healthcare Utilization

Thirty percent of participants reported adhering to a healthy diet (greater than 80% of their weekly meals consisting mostly of fruits, vegetables and lean meats), whereas 70% reported not adhering to a healthy diet (Table 2). Over half (51%) of participants reported participation in physical activity greater than three times per week and 14% indicated no weekly physical activity. The majority (88%) visited their healthcare provider annually for preventive care.

Impact of Congregation Health Promotion Activities

In terms of congregation health promotion activity in their places of worship, 66% had functioning health ministries while 61% reported that a healthy lifestyle was promoted regularly by their pastor or church leader (Table 1). Over half (52%) reported prior outreach to their respective churches for partnerships with academic entities such as medical organizations or universities. Those individuals reporting pastor and church leadership healthy lifestyle promotion or a functioning health ministry at their place of worship were more likely to be a part of a church with prior outreach for partnership with an academic entity (72 vs. 25%, $p < 0.01$; 62 vs. 33%, $p < 0.02$) as compared to those who did not report these congregation health promotion activities (Table 3). There were no statistically significant associations between congregation health promotion activities and health behaviors (healthy diet, regular physical activity) or preventive healthcare utilization (annual healthcare provider visits).

Discussion

Our findings demonstrate that the self-reported health behaviors among attendees of a predominately African–American faith-based public health conference inclusive of church and health ministry leaders are suboptimal despite their high usage of annual preventive healthcare services. This infers that the health behavior of pastors and health ministry leaders in general may be comparably or more suboptimal given the clear self-interest in health of our sample. This is relevant as church congregants and community members look to these individuals for guidance in their own health behaviors. Several studies have discussed the potential positive impact that church leadership can have on church congregant health behavior through health promotion from the pulpit or through support of health programs within the church (Baruth et al. 2013, 2015; Lumpkins et al. 2013). However, our results have not demonstrated a clear positive correlation between church and health ministry leader optimal health behaviors and the presence of church health promotion activities (healthy lifestyle promotion by the pastor or church leader, functional health ministry). Furthermore, our findings underscore the need for enhanced health-promoting activities in collaboration with medical/academic institutions that call attention to maintaining a healthy diet and regular physical activity among African–Americans. Altogether, the findings of this study provide insight into whether those in leadership roles within African–American faith communities actually “practice what they preach” in terms of

promoting healthy behaviors for chronic disease prevention and the ultimate goal of eradicating of health disparities.

Our results are consistent with other studies demonstrating poor dietary choices and physical inactivity among African-Americans (Djousse et al. 2015; Benjamin et al. 2017; Brewer et al. 2017a; Carnethon et al. 2017; Brown et al. 2018). It was expected that individuals electing to attend a health-focused conference and those involved in health promotion activities within their respective congregations would demonstrate a greater degree of optimal health behaviors than the larger communities that they serve. Similarly, Baruth and colleagues demonstrated suboptimal physical activity and fruit and vegetable consumption among African-American pastors (Lumpkins et al. 2013; Baruth et al. 2014). Poor health outcomes in 2 geographically separate African-American congregations correlated directly with their health attitudes and beliefs reaffirming the need for health education and promotion in the African-American church (Lewis and Green 2000). Comparable to our study participants, the church members reported high preventive care utilization but less than ideal regular physical activity and healthy diet. As an exception, one study of 1200 African-American congregants showed relatively healthier lifestyle practices with participants self-reporting healthy food choices (50%) and regular physical activity on most days of the week (64%) (Odulana et al. 2014). Interestingly, our study participants were more likely to report having annual preventive examinations than African-American women within a recent prospective cohort study (88 vs. 67%) (Pullen et al. 2014), but demonstrated identical patterns to older African-American adults within a population-based sample (Musa et al. 2009).

It is plausible that our findings are consistent with the fact that pastors and health ministry leaders face challenges engaging in healthy lifestyle practices such as following a healthy diet and maintaining a regular physical activity regime. Prior studies show that the health behaviors of clergy are poor due to the high physical and emotional demands of their profession (Webb et al. 2013; Baruth et al. 2014, 2015; Lindholm et al. 2016). One study indicated clergy had high self-reported good health despite actually having a high prevalence of chronic health conditions. It also posited that clergy may be uncomfortable discussing health-related issues due to their own unhealthy lifestyles (Baruth et al. 2014). Several bodies of literature to date have shown that the health practices of African-American clergy have a direct influence on their congregation members (Austin and Harris 2011; Baruth et al. 2013, 2014, 2015; Webb et al. 2013; Rowland and Isaac-Savage 2014; Lindholm et al. 2016). Also, the health status of a clergy member can determine their attitude and motivation toward implementing health-promoting activities within their church. Faith-based health promotion initiatives suffer when pastors are not supportive of the health promotion strategies (Webb et al. 2013; Baruth et al. 2015). Because pastors and church auxiliary leaders are held in high regard and viewed as agents of change, they play a significant role in shaping the physical and social environments of their faith communities to promote health and wellness (Baruth et al. 2013, 2014, 2015). Thus, faith-based public health conferences can play a role in providing clergy and health ministry leaders with education on self-care and proper training on effective health promotion within their churches and faith-based organizations.

Strengths and Limitations

Our study has several strengths. To our knowledge, this is the first study to engage in a research partnership with leadership of a faith-based public health conference which afforded us the opportunity to explore the health behaviors and preventive healthcare utilization of church and health ministry leaders. Given this distinctive forum, our study pooled a geographically diverse sample representing 22 different states from varying regions throughout the US enhancing its relevance and generalizability to the African–American faith community. We also had a favorable survey completion rate (100% of distributed surveys) which is likely reflective in part to our succinct, culturally tailored survey tool and face-to-face survey distribution.

This study has several limitations that merit discussion. The sample size was small, limiting the generalizability of the results to all African–Americans, and it lacked statistical power to make strong conclusions regarding influences such as congregation health promotion activities on health behaviors among the African–American faith community. However, we are confident that our study sample was comparable to and representative of the conference attendees as a whole according to Healthy Churches 2020 National Conference demographic data (90% African–American, 54% pastors or health ministry leaders, 41% healthcare professionals) (Healthy Churches 2020 2017). As our study was exploratory in nature, the sample size was sufficient to achieve our goal of assessing health behaviors within the African–American faith community. In addition, health behaviors were not assessed by instruments previously validated within a similar population. However, the questions were based in general from guidelines from national agencies and medical centers such as the American Heart Association and Mayo Clinic (American Heart Association 2017; Mayo Clinic 2016). There is also a possibility of selection and social biases given that individuals attending a faith-based public health conference may be more apt to engage in healthy behaviors in comparison with non-attendees although our findings did not support this assumption. We also acknowledge that this was a cross-sectional study with lack of longitudinal data on the respondents to assess the impact of their attendance of the conference on their lifestyle practices and those of their respective faith communities. We also did not inquire whether the participants were first time attendees to the conference to ascertain if repeated exposure to the content of the meeting impacted health behavior. Nevertheless, the results from this study shed light on the necessity of enhancing conference programming to promote self-care and health and wellness among this group. This training would better equip conference attendees to effectively mobilize and empower their communities toward healthy lifestyle practices. Moreover, our study provides vital insights to similar conferences, community-based organizations and researchers to inform the development and implementation of health-promoting activities and community-level interventions. These efforts altogether may impact health disparities by improving health literacy and skill development for healthy lifestyle practices. Future research should incorporate qualitative methods to provide a more comprehensive and rich perspective into the sociocultural factors and barriers influencing the health behaviors of the African–American faith community.

Several lessons were learned in terms of study implementation among conference attendees. To increase the total number of surveys completed by the conference attendees, having them distributed along with the conference materials provided to attendees during conference registration (either as an electronic survey or paper survey on-site) would have been ideal. In addition, delivering a study overview presentation to the entire conference audience detailing the study objectives, purpose of the survey and its components would likely have further enhanced study participation. In addition, we would have included previously validated, yet easily adaptable survey instruments in order to increase the validity, reliability and reproducibility of the study.

In an effort to enhance its impact, The Balm in Gilead, Inc. has expanded its reach beyond the conference by partnering with African–American congregations to reduce the burden of diabetes among African–Americans through a Centers for Disease Control and Prevention–endorsed community-based health promotion program (Southeast Diabetes Faith Initiative). Moving forward, current efforts have been initiated to implement selected Healthy Churches 2020 National Conference seminars throughout the Mayo Clinic enterprise. For example, the “Healthy Leaders-Healthy Community” series has been implemented through the Office of Health Disparities Research at Mayo Clinic Jacksonville which focuses on promoting the health and wellness of African–American church leaders. In addition, a mobile health (mHealth) lifestyle intervention to promote ideal cardiovascular health and wellness has been co-designed with the African–American faith community and Mayo Clinic Rochester investigators (Fostering African–American Improvement in Total Health, *FAITH! App*) (Brewer et al. 2018).

Conclusion

The health behaviors of faith-based public health conference attendees were less than favorable in terms of their physical activity and healthy eating. This lends further support of enhanced training and education programs for African–American health ministry leaders to better facilitate their adoption of healthy lifestyle practices as these individuals are at the forefront of health promotion in their faith communities and communities at-large to eliminate health disparities.

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Table 1

Participant characteristics

	Total (N = 77)
<i>Age</i>	
Mean (SD)	56.9 (13.6)
Median	59.0
Range	(22.0–89.0)
<i>Sex</i>	
Women	57 (74.0%)
Men	19 (25%)
Missing	1 (1%)
<i>Race</i>	
African–American	67 (87.0%)
Asian–American	1 (1.3%)
Hispanic	3 (4%)
Native Hawaiian/Pacific Islander	0 (0%)
American Indian/American Native	0 (0%)
Other	3 (4%)
White	3 (3.9%)
<i>Marital status</i>	
Married	40 (54.1%)
Divorced	12 (16.2%)
Single (never married)	15 (20.3%)
Widowed	6 (8.1%)
Missing	4 (5%)
<i>Profession</i>	
Pastor	14 (18.2%)
Healthcare professional	30 (39%)
Church health ministry leader	26 (33.8%)
Missing	7 (9%)
<i>Health insurance</i>	
Yes	74 (96.1%)
No	1 (1.3%)
Missing	2 (2.6%)
<i>Prescription medication use</i>	
Yes	49 (63.6%)
No	28 (36.4%)
<i>Emergency department visit or hospitalization in the past 12 months</i>	
Yes	15 (19.5%)
No	62 (80.5%)
<i>Race influences health</i>	
Yes	45 (58.4%)

	Total (N = 77)
No	32 (41.6%)
Positive influence	10 (23.3%)
Negative influence	28 (65.1%)
Missing	39 (11.6%)
<i>Functioning health ministry at place of worship</i>	
Yes	50 (65.8%)
No	24 (31.6%)
Missing	3 (4%)
<i>Healthy lifestyle promoted regularly by pastor or church leaders</i>	
Yes	46 (61.3%)
No	29 (38.7%)
Missing	2 (3%)
<i>Academic entity outreach for partnerships</i>	
Yes	40 (52%)
No	35 (45%)
Missing	2 (3%)
<i>Mayo Clinic opinions</i>	
Positive	58 (75.3%)
Neutral	13 (16.9%)
Negative	1 (1.3%)
Never heard of	5 (6.5%)

Data are expressed as no. (%) unless otherwise indicated

Table 2

Participant health behaviors and preventive healthcare utilization

Total (N = 77)	
<i>Diet (percent of weekly meals considered healthy)</i>	
Greater than 80%	23 (29.9%)
50–80%	36 (46.8%)
Less than 50%	18 (23.4%)
<i>Physical activity (times per week)</i>	
0	11 (14.3%)
1-3	26 (33.8%)
3 or more	39 (50.6%)
<i>Preventive healthcare utilization (annual healthcare provider visits)</i>	
Yes	67 (88.2%)
No	9 (11.8%)

Data are expressed as no. (%) unless otherwise indicated

Table 3

Associations between congregation health promotion activities, health behaviors, preventive healthcare utilization, and academic entity partnerships

Congregation health promotion activities						
Is there a functioning health ministry at your place of worship?						
Is a healthy lifestyle promoted by your pastor/church?						
	No (n = 29)	Yes (n = 46)	p value ^I	% (95% CI) ²	No (n = 24)	Yes (n = 50)
Healthy diet: Percent of weekly meals considered healthy						
Greater than 80%	9 (31%)	12 (26%)	0.64	– 4.9 (– 19.9, 10.0)	10 (42%)	11 (22%)
Less than 80%	20 (69%)	34 (74%)			14 (58%)	39 (78%)
Regular physical activity: Times physically active per week						
Missing	0	1	0.96		0	1
3 or more	15 (52%)	23 (51%)		– 0.6 (– 17, 15.8)	14 (58%)	22 (45%)
Less than 3	14 (48%)	22 (49%)			10 (42%)	27 (55%)
Preventive healthcare utilization: Annual healthcare provider visits						
Missing	1	0	0.24		1	0
Yes	23 (82%)	42 (91%)		9.2 (– 2.3, 20.6)	21 (91%)	43 (86%)
No	5 (18%)	4 (9%)			2 (9%)	7 (14%)
Academic entity outreach for partnerships						
Missing	1	0	<0.01		0	0
Yes	7 (25%)	33 (72%)		46.7 (32.3, 61.2)	8 (33%)	31 (62%)
No	21 (75%)	13 (28%)			16 (67%)	19 (38%)

^I Chi-square p value² 95% normally approximated confidence interval (CI) for the difference in proportions