

ORIGINAL REPORTS: LIFESTYLE CHOICES AND CARDIOVASCULAR HEALTH

RELIGION, SPIRITUALITY, AND HEALTHCARE CHOICES OF AFRICAN-AMERICAN WOMEN: RESULTS OF A NATIONAL SURVEY

Objective: This study describes the prevalence and patterns of use of religion and spirituality for health reasons among African-American women.

Methods: Respondents were asked about their use of religion/spirituality for health reasons as part of a larger study of the prevalence and correlates of complementary and alternative medicine (CAM) use among women. In 2001, a national survey of 3,172 women, aged 18 and older, was conducted in 4 languages, with over-sampling among African-, Mexican-, and Chinese-American participants. This paper focuses on the sub-sample of 812 African-American women.

Results: Overall, 43% of the African-American women reported using religion/spirituality for health reasons in the past year. Factors significantly associated with the use of religion/spirituality for health reasons included having an income of \$40,000–\$60,000, an education level of college graduate or more, or being 37–56 years of age; worse health status approached significance. African-American women utilized religion and spirituality most often for serious conditions such as cancer, heart disease, and depression. African-American women who had used religion/spirituality in the past year for health reasons were more than twice as likely to have used some form of CAM, and also more likely to have seen a medical doctor during the year prior to the interview, compared to their counterparts.

Conclusion: Religion and spirituality are associated with health-seeking behaviors of African-American women. The use of religion and spirituality for health reasons warrants additional research, particularly its use for chronic and serious conditions, and its role in the health-seeking behavior of African-American women in conjunction with the utilization of conventional medicine and CAM. (*Ethn Dis.* 2004;14:189–197.)

Key Words: African-American, CAM, Complementary and Alternative Medicine, Ethnic, Race, Religion, Spirituality

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BACKGROUND AND SIGNIFICANCE

Although the influence of religion in the lives of African Americans is largely recognized,^{1–4} our understanding of its effects on healthcare utilization is still limited. A religion can be defined as a set of beliefs and practices, which usually includes a ritual observance of faith. A more material definition refers to a group of individuals who adhere to a set of beliefs and practices. The Black Church, made up of the independent and totally Black-controlled Christian denominations that emerged in the late eighteenth century, includes the majority of religious Blacks in the United States.⁵ Its influence on African-American culture is well-documented. Historically, African-American churches have

functioned beyond a religious scope, first as the seat of resistance to slavery, and then as the first Black-owned institutions and economic cooperatives, producing and nurturing major voices of the Civil Rights struggle, and giving birth to a range of secular organizations, including schools, banks, insurance companies, and low income housing.⁵ Today, religion continues to be an integral part of African-American culture⁶ regardless of church membership or attendance.

Spirituality often refers to a person's acknowledgment of, and relationship with, a higher being, but can also mean one's unique sense of connectedness to the self, others, and nature.⁷ Spirituality is a broader term than religion, and though there is considerable conceptual overlap, spiritual influences may be more difficult to qualify, as they are not necessarily being associated with institutions, literature-based doctrine, or formal ritual. Those who consider themselves to be spiritual may or may not participate in formal religious practice, or identify with a religious group; however, many religious people consider themselves to be spiritual. Two qualitative studies of spirituality have found culturally specific attributes for African Americans.^{8,9}

Health-seeking behavior in African Americans may be linked to religion and/or spirituality, particularly in women, given that they are more religious than their male counterparts.^{2,10,11} Certain denominations, such as Seventh

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Day Adventists, and Jehovah's Witnesses, which have substantial numbers of African-American members, exemplify the potential influence of religion on health behaviors and healthcare decision-making. Seventh Day Adventists advocate vegetarian diets, and abstain from alcohol and tobacco use.¹² Jehovah's Witnesses are known for refusing blood transfusions, organ transplants, and vaccines.¹³ Other denominations may be less overt in their prescriptions, but have a similar influence on health behaviors. For example, Baptist and Methodist weekly sermons frequently incorporate the topic of health and healing,^{10,14} and encourage congregants to rely on the power of prayer for curing their ailments. Indeed, prayer is the most common practice of self-help therapy among African Americans.¹⁵ Moreover, the use of prayer as a health resource is not limited to churchgoers, but extends to the significant number of African Americans who may not be members of an organized religious group, but who consider themselves to be spiritual. A cross-disciplinary concept analysis found that *guidance* and *coping* are prominent and culturally specific attributes of African-American spirituality.⁸ Spirituality as a source of guidance in daily life may influence health behaviors, and spirituality may have an impact on healing as a source of coping with, and consolation for, suffering. Personal and/or cultural philosophies and faiths may mediate healthcare decision-making,¹⁶ and, for this reason, healthcare providers should make an effort to understand how such views and practices affect health-services-seeking behavior, self-care, and treatment choices.

The role of religious or spiritual involvement on health-seeking behavior may be of particular importance among under-served populations. Thirty years after the passage of Civil Rights legislation, significant economic and social inequities persist among racial/ethnic groups.¹⁷ In the area of health, African Americans often receive less-intensive,¹⁸

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or inappropriate, treatments¹⁹ have more chronic illnesses, and have higher death rates,⁴ compared to Whites. Gender further complicates racial disparities in health, leaving African-American women, like other women of color, with a disproportionate burden of disease, and in a highly disadvantaged position for receiving adequate health care.^{4,19} Although religious and spiritual orientation and/or participation cannot eliminate these inequities, and should not substitute for commitment to adequate services, they may play a role in attenuating some of the racial disparities in health care. Forms of religion/spirituality (eg, the Black Church, Yoruba, Santeria) have been a healthcare resource in African-American communities as mechanisms of social support, as psychological resources, and as a means of addressing some of the healthcare needs not met by conventional medical care.^{1,20-25}

Increased recognition of the role of religion and spirituality in health has paralleled a growing interest in complementary and alternative medicine (CAM) in recent decades.²⁶ A substantial use of CAM, which refers to the large array of healing systems and practices that are not considered part of conventional medicine, has been documented in the general American population,^{16,27} as well as in national samples of minority groups.²⁸ Aspects of religion/spirituality, such as prayer and spiritual healing, have been examined in

*African-American women [nearly half in this study] are more likely to utilize religion/spirituality than women of other race/ethnicities, such as Mexican Americans (19%), Chinese Americans (7%), and non-Hispanic Whites (37%).*²⁸

previous studies of CAM use. Some doctors have included them under the broad heading of CAM, or as a mind-body intervention.^{16,27,29,30} Others have not included them, recognizing the use of religion/spirituality across both CAM and conventional medicine, and asserting that religion/spirituality should be considered apart from CAM.³¹ Those who use religion/spirituality in relation to health may share philosophies and values common among CAM users, and personal belief systems may, in fact, influence an individual's decision to use unconventional healthcare practices such as CAM.^{16,32} Despite the historic importance of religion and spirituality among African-American women, our knowledge of its influence on the use of medical services, including CAM, is sparse.

As part of a national study, we asked African-American women (along with Whites, Mexican Americans, and Chinese Americans) about a variety of healthcare practices, including the use of religion and spirituality. We did not include religion/spirituality, however, as part of our measure of overall CAM use. Here, we report on African-American women's use of religion/spirituality for health reasons. Findings on the patterns of CAM use among Whites and the 3 minority groups are reported elsewhere.²⁸ This study focuses on the sub-

set of data on African-American women's use of religion and spirituality as a practice complementary to other forms of health care, and, in some cases, as an approach used without other medical treatment and services. The following research questions were addressed: 1) How prevalent is the use of religion/spirituality for health reasons, and for what health conditions? 2) What socio-demographic factors are associated with the use of religion/spirituality for health reasons? 3) Are women who use religion/spirituality more or less likely to use CAM or conventional medicine compared to women who do not use religion/spirituality? 4) Are reasons for CAM use different for religion/spirituality users than for those who do not use religion/spirituality?

METHODS

Data were gathered as part of a larger study regarding the prevalence and correlates of CAM use among women.²⁸ A cross-sectional telephone survey of women, aged 18 and older, and living in the United States, was designed to provide nationally representative data on women's use of CAM during the year 2000–2001 along with estimates of use among women in 4 racial-ethnic groups: White, African-, Mexican-, and Chinese-American. One question was also asked about women's use of religion, spirituality, and prayer for health reasons.

Sample

Three sampling procedures were used in the overall study. Random digit dialing (RDD) was used to obtain a nationally representative sample. In addition, geo-targeting, or over-sampling on telephone exchanges from high population areas for each group, was used to obtain the Mexican- and African-American samples. Telephone numbers were randomly selected from exchanges that included census tracts of 40% or more

African- or Mexican-American residents. This yielded samples that represented 66% of the African-American population, and 73% of the Mexican-American population. Finally, the Chinese-American sample was recruited with the use of a surname database. The entire study sample consisted of a total of 3,172 women.²⁸ The current study focuses on the sub-sample of 812 African-American women, which was obtained through the RDD sample (64 women), and by using geo-targeting (748 women). The response rate for this sub-sample was 50%, using a moderately conservative algorithm.

Only one interview was completed in each sample household, even when multiple eligible respondents resided there. To account for the probability of selection within households, a weight was created based on household size. The weight variable was used in all bivariate analyses in this study.

Data Collection and Measurement

Designing the instrument for this study was a process that involved both qualitative and quantitative studies. Four focus groups were conducted in 1996 with African-American and Hispanic women, providing valuable information regarding their health concerns, as well as their familiarity with, and use of, CAM.³³ A pilot survey was then implemented among 300 women in New York City.³⁴ These preliminary studies, as well as extensive literature reviews, informed the creation of CAM domains, and the health conditions that were included in the final survey. Two pre-tests were also conducted of the final survey instrument before the final field period.

Interviewer Training and Interviewing

An extensive interviewer field guide was collaboratively prepared for use by investigators from The Richard and Hinda Rosenthal Center for Complementary and Alternative Medicine at

Columbia University, survey researchers from Audits and Surveys Worldwide, a major survey research firm in New York City, and consultants with in-depth knowledge of each racial/ethnic group. In addition to interviewing procedures, the guide included a substantive section on CAM. Colleagues with expertise in the respective languages and cultures listened to pre-tests to ensure interviewer fluency in CAM concepts and terminology. The 5-month field period extended from April to September 2001. A large and nationally recognized survey research firm conducted screening and interviewing, using Computer Assisted Telephone Interviews (CATI). Several Columbia investigators periodically listened to interviews, as did supervisors from the survey firm, as a quality control measure.

Sociodemographic data, such as age, income, and education level, were collected from study respondents. In addition, the survey included a number of questions regarding health and health-care utilization. Women were asked to rate their health status (excellent, good, fair, or poor), whether or not they had seen a medical doctor in the past year, and, if so, their level of satisfaction with the care they received. Additionally, women were asked whether they had experienced any of the following health problems or conditions in the previous year: back pain, joint pain or arthritis, headaches, high blood pressure, weight loss, high cholesterol, insomnia, urinary tract/vaginal infections, depression, uterine fibroids, heart disease, osteoporosis, and/or cancer. We asked about medically diagnosed depression, to distinguish it from less serious or temporary mood disorders. We also asked about menstrual and menopausal symptoms, and pregnancy-related conditions.

Women were asked about their use of "remedies and treatments that are not typically prescribed by medical doctors." Respondents were asked whether or not they had used any of 11 CAM domains for health reasons in the past year. Cat-

Table 1. Demographic and healthcare characteristics by use of religion/spirituality for health reasons

	Study Sample	Used Religion/Spirituality	Did Not Use Religion/Spirituality	χ^2	P value
N (weighted)	1081	463 (42.8%)	618 (57.2%)	—	—
Age (mean)*	41.28				
Pre Baby Boom (pre 1945)	43.6%	38.0%	47.8%	13.36	.001
Baby Boom (1945–1964)	36.1%	42.0%	31.8%		
Post Baby Boom (post 1964)	20.2%	20.0%	20.4%		
Income*					
Less than \$20,000	27.2%	23.7%	30.0%	27.19	.000
\$20,000–\$40,000	38.0%	35.6%	39.9%		
\$40,000–\$60,000	17.5%	22.3%	13.9%		
Over \$60,000	17.2%	18.4%	16.3%		
Education*					
Less than high school	16.2%	12.6%	18.9%	33.13	.000
HS graduate/trade school	34.2%	29.7%	37.7%		
Some college or 2 year college	31.7%	33.1%	30.7%		
College grad or more	17.9%	24.7%	12.7%		
Self-assessed health status					
Poor	5.2%	7.0%	3.9%	7.55	.056
Fair	22.3%	21.5%	22.9%		
Good	55.6%	56.8%	54.8%		
Excellent	16.9%	14.7%	18.5%		
Used CAM*	37.9%	54.9%	25.2%	98.05	.000
Saw a medical doctor in the past year*	59.1%	69.8%	51.5%	38.30	.000
Satisfaction with care received from medical doctor†				6.51	.089
Very dissatisfied	2.2%	1.3%	3.2%		
Somewhat dissatisfied	7.4%	8.5%	6.1%		
Somewhat satisfied	38.6%	41.5%	35.6%		
Very satisfied	51.8%	48.7%	55.0%		

* $P < .001$.

† Based on those who had seen a medical doctor in the past year.

egories of CAM were constructed to capture use of the many types and styles of therapies, with listed examples. These included: vitamins and nutritional supplements; a special diet such as whole foods, macrobiotic or other vegetarian diet; medicinal herbs or teas; remedies or practices associated with a particular culture (eg, Chinese medicine, Ayurvedic Medicine, Native American healing, Curanderismo); homeopathic remedies; mind/body therapies, such as: yoga, meditation, tai ji; chiropractic treatments; manual therapies such as massage or acupressure; energy therapies such as Reiki or therapeutic touch; acupuncture; or any other remedy or treat-

ment not typically prescribed by a medical doctor. One question included in the interview was: "In the past year, did you use spirituality, religion, or prayer for health reasons?" This combined measure includes the more broadly defined (spirituality), to the more restrictive (religion), and a specific practice (prayer) common to both. The measure does not distinguish those who used spiritual or religious healing administered by a practitioner.

To assess overall use of CAM, we constructed a dichotomous variable that measured use of no domains vs use of any one of these 11 domains within the past year. We excluded spirituality, reli-

gion, and prayer from our overall CAM measure. Based on statistical power calculations of the parent study, a sample size of 800 respondents yields sufficient power to detect prevalence of CAM use within a 3% sampling error of 50% at the 95% confidence interval. Prevalence estimates larger and smaller than 50% result in smaller sampling errors. Data were analyzed using descriptive statistics and χ^2 tests. Since all measures in this study were treated as categorical variables, significant differences of associations were assessed with χ^2 statistics.

RESULTS

Sample Characteristics

Respondents were self-identified African-American women, aged 18 years and older. As shown in Table 1, the weighted sample consisted of a total of 1081 women, with an average age of 41 years. Overall, women in our sample had a median income of \$20,000–\$40,000 and a median education level of high school graduate, or trade school. Most of our sample resided in the southern (60%) or northeastern (19%) regions of the United States (data not shown). This is comparable to the distribution of the African-American population in the United States: 55% in the South, and 19% in the Northeast.³⁵

Also included in Table 1 are descriptive data regarding respondents' self-reported health status, and their use of conventional medicine in the previous year. Over half of survey respondents reported good health status (56%), and had seen a medical doctor in the year prior to the survey (59%). Of those who had seen an MD in the previous year, 52% were "very satisfied" with the care they had received.

Use of Religion/Spirituality: Prevalence and Health Conditions

We assessed the overall prevalence of the use of religion/spirituality for health

Table 2. Use of religion/spirituality by health condition

Health Condition	% (N) with Condition	% (N) Who Used Religion/Spirituality*
Back pain	43.6% (471)	15.5% (73)
Joint pain or arthritis	36.8% (397)	22.2% (88)
Headaches	34.9% (377)	20.7% (78)
High blood pressure	30.0% (324)	24.7% (80)
Weight loss	20.5% (222)	10.8% (24)
High cholesterol	17.1% (180)	9.4% (17)
Insomnia	16.4% (176)	14.2% (25)
Urinary tract/vaginal infections	16.2% (175)	9.1% (16)
Depression	8.3% (89)	41.6% (37)
Uterine fibroids	5.9% (63)	9.5% (6)
Heart disease	3.9% (42)	40.5% (17)
Osteoporosis	1.9% (20)	35.0% (7)
Cancer	1.6% (17)	41.2% (7)

* % Based on those with health condition.

reasons among African-American women in our sample. We also examined the association between the use of religion/spirituality and various factors, such as health status and sociodemographic variables. (Results are shown in Table 1.) Overall, 463 African-American women (43%) reported using religion/spirituality for health reasons during the year prior to the study. Notably, African-American women who used religion/

spirituality were significantly more likely to have an income of \$40,000–60,000 than to be in higher or lower income brackets ($\chi^2=27.19$, $P<.001$), and to be highly educated (college graduate or more) ($\chi^2=33.13$, $P<.001$), compared to women who had not used religion/spirituality. They were also more likely to be in the middle-aged cohort (37–56) than to be in either the older or younger group. The association between

self-reported health status and use of religion/spirituality approached statistical significance ($\chi^2=7.56$, $P<.06$).

The interviews also included specific questions regarding whether or not respondents had experienced any of 15 health problems or conditions during the previous year. Most respondents (91%) had experienced one or more of the health conditions included on the survey. The most commonly cited health conditions included back pain (44%), joint pain or arthritis (37%), and headaches (35%) (Table 2). Cancer and osteoporosis were the least commonly reported conditions, each prevalent in less than 2% of the sample. The use of religion/spirituality to treat health conditions ranged from 9% to 42% (Table 2). Only in 3 conditions (high cholesterol, urinary tract/vaginal infections, and uterine fibroids) was religion/spirituality used by fewer than 10% of those who had the respective health conditions. Use of religion/spirituality was particularly common among those with depression (42%), heart disease (41%), and cancer (41%). Of the women who reported symptoms related to life-cycle conditions, only a small number (menopause 6%, pregnancy 5%, and menstruation 9%) used religion/spirituality for the condition (results not shown).

Use of Medical Treatments and Services

As shown in Table 1, African-American women who had used religion/spirituality for health reasons during the year prior to the study were more than twice as likely to have used some form of CAM, compared to their counterparts (55% vs 25%, respectively, $\chi^2=98.05$, $P<.001$). Women who had used religion/spirituality for health reasons were also more likely to have seen a medical doctor in the past year, compared to those who had not used religion/spirituality (70% vs 51%, respectively, $\chi^2=38.30$, $P<.001$). Some women in the sample (6.8%) reported using

Table 3. Reasons for CAM use by religion/spirituality

	Used Religion/Spirituality	Did Not Use Religion/Spirituality	χ^2	P value
Personal beliefs				
Using these types of remedies and treatments is consistent with my beliefs.*	58.7%	30.6%	28.60	.000
I wanted a natural approach to treatment.†	63.8%	50.0%	7.09	.010
Dissatisfaction w/conventional medicines				
I couldn't afford conventional medical treatment.	16.6%	17.2%	.03	.890
I tried a conventional medical treatment and it didn't work.†	31.1%	18.5%	7.53	.006
I tried a conventional medical treatment and it had side effects that I didn't like.*	38.3%	20.5%	13.38	.000
Social influences				
Personal: When I was growing up family members or other people who were close to me used these types of remedies.*	53.3%	23.6%	32.14	.000
Professional: My doctor recommended it.	30.2%	31.0%	.03	.910
Media: I read something or heard something on TV or on radio that convinced me to use them.	43.3%	40.4%	.32	.598

* $P<.001$; † $P<.01$.

religion/spirituality for health reasons, but did not see a medical doctor, or use any CAM during the prior year (results not shown).

Among those who had used CAM, we assessed differences in reasons for use between religion/spirituality users and non-religion/spirituality users. As shown in Table 3, reasons for using CAM differed significantly between these 2 groups. Compared to those women who did not use religion/spirituality, religion/spirituality users were more likely to have utilized some form of CAM because it was consistent with their beliefs (31% vs 59%, respectively, $\chi^2=28.60$, $P<.001$) and/or because they wanted a natural approach to treatment (50% vs 64%, respectively, $\chi^2=7.09$, $P<.01$). They were also significantly more likely to cite problems with conventional medicine (eg, side effects $\chi^2=13.38$, $P<.001$, or inefficacy $\chi^2=7.53$, $P<.01$) as a reason for CAM use, compared to non-religion/spirituality users. Religion/spirituality users were also more likely to attribute their use of CAM to having grown up around family members who had used CAM (53% vs 24%, respectively, $\chi^2=32.14$, $P<.001$).

DISCUSSION

Nearly half (43%) of African-American women in this study used religion, spirituality, or prayer for health reasons in 2001. African-American women are more likely to utilize religion/spirituality than women of other race/ethnicities, such as Mexican Americans (19%), Chinese Americans (7%), and non-Hispanic Whites (37%).²⁸ This high utilization may be due to the historic (and current) influences of the Black Church, and other churches, since most recognize a connection between religious and spiritual beliefs and health, and promote that recognition among members. Other studies have also found that African Americans reported more frequent utilization than any other racial/ethnic

group.^{29,30} However, our prevalence estimate of the use of religion/spirituality for health among African Americans is higher than those found by previous studies. The 1999 National Health Interview Survey (NHIS), which included both women and men, found a much lower prevalence (17%) of use of religion/spirituality for health among African Americans.³⁶ Our sample consists of women only, which could partially account for our higher prevalence. Women are generally more involved religiously than are men, and this may be especially true for African Americans.³⁷⁻³⁹ In fact, our estimate is similar to the findings of a study based in San Francisco, which reported that 36% of African-American women used "spiritual healing" for breast cancer. In addition, we asked generally about using spirituality, religion, or prayer for health reasons, or to treat a specific condition, whereas the NHIS survey asked about practices (spiritual healing and prayer).³⁶

The overall prevalence of use of religion/spirituality among African-American women across a wide variety of health conditions is consistent with previous research demonstrating the important role of religion in the healthcare practices of African-American communities. These findings also support the value of African-American churches in health-promotion efforts, such as church-based efforts to increase cancer screening, or to reduce risk of cardiovascular disease through changes in diet and exercise.^{7,20-22,40,41}

The women in our sample were more likely to use religion/spirituality for serious conditions, such as cancer, heart disease, and osteoporosis, than for less serious conditions. Depression was also a condition for which women often reported turning to religion/spirituality. Depression may be triggered by stressful life events, such as a serious or life-threatening illness. The high prevalence of religion/spirituality use for depression may be due to a belief that mental health conditions are aptly treated by

spiritual and religious practices. It may also point to the provision of informal mental health services by the Black Church, as suggested by a recent study conducted in the South.⁴² The strong religious or spiritual faith of African Americans, among other protective factors, may contribute to lower rates of depression found in African Americans, relative to Whites.⁴³

For less serious conditions like headaches and insomnia, women were less likely to report the use of religion/spirituality. The use of religion/spirituality for marker conditions considered to be risk factors of disease, such as high blood pressure, high cholesterol, and excess weight, was also reported less frequently, as was its use for conditions related to menopause, pregnancy, and menstruation.

Social pressures may constrain health-seeking behavior in minority populations.⁴⁴ An assumption often underlying this concern is that those who utilize unconventional healing practices may forgo conventional medical treatments for serious conditions when they most need them.⁴⁵ In our study, African-American women who used religion/spirituality for health reasons were more likely to have used CAM in the past year, and were also more likely to have seen a medical doctor. These findings support previous research suggesting that personal beliefs, and/or religious involvement, may encourage a variety of health-seeking behaviors, rather than limiting them.^{2,11,16,37}

The tendency to seek out, and engage in, a variety of healthcare practices is influenced by a patient's values, world view, and beliefs regarding the nature and meaning of health and illness⁴⁶; however, the opportunity to exercise this tendency is increased by higher income and education levels. We found that middle-income African-American women and those with higher education were most likely to utilize religion/spirituality to influence their health. Our data indicate that these associations hold

for CAM use as well (reported elsewhere).²⁸ Although regional studies have found greater spiritual beliefs and religious participation among the poor and those with less education,⁴⁷ an analysis of the 1999 National Health Interview Survey indicated that use of religion/spirituality was highest among Blacks with a college education or more.³⁶

The use of medicines, treatments, and health services is often associated with poorer health status.^{16,48} Health status is a significant predictor of CAM use for all racial/ethnic groups in our larger study.²⁸ The association between the use of religion/spirituality or prayer with poorer self-assessed health status approached, but did not reach, significance in this sample. Therefore, the African-American women in this sample who were particularly vulnerable, due to acute illness, chronic health conditions, or low socioeconomic status, were not significantly more likely than their counterparts to utilize religion/spirituality to treat illnesses, or to influence their health. Our data do not support the notion that African-American women naively turn to religion or spirituality in lieu of medical treatment when they are most vulnerable,¹⁰ but rather that more-educated women with some disposable income engage in a variety of healthcare practices.

The African-American women who had turned to religion/spirituality for health reasons were more likely than those who had not to cite their "personal beliefs" as a reason for using unconventional therapies. They were also more likely to attribute their CAM use to a preference for "natural approaches to treatment," a concept consistent with a definition of spirituality as a sense of connectedness to self, others, and nature,⁷ and also embraced by certain religious groups.^{12,13} Astin's 1998 study of reasons for CAM use in a general population found that one predictor of CAM use was classification in a cultural group identified, in part, by its interest in spirituality or personal-growth psy-

chology. This led the author to conclude that the use of alternative health care is part of a broader value orientation and set of cultural beliefs, one that embraces a holistic, and, sometimes, spiritual orientation to life.¹⁶ In our sample of African-American women, the use of religion/spirituality for health was significantly associated with CAM use; more than twice as many women who used religion/spirituality for health reasons also engaged in CAM practices, compared to those who did not. The association of higher education and income levels with both religion/spirituality for health, and CAM use, may indicate that education and economic access to choices promotes medical pluralism in those with certain types of personal philosophies. Some of the psycho-social characteristics that predict pluralistic health practices in the general population may also be influential regarding the health choices of African-American women.

Women of the middle-aged cohort (37–56), the "baby-boom" generation, were more likely than older or younger women to say they used religion/spirituality for health reasons. The 1960s and 1970s were characterized by a prominence of the Black Church in the Civil Rights movement, as well as a Black-consciousness movement that supported naturalistic health care.³ Baby boomers may hold personal philosophies influenced by their generation that predispose them to explore a variety of health practices. In addition to these potential cohort effects, our data also suggest the possibility of inter-generational influences in the use of CAM. The women in this sample who utilized religion or spirituality for health reasons were also more than twice as likely as those who did not to cite the influence of family members as a reason for their use of CAM.

Women who utilized religion/spirituality for health were more likely than those who did not to indicate negative reactions to conventional care as a reason for choosing CAM practices. This

tendency may be due to variations in expectations and meanings of medical encounters. Patients who value religion or spirituality as agents of healing may be less satisfied with a system of medicine that emphasizes materialistic interpretations and mechanisms, and ignores their belief systems. As the African-American women in this sample who used religion/spirituality had higher levels of education, this is consistent with research suggesting that people with more education are more critical of conventional health care.⁴⁹

Study Limitations and Future Needs

A number of qualifications may limit the interpretation of these findings. Our response rate was 50%, and results only apply to households with telephones and to English-speaking African-American women. Also, the geo-targeting strategy used to obtain our study respondents does not yield a national random sample. Our sample may consist of a higher proportion of urban residents, women of higher socioeconomic status, and fewer immigrants, than does the national population of African-American women. Nonetheless, the geo-targeted sample represents the majority of African-American women living in the United States.

In addition, our measure of religion/spirituality was limited in its specificity. We were unable to distinguish between religion and spirituality, in general, and between religion/spirituality for health that was personally interiorized, religious and spiritual practices by women for self-care, and treatments by religious and spiritual healers. In addition, there may be some overlap between religion/spirituality and other CAM categories, such as "yoga, meditation, and tai ji," "remedies and practices associated with a specific culture, (eg, Chinese medicine, Ayurvedic medicine, Native American healing, Curanderismo)," or "energy therapies, such as Reiki or therapeutic touch." Given the dearth of data

in this area, the combined measure of religion, spirituality or prayer for health reasons used in this study provides valuable descriptive information.

Future research should be aimed at the development of more discrete measures of religion and spirituality, which would further our understanding of the possible means by which they affect health and healthcare choices, and how they may mediate the health of African-American women. This additional research should include topics such as: 1) lifestyles and health behaviors; 2) social resources; 3) coping resources and behaviors; 4) attitudes, beliefs, and emotions; and 5) generalized beliefs about the world.² Studies exploring these mechanisms would advance our knowledge of both the positive and negative effects of religion and spirituality on health.

Our findings suggest an association between the use of religion/spirituality and a pluralistic approach toward health care, such as the use of both CAM and conventional medicine. The tendency to seek a variety of services and types of medical care must be better understood. Does involvement with religion and spirituality enhance health-seeking behavior and access to care? Can such involvement influence disease? If clinical studies with experimental designs identify direct effects of religion and spirituality on health outcomes, what are the ethical implications for those providing medical services? Should medical professionals and institutions interact with religion and spirituality, both as a social force and as an interiorized world view of many African Americans?

Religion and spirituality are associated with health-seeking behaviors of African-American women, as evidenced by their use across a number of health conditions, and by the overall prevalence found in this study. Although cross-sectional, large-scale studies provide important information about population trends and associations, multi-disciplinary research designs with tem-

poral dimensions should also be employed. Prospective studies assessing the influence of religion and spirituality would be particularly useful, regarding causal pathways and disease outcomes. In addition, qualitative studies, elaborating the generalities of quantitative data, are necessary to explore the meaning of religion and spirituality for communities and individuals.

Both religion/spirituality and health are multi-dimensional concepts that need to be elaborated carefully for their interaction to be understood. Cross-cultural concepts of health, health-seeking behavior, and religion/spirituality, are necessary if studies are to have specificity and meaning. The use of religion and spirituality for a range of conditions and life-cycle segments should be explored to further anchor theoretical constructs in the health conditions and experiences of African-American women.

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