

The Role of Spirituality in the Self-management of Chronic Illness among Older African and Whites

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Abstract This study used data from in-depth interviews collected from 88 African American and White men and women aged 65 years and older who reside in Allegheny County, Pennsylvania. The purpose of this study was to understand the role of spirituality in the self-management of chronic illness among this population. Thematic content analysis addressed two specific questions: (1) how do older adults use spirituality to help manage their chronic illness, and (2) are there any racial differences in the use of spirituality. Several core themes emerged from the linkage of spirituality and self-management: God: the healer, God: the enabler through doctors, faith in God, prayer as a mediator, spirituality as a coping mechanism, combining conventional medicine and spiritual practices, and empowering respondents to practice healthy eating habits. These results display racial differences in the use of spirituality in the self-management of chronic illness. African American elders were more likely than White elders to endorse a belief in divine intervention. White elders were more likely than African American elders to merge their spirituality in various self-management practices. Despite these differences, spirituality can play an integral part in a person's health and well-being of chronically ill elders.

Keywords Self-management · Spirituality · Older adults · Chronic illness

Introduction

The population of Americans who are 65 years and older is rapidly increasing. This population is estimated to represent approximately 20% of the U.S. population by the year

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2030 (U.S. Administration on Aging 2004). These individuals are more likely to have at least one chronic health condition, such as arthritis, heart disease, and diabetes that negatively affects their quality of living and daily activities of living. According to Stoller *et al.* (1993), adults in this age group were more likely to carry out self-management activities if they had a chronic health condition. The goal of self-management is to complement conventional medical care. Self-management is the ability to manage a medical problem by treating the ailment outside the doctor's office or hospital (Clark *et al.* 1991; Vickery and Levinson 1993).

The topic of self-management has been viewed as a legitimate area of inquiry among health professionals since the 1980s (DeFries *et al.* 1994). Self-management of chronic illness refers to activities in which persons cope and manage chronic conditions (Clark *et al.* 1991; DeFries *et al.* 1994). To ensure a successful self-management process of chronic illness, an individual must have sufficient knowledge regarding a particular illness in order to make an informed decision regarding the care of that disease. Then that person must be able to perform activities to manage the health condition and use these activities to maintain the sufficient psychosocial functioning (Clark *et al.* 1991).

The theoretical foundation this study used for self-management was social cognitive theory (Bandura 1982, 1986; Tobin *et al.* 1986). Social cognitive theory states that personal factors (beliefs and other cognitions) and environmental factors (physical and social) interact to influence behavior. Self-efficacy, which is a person's confidence in his or her ability to undertake specific self-management behaviors, produces positive outcomes in successful self-management programs (Clark *et al.* 1991; Lorig *et al.* 1984). Essentially, self-efficacy has been identified as the main motivation for a successful self-management lifestyle (Maes and Karoly 2005). Both self-efficacy and self-management consist of relationships between the individual's interpersonal and environmental factors that incorporate day-to-day activities in managing illness.

Spirituality has been equated with religion (Emblen 1992). However, spirituality is recognized as a broader concept of religion and is an inherent quality in all humans (Elkins *et al.* 1988; Meravigilla 1999). Spirituality is the essence of human beings that transcends the immediate awareness of self (Highland 1992). It refers to an inner quality that facilitates connectedness of self, others, and nature, as well as a belief in something greater than self (Elkins *et al.* 1988; Tornstam 1994). Empirical literature on spirituality and health focused on the traditional practices of religion (George *et al.* 2000; Matthews *et al.* 1998; Musick *et al.* 2000; Wink and Dillon 2002; Zinnbauer *et al.* 1997). These studies defined spirituality as a religious activity, such as the frequency of prayer and church attendance and also religious affiliation. However, individuals express their spirituality in a myriad of ways outside the religious arena. As a result, empirical research began to distinguish spirituality from the extrinsic organized faith system, which was grounded in religious institutional practices. Researchers who studied health and intrinsic spirituality (i.e., the belief that a higher power exists and that power dwells within) found that those with a higher level of intrinsic spirituality were positively associated with health-promoting activities (Chatters 2000; George *et al.* 2000). Samuel-Hodge *et al.* (2000) used a focus group to study the influences of spirituality on self-management among 70 diabetic African American women. Informants articulated that spirituality was an important factor in the self-management of their diabetes. From this perspective, the authors determined that spirituality influences self-management practices among people of color. This finding suggests that influences on self-management of chronic illness among diverse groups of people may be understood from a sociocultural context.

Tuck *et al.* (2001) indicated that spirituality, as measured by the existential well-being subscale of the Spiritual Well-being Scale, was positively related to effective coping

strategies and enhanced quality of life among persons living with Human Immunodeficiency Virus (HIV). In another study, Meisenhelder and Chandler (2002) examined the frequency of prayers and the importance of faith and health status among older Native Americans. They hypothesized that older adults with a higher level of faith and prayer also scored high in their self-perception of health status, as measured by the Medical Outcomes Study Item Short-form Health Survey (SF-36). From the sample of 71 individuals, those who prayed often and who indicated a high level in the importance of their faith scored higher in the mental health subscale in the SF-36 Health Survey.

Ramsey and Blieszner (1999) suggested that older adults are using spirituality to manage the challenges associated with living with their chronic illness. According to Chin *et al.* (2000), 11 of the 19 older African Americans in their study cited spirituality as a coping mechanism in dealing with their chronic illness. The aforementioned studies suggest that chronically ill older adults are using spirituality as a resource, but the available literature does not offer a clear description of how this process occurs. In the population of chronically ill elders, spirituality may be a key determinant of self-management behavior. This study aims to fill this gap in the body of knowledge by understanding how older adults use spirituality to help manage their chronic illness, and by delineating if race differs in the use of spirituality to manage a chronic illness. The basis for the current study is to increase the knowledge about spirituality, and determine the influences spirituality has on self-management behaviors among older adults with chronic illness.

Materials and Methods

The participants in this study were enrolled in a four-year longitudinal research project funded by the National Institute of Aging (R01-AG 18308) “Process of Self-Care Comparison of Older African Americans and White,” referred to here as the “parent study.” The parent study examined the process of self-care for hip or knee osteoarthritis (OA) and ischemic heart disease (IHD) in a community-based sample of African American and white older adults in Allegheny County, Pennsylvania. The sampling frame for the parent study was the Medicare Enrollment File for Allegheny County in April 2001. The Medicare Enrollment File includes adults nationwide, 96% of whom were aged 65 years or older, and thus broadly representative of older adults. African Americans were over-sampled to achieve adequate representation, and the sample was stratified by gender and race to ensure that comparisons would be possible. Disease eligibility criteria for the parent study were based on a series of self-report questions derived from the National Health and Nutrition Survey (OA), and self-report disease markers for cardiac conditions and treatments (IHD). Additional eligibility criteria included community dwelling individuals residing in Allegheny County who were 65 years of age or older, and who had no obvious indications of cognitive impairment.

A recruitment survey screened for eligibility and recruited participants to the study. From June 2001 to May 2002, 5,094 older adults in Allegheny County were surveyed by telephone regarding eligibility. The overall response rate was 39.6% (RR4 calculation: AAPOR 2006). From these 5,094 older adults, 2,171 met criteria for study inclusion, and 1,128, or 52%, agreed to participate in the research (525 African Americans and 603 non-African Americans). Those who were eligible and participated were more likely to be African-American (57.3% of those eligible participated, compared to 48.1% of whites, $p < 0.001$). Participants were also likely to be younger (54.6% of people aged 65–74 participated, compared to 48.6% of people aged 75+, $p < 0.01$). While participants and

nonparticipants did not differ in income, gender, or marital status, participants were more likely to have attended college (57.8% vs. 42.2%, $p < 0.001$).

Participants were interviewed four times during a 36-month period between June 2001 and July 2004. By the third wave, 959 participants were actively enrolled in the parent study. Additional spirituality questions added to the parent study were approved by the University of Pittsburgh Institutional Review Board (November 5, 2003) and then integrated into the wave 3 questionnaire after data collection was already under way. Only 414 of the active respondents in the parent study had yet to be interviewed at this point, and the study participants were drawn from this pool. However, interviews in the parent study occurred in random (recruitment) order so the 414 participants were representative of the entire third wave. Data collection for the spirituality questions began November 10, 2003 and ended February 15, 2004.

Using a quota sampling technique, 10% of the remaining African Americans and whites (approximately equal numbers of male and female) in the parent study were randomly selected and given the spirituality questions during wave 3. This qualitative sample was similar to the parent study sample in sociodemographic characteristics. For example, the mean age (sd) in the parent study was 73.8 years (5.7), and the mean age (sd) in the qualitative sample was 73.7 years (4.9). Eighty-five percent (85.5%) of African Americans and 72.4% of whites were likely to report being very or moderately spiritual in the parent study, and 84.4% of African Americans and 75.6% of whites were likely to report being very or moderately spiritual in qualitative sample.

The qualitative sample received additional questions at the end of the parent study interview regarding their spirituality and self-management behaviors. The interviews were conducted by five experienced female interviewers. These interviewers, including the primary author, were trained in the disciplines of public health, nursing, or anthropology, and they had extensive prior work experience as interviewers. To foster closer rapport between interviewers and respondents, the interviewers' ethnicity and race were matched with the respondents' ethnicity and race (i.e., African American interviewers were matched with African American respondents). The interviews took place in either the participant's home or an agreed-upon location. With permission from the participants, all interviews were audio-taped.

Respondents in the parent study were asked the question: "To what extent do you consider yourself a spiritual person?" on a 4-point Likert scale to ascertain their overall self-perceptions of spirituality. It is important to note that the interviewers never defined the term *spirituality* for the participants. The authors felt that to define *spirituality* might shape the participants' discussion. The interviewers were trained to use the aforementioned question as a prompt in the qualitative study. They asked the participants: "You said you were [very, moderately, slightly, or not at all] spiritual. There are many ways that people define *spirituality*. It can mean different things to different people. We would like to know, what does being spiritual mean to you?" After ascertaining the respondents' definition of *spirituality*, these adults were subsequently asked: "You also mentioned that your most important health problem is _____. People have told us many different ways that their spirituality or spiritual beliefs have helped them with their most important health problem. Can you tell me how your spiritual beliefs or feelings about spirituality have helped you?" The questions focused on the participant's experience with spirituality, the personal meaning of spirituality, and the role of spirituality in that individual's self-management behavior. Throughout the interview, the interviewers followed the participant's lead. For instance, if the respondent used words such as *prayer* or *God* to describe the use of spirituality, the interviewers incorporated that word into the follow-up questions. During the interview, interviewers made every effort to encourage candid responses.

The audiotapes were transcribed verbatim following each interview by a professional transcriptionist. Thematic content analysis was used to evaluate data that focused on the role of spirituality in the self-management of chronic illness. First, transcripts were coded by the primary author line-by-line and inductively, according to themes that arose from the data. Content concerning spirituality and self-management consisted of two categories: responses to direct questions about self-management; and indirect responses that occurred elsewhere in the interview, which were not related directly to questions regarding spirituality and self-management. Based on thematic content analysis, when themes were located, they were coded as to their content (the nature or type of self-management found) in the margin of each transcript. These themes were coded manually using the “pen and paper” approach for major themes and subthemes. Each account of self-management was given an identifier, usually a key line from the text. To insure interreliability in the coding of the themes, the primary author and co-author reviewed the preliminary findings of themes separately. If there was disagreement with the coding, the two authors met to discuss the reason behind the discrepancies. This inductive process required several meetings and multiple iterations for a consensus to be achieved regarding the coding and interpretation of themes. After undergoing several revisions, themes were finalized into major categories based on the participant’s ability to manage illness. Responses generated from respondents were likely to be incorporated into more than one theme (see Table III). This form of analysis was selected to preserve the richness of the respondents’ words and to identify, compare, and contrast both recurrent and salient the themes within and between respondents. The primary author and co-author compared the themes with existing empirical literature. The results presented in this paper were drawn from in-depth interviews among older African Americans and whites diagnosed with chronic conditions.

Results

Table I compared African American and white respondents in the qualitative sample. The qualitative cohort, by design, included roughly equal numbers of African Americans ($n=47$) and whites ($n=41$). Men were overrepresented among African-Americans (26 men, 21 women) compared to whites (21 men, 20 women). Age did not significantly differ across race by gender groups. For men, the mean age (sd) was 76.7 (4.0) among African-Americans and 75.7 (4.2) among whites. For women, it was 74.0 (4.6) among African-Americans and 75.4 (5.8) among whites. African-Americans completed fewer years of education than whites. African Americans were more likely to a high school education or less (61.7%) compared to whites (56.1%). Comparing by race, African Americans were more likely to be divorced or separated (17.1% vs. 2.4%), while whites were more likely to be widowed (41.5% vs. 25.5%). Other differences in sociodemographic indicators were noteworthy only among African Americans. For example, nearly all African American respondents (92%) reported being Protestant while whites reported being either Catholic (51.2%) or Protestant (41.5%). African American respondents were more likely to report being very or moderately spiritual (85.2%) compared to whites respondents (75.6%).

In Table II, African-American men and women were less likely than whites to rate their health as “excellent” or “very good” (19.1% vs. 29.2%). African Americans were more likely to report these feelings on a daily basis: feeling God’s presence (85.2%), feeling deep and inner peace (59.6%), thinking life is part of a larger spiritual force (76.7), and looking to God for strength, support, and guidance (93.6%) compared to whites (48.8%, 36.6%, 46.4%, and 78.1%) respectively.

Table 1 Demographic Characteristics of Spirituality by Race, ($n=88$)

Variables	African American $N=47$		White $N=41$	
	N	(%)	N	(%)
Age				
65–74 years	22	(46.8)	17	(41.5)
75 years and older	25	(53.2)	24	(58.5)
Gender				
Male	26	(55.3)	21	(51.2)
Female	21	(44.7)	20	(48.8)
Marital Status				
Single	2	(4.3)	2	(4.9)
Married	25	(53.2)	21	(51.2)
Widow	12	(25.5)	17	(41.5)
Divorced	6	(12.8)	1	(2.4)
Separated	2	(4.3)	0	(0.0)
Education				
Less than High School	12	(25.5)	9	(22.0)
High School/GED	17	(36.2)	14	(34.1)
Some College/vocational	11	(23.4)	10	(24.4)
Bachelor or higher	7	(14.9)	8	(19.5)
Income				
<\$5,000–\$9,999	6	(12.8)	3	(7.3)
\$10,000–\$19,999	15	(31.2)	2	(4.9)
\$20,000–\$34,999	14	(29.8)	12	(29.3)
\$35,999–\$74,999	8	(17.0)	10	(24.4)
Over \$75,000	0	(0.0)	3	(7.3)
Missing	4	(8.5)	9	(22.0)
Religion				
Protestant	43	(91.5)	17	(41.5)
Catholic	3	(6.4)	21	(51.2)
Jewish	0	(0.0)	2	(4.9)
Other	1	(2.1)	0	(0.0)
None	0	(0.0)	1	(2.4)
To what extent do you consider yourself to be a spiritual person?				
Very spiritual	20	(42.6)	5	(12.2)
Moderately spiritual	20	(42.6)	26	(63.4)
Slightly spiritual	4	(8.5)	5	(12.2)
Not spiritual at all	1	(2.1)	2	(4.9)
Don't know	2	(4.3)	3	(7.3)

Several vignettes are provided to expound upon the themes that shaped this study. These findings are important because it help the author to get a better sense of the participants' experience. These findings also help to capture the aspect of ordinary day-to-day spiritual experience as it relates to the participants' major health problems and help to develop a full understanding of the spiritual resources the participants may call upon. Every theme interconnected with each other. Even though the core themes are categorized, there was fluidity that occurred during the interview. The core themes that emerged from the transcripts were (1) God: The healer; (2) God: The enabler through doctors; (3) faith in God; (4) prayer as a mediator; (5) spirituality as a coping mechanism; (6) combining

Table II Health Status and Spirituality Indicators by Race (*n*=88)

Variables	African American <i>N</i> =47		White <i>N</i> =41	
	<i>N</i>	(%)	<i>N</i>	(%)
Physical well-being: In general, would you say your health is ...				
Excellent	1	(2.1)	3	(7.3)
Very good	8	(17.0)	9	(21.9)
Good	23	(48.9)	20	(48.8)
Fair	12	(25.5)	7	(17.1)
Poor	3	(6.5)	2	(4.9)
Spiritual orientation I feel God's presence.				
>once a day	4	(8.5)	5	(12.2)
Every day	36	(76.7)	15	(36.6)
Most days	4	(8.5)	5	(12.2)
Some days	0	(0.0)	7	(17.1)
Once in a while	1	(2.1)	2	(4.9)
Never/almost never	2	(4.3)	6	(14.6)
Don't know	0	(0.0)	1	(2.4)
I feel deep inner peace and harmony.				
>once a day	4	(8.5)	3	(7.3)
Every day	24	(51.1)	12	(29.3)
Most days	15	(31.9)	13	(31.7)
Some days	2	(4.3)	8	(19.5)
Once in a while	1	(2.1)	3	(7.3)
Never / almost never	1	(2.1)	2	(4.9)
I think about how my life is part of a larger spiritual force.				
A great deal	23	(48.9)	12	(29.3)
Quite a bit	14	(27.8)	7	(17.1)
Somewhat	8	(17.0)	13	(31.7)
Not at all	1	(2.1)	9	(21.9)
Missing	1	(2.1)	0	(0.0)
I look to God for strength, support, and guidance.				
A great deal	39	(83.0)	22	(53.7)
Quite a bit	5	(10.6)	10	(24.4)
Somewhat	2	(4.3)	5	(12.2)
Not at all	1	(2.1)	4	(9.8)

conventional medicine and spiritual practices in self-management; and (7) empowering respondents to practice healthy eating habits.

God: the healer

More African American participants (*n*=17) than white respondents (*n*=10) narratives reflected their faith and trust in God. They believed that God provides the means to get through their illness by either restoring them back to health or accepting the outcome of their health. They also believed that God play several roles in their life such as being in control of their life and healing them from their illness. The following statements represented the beliefs of the participants.

When I get pains and soreness—soreness and pain or aches or whatever, I pray to God He relieve it; cast it out of my body. . .He's the only one that can heal it. Because I

Table III The Role of Spirituality in Self-management of Chronic Illness Based on Race ($n=88$)

Themes	Race	
	African American <i>N</i> =47	White <i>N</i> =41
God: the healer	17	10
God: the enabler through doctors	10	1
Faith in God	2	5
Prayer as a mediator	14	12
Spirituality as a coping mechanism	18	14
Combining conventional medicine and spiritual practices in self-management	4	2
Empowering respondents to practice healthy eating habits	3	9

know that He has the power to heal. He's the one that can cleanse my body. . . That's how I feel. I can take all the medicine that's in the pharmacy, and if He doesn't want me healed, I won't get healed. It's up to Him to make the medication work, to heal me. . . He can just send the Spirit down to heal me. (African American respondent)

Well, when I first had the heart problem, I knew that God was with me. I realized that God is in the plan. He is overseeing everything. And, therefore, I didn't panic and when I had the cancer of the prostate, I trusted God that everything would be all right. I look to God, and my body is under God's control. I think that I have trust in God, and I just don't have that fear. I don't have the fear because I believe that everything will be all right, you know. But I have faith and trust that everything is going to be all right. And from a spiritual point of view that means that I'm not worried about them. (African American respondent)

God: the enabler through doctors

The majority of African American respondents ($n=10$) believed that God work through their doctors compared to only one white. God is a collaborative partner in addressing chronic illness through doctors. Medical care is the extension of God's involvement in their illness. The participants maintained their dual working partnership between God and their doctors. The participants believed that God gave the medical doctors wisdom to treat their illness.

I obey the doctors. When the doctor just wait on me, I take their medicine like they say . . . that is spiritual because if God hadn't sent a man down here with wisdom, where would we have been? God gave them the wisdom of being a doctor. . . I had faith in God and the doctors. (African American respondent)

African American respondents acknowledge the working partnership between God and the medical profession in providing health care in the lives of the participants. For example, a 74-year-old African American respondent stated,

God put the doctors down here. . . They work together. God helps put the doctors so He can help you. So I think God helped me. And He put these doctors down here to give you medicine and help you in that direction. So you got two good things going for you.

Another 72-year-old African American respondent said,

God is going to take care of my hip. . . The doctor tells you what to do . . . the Lord and the doctor; they're going to take care of my hip.

A 72-year-old African American respondent concluded,

I think God works through man, I really think it's the way that God works. If you expect for God to come and I'm sure there has been some miracles that God come down and removed a cancer, but I think that God puts you in an area. He guides you through His divine wisdom. He doesn't talk to you. He just some kind of way moves you by some spiritual forces. He directed me to a good doctor. Then the doctor was able to work with the person up at the VA hospital. See this is when you say God was involved.

When African Americans told their stories, they acknowledged God was really in control of their health, doctors were only used as an instrument of healing.

Faith in God

Although the sample is small, more whites ($n=5$) than African Americans ($n=2$) reported that their faith in God allowed them to accept the outcome of their illness.

Well, when I went in for bypass surgery, I was not concerned one bit—what was going to happen because I knew if God wanted me, He'd take me. If He didn't, I'd be all right. So my faith was in God, whatever He said, that's what's going to be. (White respondent)

You have to believe in Him. That's the only way you can deal with the illness, is through your faith in the Lord and what you know is going to be the outcome of whatever you have. You just trust in the Lord. And He sends you where you need to go and He sends people that you need to see. And He takes care of the situation. (African American respondent)

I think somewhere along the line you have to put your faith in God and ask for help. I just have faith in God. He'll take care of that end of it, you know. He always has. I had 18 operations and I'm 78 years old, and I'm still here. (White respondent)

Prayer as a mediator

Both African American and white respondents acknowledge that prayer was a mode of communication between them and God. Prayer played a central role in the self-management of chronic illness. It helped the respondents accept their health issues. Praying for one's health did not require a specific time or place. Prayer occurred first thing in the morning, throughout the day, before going to bed, on the bus, in the doctor's office, in the dialysis clinic, in church, in their homes, with family or friends, with religious leaders, with medical professionals or by themselves. Praying was described as feeling and being connected to God. Each participant used prayer to help shape their reality and acknowledge that God was present in the healing process. The themes regarding prayer include petitioning God to help in the self-management of chronic illness and to heal or alleviate the physical condition.

Several participants prayed before taking prescribed medications, while performing disease-specific self-management practices, and in the middle of medical treatments.

I had a friend that asked me, do you pray over your medication that the doctor give you? And I thought about it. I said, yeah. New medicine, especially that they won't make me sick and it would help me. (African American respondent)

Well, because I have seen some difference in, you know, in just my test results. Even with my daily glucose testing, they are so much better than they had been for so long, something that I had prayed for. (African American respondent)

I pray a whole lot. I can walk the street and pray. And I ask for God's help. I've had hypertension over the years. I try to keep my blood pressure under control with medication. I think when you pray about something, you can only take it to God one time. So when I pray, I say I'm leaving it in your hands. Either go to the doctor or I pray about it. And I certainly take my medication. And I ask God to give me the strength to do that. (African American respondent)

Particularly salient were the prayers asking God to heal or alleviate their symptoms. Several participants acknowledged the positive outcome from prayers. Several attributed unexpected improvements in their health due to praying.

You have to have their prayers, and I found that out when I had my aneurysm, you know. And I do believe He brought me through. I had everybody praying for me, prayer partners, and things like that. That I got better, that I was healed. I had many people praying for me and I prayed a lot myself, especially when I had this brain surgery. (African American respondent)

There have been moments when I've had severe palpitations, shortness of breath, and pain. And I have just simply prayed and asked God to alleviate the situation and to change the situation. What makes me believe in it so much is that I found that the physical ailment just merely went away. It was really, for me, a prayer-answering result. (African American respondent)

Well, I pray every night that this aneurysm isn't going to burst. When you should say your prayers, you're praying every night that your health would be good. And as I said, I specifically pray about this aneurysm. (White respondent)

I have not had a physical heart palpitation within the past year, I have been more involved with prayer and meditation, and I think that it was a direct result of my prayer life and my spiritual life. (African American respondent)

The participants acknowledged that the impact of their illness caused them to pray to God to intervene in their health condition. The following statement by a 73-year-old white respondent illustrates this point: "Well, I guess when you have a heart attack once; you're always going to be thinking about having it again, that you are going to be praying that you don't."

Spirituality as a coping mechanism

The participants offered many approaches they used to cope with stressors of their chronic illness and pain. This category focuses on how the participants cope with being ill. It is clear that managing their illness means using spirituality practices and beliefs as a coping

mechanism. Participants within this study repeatedly described the process in which they incorporated spirituality as a coping mechanism. This mechanism alleviated several potential physiology and psychological stressors such as pain and helplessness. The following quotes represent how the participants used their spirituality to cope with their illness.

Like I said, if I didn't believe in the Almighty . . . I probably would have ended it all a long time ago. . . It keeps me together. It keeps my head straight. . . I ask the good Lord for mercy if it gets bad enough. (African American respondent)

Well, when you meditate, that kind of lightens your burdens of all what bothers you or your aches and pains, everything is wrong with you. (African American respondent)

If I feel that I am in a crisis situation physically, it helps me to cope by reminding me that the ultimate choice of whatever the outcome of this situation is, is not my own. And, therefore, I give myself over to whatever will there needs to be as far as my belief in God is concerned. And, therefore, whatever is happening to me at the time, I'm able to cope with it easier. And at the same time, it also asserts that what my belief teaches, that we're not given a spirit of fear but of faith. And when I reiterate that or when that comes to mind, for some reason the problem doesn't seem as great. And my coping skills are enhanced. And I calm down and I get quieter. And sometimes it just gives me such a relief from the tensions or whatever the crisis is that I'm just better able to deal with that. If I am nervous, if I am jittery, I just seem to get this sensation of peace and quiet that comes over me, and I know that that's not of me. I know that it isn't. It's truly, I believe, the hand of God and the touch of God and the Holy Spirit that quiets and consumes me. And I am whatever I need to do at that time; it's just given to me. And I can cope. I wouldn't be able to deal with a heartbeat that is so irregular that it, you know, it used to jolt me in the middle of something or take my breath away or make me feel so anxious and aggravated and out of control with this. I wouldn't be able to do that without having the spirituality to help me get through that. (African American respondent)

Well, it has helped me spiritually to cope with my condition by not having to think about it often. I place everything in faith. If I'm supposed to go that way, that's the way I'm going to go, vice versa. See, I'm at peace with myself and with God. (White respondent)

Combining conventional medicine and spiritual practices in self-management

A few participants from each group (e.g., four African American and two white respondents) discussed combining conventional medical practices with spiritual practices. The participants accredited God with giving the medical doctors the wisdom and the knowledge to treat their illness.

When this clotting occurred, I was sitting in the office of my urologist, and these pains, severe pains, started hitting me in the chest. And to my mind, I was sitting there, the more severe the pains became. And so I eventually had to leave. And I told them I wanted to leave. I told the receptionist at the window I had to go. And she told the doctor. The doctor would not let me leave on my own. So he made arrangements for me to be transported across the way through the hospital to the emergency room,

whereas they treated me and come to the conclusion that it wasn't a heart attack that I was having. It was clots. And they came to that conclusion, and they did make arrangements to administer the drugs to dissolve the clots as soon as possible. And it was through God's will that He instilled in the minds of the technicians who saved me and to work with me to dissolve these clots. (African American respondent)

Therefore, combining conventional and spiritual methods is defined as a therapeutic approach that combines medical practices with spiritual beliefs and practices. Several respondents repeated the need to use a combination of medicine or self-management and God.

I believe you need both God and medicine. You can't just pray and then forget everything else. I think they both work together. I still have to watch my diet and I have to try and exercise and take my meds. (White respondent)

Well, it makes you feel good after you've prayed. And then, too, you feel that you've told God about it. And if there's anything He's going to do, He's going to do it and make you feel better. And a lot of times He does make you feel better. I have a little help from pills from the doctor to make it feel better. (White respondent)

Well, my knee arthritis, I'm going to see a doctor about it, but I know that somehow, somehow, God will help me until I get to that doctor. (African American respondent)

Empowering respondents to practice healthy eating habits

Three times as many whites ($n=9$) reported how important the role of spirituality was in empowering them to practice healthy eating habits compared to African Americans ($n=3$).

My opinion, I am even more dependent on my daily guidance and asking for guidance for the day and for healing and help with my health and give me good gumption in how to take care of myself. Overall, I mean, there's a saying about the Lord helps them who help themselves. (White respondent)

Well, like I say, I believe God has given us a diet. And He told us what to eat and what we should eat and not to eat. When He put Adam and Eve in that garden, He told them, you know, gave them all the vegetables and everything and told them to eat those things. And nuts and grains and fruits and vegetables and stuff. Those things we know are good for us. But now, like I said, we can mess up by abusing those things and not doing those things. It's not that God didn't tell us how to do it in the first place. It's our problem. But I believe if we follow Him and live this diet and even taking care of our bodies by getting enough rest and, you know, eating the right things and having the right frame of mind. In other words, having the relationship with Him, communing with Him through prayer. I believe that helps us. (African American respondent)

This study identified difference ways older African Americans and whites used spirituality in the self-management for their chronic illness. In discussing spirituality, the participants included several references to God in the self-management of their chronic illness. African Americans were more likely to conceptualize spirituality in their self-management of chronic illness than whites. When asked directly whether spirituality played a role in the self-management of their chronic illness, African Americans were more likely than whites to: indicate God as a healer (17 vs. 10); God as an enabler working through

their medical doctors (10 vs. 1); and combining conventional medicine and spiritual practices (4 vs. 2). Whites were more likely than African Americans to: put their faith in God (5 vs. 2); and use their spirituality to enhance their healthy eating habits (9 vs. 3). Both African Americans and whites were likely to use prayer as a mediator (14 vs. 12) and spirituality as a coping mechanism (18 vs. 14) (Table III).

The study participants demonstrated a variety of responses from God as the healer to taking personal responsibility in the self-management of their illness. In fact, the qualitative analysis revealed that a vast majority of the 88 participants attributed several of their self-management practices to their spirituality. The findings in the study suggest that spirituality plays a part in documenting the self-management process.

Discussion

Current research on spirituality and health has made important strides in understanding the role of race and ethnicity and has contributed to the literature (Abrums 2000; Arcury *et al.* 2000; Chatters and Taylor 1994; Chin *et al.* 2000; George *et al.* 2000; Mansfield *et al.* 2002; Matthews *et al.* 1998; McAuley *et al.* 2000). With the expanding literature base, it is important to examine the role of spirituality in the lives of older Americans as it pertains to their perception of chronic illness and disease management. The purpose of this study was to explore the role of spirituality in the self-management of chronic illness among older African American and white elders. The results demonstrated that racial differences exist in the role of spirituality in the self-management behaviors among those who suffered from chronic illness. Many scholars have noted from the interviews with African American elders that spirituality is an integral part of the respondents' lives (Armstrong and Crowther 2002; McAuley *et al.* 2000; Robinson 1985). Qualitative insights regarding the integration of spirituality and self-management were reported in older urban African American diabetics by Chin *et al.* (2000), older rural African American adults by Arcury *et al.* (2000) and African American women by Abrums (2000). In a study with 19 older African American diabetics, Chin *et al.* found that respondents believed God directed their lives and justified their use of self-management by using the analogy that God works through others. Also consistent with Abrums' findings, she concluded that the power to heal remained in God's hands and medical doctors were an instrument of God. Mansfield *et al.* found that African Americans were more likely than whites to endorse a belief in divine intervention in healing and a belief that God acted through physicians to cure illnesses. The African American respondents created a belief system that enabled them to understand their experiences and to take control of their own healing. The anchor for this belief system is based on the belief that the body was a gift from God and that only God had the ultimate say over what happen to the body. Spiritual views about healing were particularly evident among this population. Regardless of the therapeutic measure selected by African American respondents, God is believed to be the healer and has the power to heal. This belief system involves blending the spiritual and allopathic aspects of health. When the African American respondents can choose, they tend to use both spiritual and biomedical practices.

Several of the white participants merge their spirituality in various self-management practices. In addition to reporting belief in prayer and in God, as did with their counterparts, the white respondents also expressed a greater responsibility and control over their health outcomes. These respondents assume some control over illness management and health outcomes by watching their diet and exercising. As shown by the self-management practices of whites spiritual beliefs were closely intertwined with the concepts health

promotion. Although spiritual beliefs motivated these individuals to become proactive in their self-management practices, differences in health beliefs and the ability to access care may help to explain the pattern of self-management behaviors. Despite these differences, spirituality can play an integral part in a person's health and well-being of chronically ill elders.

For both groups, spirituality was used as a coping resource in a variety of ways from responding to specific health crisis to effectively dealing with life's daily challenges. Across interviews, respondents indicated that spirituality served as a coping mechanism through which they were able to find a sense of peace. For instance, the respondents used their spiritual beliefs to deal with the negative aspects of their health such as a diagnosis of cancer. They implied that God, the major player in the self-management of illness, was their source of strength. Coyle (2002) and Narayanasamy *et al.* (2004) found that respondents believed that spirituality was an important dimension of health by providing meaning and purpose.

The study had some limitations. The sample was predominately Christian and of European American and African American descent. Most research in spirituality and health has occurred in populations that consist of whites and African Americans. Further study on the role of spirituality in the lives of the chronically ill elders should include others of non-Christian religions, as well as agnostics, allowing a broader understanding of spiritual issues across religious and nonreligious sectors. Given the increase in diversity among older adults in the United States, more attention needs to be given to other religions and spiritual groups as well as to other groups such as Asian and Latino elders.

This exploratory study provided qualitative inquiry linking spirituality and self-management of chronic illness. Furthermore, this study focused on the participants' perceptions of the use of spirituality and self-management of chronic illness. Spirituality plays a vital part in the life of a chronically ill individual. We clearly need to learn more about the complex relationship between spirituality and self-management in the chronically ill population. The current study validates that association and further research is needed to understand this phenomenon more fully. The aspects of self-management of disease and dimensions of spirituality should be integrated in self-management research. As indicated in this study, the experience of spirituality, self-management, and chronic illness among the elderly is complex and multifaceted. In conclusion, understanding the experience of chronically ill elders may offer hope in developing more culturally appropriate and competent public health education programs.

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