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African-American Cancer Survivors' Use of Religious Beliefs to Positively Influence the Utilization of Cancer Care

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Abstract Among African-Americans, religion impacts health-seeking behaviors. This qualitative study used criterion purposeful sampling and thematic analysis in analysis of data from 31 African-American cancer patients to understand the influence of religion on the utilization of cancer care services. Our findings suggest that religious beliefs and practices positively influenced attitudes toward their illness and ability to endure treatment. God's ability to heal and cure, God's control over survival, God's will over their lives, and God's promise for health and prosperity were examples of survivor's religious beliefs. Religious practices such as prayer promoted a trusting relationship with healthcare providers and were a source of strength and encouragement.

Keywords African-American · Cancer · Survivorship · Religion · Access to care

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Introduction

The overall racial disparity in cancer death rates among African-Americans and non-Hispanic whites is narrowing. However, African-Americans diagnosed with cancer are still more likely to die, with a 33 % higher death rate for men and 16 % higher death rate for women than that of white men or white women, respectively (American Cancer Society [ACS] 2013). The higher death rate among African-Americans has been attributed to social factors that create barriers and hinder access to optimal cancer care in addition to tumor biology characteristics (Aizer et al. 2014; ACS 2013). Social factors emphasized in the literature known to increase the risk of cancer deaths are generally lower education and income since individuals with a lower SES tend to be uninsured, have fewer opportunities to access health care, and have lower levels of health literacy (Gordon et al. 2014; Zhan and Lin 2014). Other social factors emphasized have been tobacco use, obesity, physical inactivity, and unhealthy dietary patterns, all of which have been linked to some cancers (McCullough et al. 2005; Paxton et al. 2013). Researchers are also beginning to examine whether cancer deaths are attributed to more aggressive tumors, especially those that occur among African-American women with breast cancer (Brawley 2013).

In comparison, studies examining cultural influences such as religion on cancer disparities in mortality rates are minimal. Among African-American populations, religion is likely a key influence on health-seeking behaviors and cancer health disparities since a large majority of this US population (79 %) reports that religion is very important in their lives (PewForum 2007). The use of religion in the lives of African-Americans can be traced to antebellum times (Raboteau 1995). In response to the cruelties of slavery, African-Americans turned to teachings about God for support and guidance to survive a strange and hostile land (Cone 2002; Raboteau 1978). For African-American slaves, instructions for surviving their oppressed living situation came from sermons and songs that gave meaning to their lives. Songs and sermons reinforced their identity as human beings and belief as children of God, He [God] would deliver them from their suffering (Cone 2002; Pinn 1999). Therefore, a belief in God promoted a religious thought that God would not only provide support for their needs but also ultimately end their physical and mental pain if they had patience and lived according to His doctrines (Cone 2002).

A religious consciousness and perspective of God as all-powerful, protector against evil, and capable of ending suffering, persists today and are sources of strength, hope, and inspiration for African-American believers (Hamilton et al. 2013a; Polzer Casarez and Miles 2008). Recent research on the use of songs and Bible verses in response to stressful life events suggests that the continued use of these practices influences an optimistic consciousness toward disease states such as cancer (Hamilton et al. 2013a; b). Participants in these studies reported that during stressful illnesses, religious songs transformed the mood of the user from a negative to a positive, hopeful one. The lyrics of religious songs reminded and encouraged the user of the possibility that God would take them from a place of weakness and vulnerability to that of strength and power; from pain and suffering to peace, relaxation, and serenity; and that God would help them through tragic illnesses (Hamilton et al. 2013b). Similarly, reading Bible verses served as reminders of God's ability to protect, heal, and restore the human body (Hamilton et al. 2013a). The text of Bible verses also served to instruct, guide, and direct the reader during life-threatening illness. As a result, these religious practices likely influenced changes in health-seeking behaviors by cognitively reframing stressful situations to positively influence health outcomes (Grossoehme et al. 2012).

Although the literature on coping through the use of religion among African-American cancer survivors is limited, studies have shown that in comparison to whites, African-Americans pray more, and this practice promoted a more positive attitude toward their cancer experience (Lambe 2013; Sterba et al. 2014). Studies have also shown that the use of religion to cope with a cancer experience also positively influenced utilization of cancer care services. For example, after a cancer diagnosis, African-Americans reported that they have prayed to God and trusted Him to intercede on their behalf with their worries and provide guidance with treatment-related decisions (Hamilton et al. 2007; Henderson et al. 2003). A faith in God was used among recently diagnosed African-American cancer survivors to overcome their fears and fatalistic attitudes of cancer being a death sentence and undergo prescribed cancer treatment (Maliski et al. 2010). A higher level of faith in God and use of religious practices among African-American cancer survivors also minimizes treatment side effects, which likely also promotes adherence to treatment (Dilorio et al. 2011).

Research reports on the negative influences of religion on the utilization of cancer care services are even more limited. However, what is known from this research is that prior to treatment, African-American women who talked only to God about their breast symptoms had a greater delay in time to seeking medical care than those women who talked to another person (Gullatte et al. 2009a). On the other hand, highly religious African-American cancer patients are more likely to request aggressive end of life cancer care compared to less religious individuals (Balboni et al. 2007).

Noticeably absent from the findings of research on religiousness are discussions of the ways in which God is believed to provide support and influence attitudes toward treatment among African-American cancer survivors (Hamilton et al. 2010). A better understanding of the ways in which religion is used to overcome barriers to accessing cancer care can be used to develop interventions tailored to the needs of African-American cancer patients. The purpose of this paper was to report the findings from the ways in which African-Americans use their religion to positively influence the utilization of cancer care.

Methods

This study used a qualitative descriptive design (Sandelowski 2000) that included criterion purposeful sampling (Patton 2002), open-ended interviews, and thematic analysis (Braun and Clarke 2006). Criterion purposeful sampling guided our recruitment process to target African-American survivors of cancer and those who had completed or nearly completed treatment, able to discuss their experiences with fears and fatalistic attitudes, and the strategies used (if any) to overcome those feelings and beliefs. Thematic analysis was used to analyze the data for recurring themes and patterns related to fears and fatalistic attitudes toward cancer (Braun and Clarke 2006). Approval for this study was obtained from the Institutional Review Board of the University of North Carolina at Chapel Hill.

Data Collection and Participants

African-American men and women were eligible for this study if they were 50 years or older, had a confirmed diagnosis of cancer, and able to participate in these interviews. Potential participants for these interviews were contacted during a scheduled clinic visit at a NCI-designated Cancer Center or recruited through cancer support groups in neighboring communities. Participants were contacted in person and provided information about the

study. Written or verbal consent was obtained prior to the interviews, and participants received a $30 store gift card for each completed interview. Interviews were conducted in the privacy of individual's homes, examination rooms, or via telephone by the first author and digitally recorded. The interviews lasted between 20 and 45 min.

During the interviews, participants were asked to talk about their feelings at the time of their diagnosis, what they knew about cancer and where did they learn about cancer, and the strategies they used to manage any fears they may have had. Example questions included "When you were diagnosed, what did you know, what had you seen, or what had you heard?" and "Who did you talk to about things that worried you?" Follow-up questions included "When people act as if it is a death sentence, where do you think that comes from?" "How did you respond to people that may have treated you as if you were going to die?" and "How did your religion influence your decision to be treated?" The focus of this report is the analysis of participant comments specific to the use of religious beliefs and/or practices that promoted a positive attitude toward their utilization of cancer care services.

Data Analysis

The interviews were transcribed verbatim and checked for accuracy by the first author. The thematic approach to data analysis involved organizing participant responses to questions according to a religious belief that shaped their attitude toward a cancer and influenced their decision to seek treatment. The process of thematic analysis (Braun and Clarke 2006) included becoming familiar with the data through rereading and noting initial ideas related to survivors' responses. Initial coding of the data by the first author was to organize the data in a table according to any text related to a religious belief or a religious practice. We extracted all the data from the interviews that appeared directly related to religion and related attitudes toward cancer, treatment, healing, and survivorship outcomes. Other closely related data analyzed included religious practices including praying, church attendance, reading the Bible, singing or listening to religious music, and meditation. From the data that was coded and categorized, we identified themes. We also examined the data for relationships among the themes and for different levels within the themes (subthemes). Strategies to optimize validity (Maxwell 2013) included reviewing the coding among the first, second, and third authors and refining the coding until there was agreement. The fourth author, a breast cancer survivor, also reviewed the findings for accuracy of our themes generated, interpretations of data, and conclusions.

Results

As shown in Table 1, the average age of the 31 African-American cancer survivors was 60 years. The majority of these cancer survivors are characterized as female, married, and well educated with an educational level that included some college. At the time of the interviews, a majority were not employed as a result of either their health or their retirement; however, they were insured. The most prevalent cancer diagnosis among the participants interviewed was breast cancer, and a majority were still in treatment. Of the 31 participants interviewed, 28 discussed a religious belief or practice and these influences on their attitude toward cancer and their ability to endure treatment and negative interactions within their social networks.

In the next section, we show with quotations, the religious beliefs used among these participants that shaped their attitudes toward their disease and treatment. These religious

Table 1 Demographics of African-American cancer survivors (total sample $N = 31$)

Variable	
Age, mean (SD)	60.4 (6.9)
Gender *n* (%)	
Men	13 (41.9)
Women	18 (58.1)
Marital status *n* (%)	
Married	19 (61.3)
Widowed	2 (6.5)
Divorced	8 (25.8)
Never married	2 (6.5)
Education *n* (%)	
Junior high school, seventh–ninth	1 (3.2)
Partial high school, tenth–eleventh grade	4 (12.9)
High school or GED	9 (29)
Partial college	5 (16.1)
Completed college	5 (16.1)
Graduate professional training	5 (16.1)
Missing	2 (6.4)
Employment status *n* (%)	
No, retired	11 (35.5)
No, looking for work	1 (3.2)
No, quit work because of health	9 (29.0)
Yes, part time	1 (3.2)
Yes, full time	9 (29.0)
Insured *n* (%)	
No	4 (12.9)
Yes	27 (87.1)
Religious affiliation *n* (%)	
Baptist	18 (58.1)
Holiness	1 (3.2)
Methodist	4 (12.9)
Non-denominational	1 (3.2)
Presbyterian	1 (3.2)
Protestant	1 (3.2)
No religious affiliation	1 (3.2)
Other	4 (12.9)
Type of cancer *n* (%)	
Breast	16 (51.6)
Colorectal	1 (3.2)
Lung	3 (9.7)
Hematologic	2 (6.5)
Prostate	4 (12.9)
Other	5 (16.1)
Tumor stage *n* (%)	
0	1 (3.2)
1	5 (16.1)

Table 1 continued

2	6 (19.4)
3	5 (16.1)
4	4 (12.9)
Currently in treatment *n* (%)	
No	10 (32.3)
Yes	21 (67.7)

Because of rounding, not all percentages total 100

beliefs included a faith in: God's ability to heal and cure, God's control over survival, God's will over their lives, and God's promise for health and prosperity. Participants also discussed ways that religious practices connected them to God and others, made them feel cared for, and were a source of strength. These beliefs and religious practices were also motivators to these cancer survivors during diagnosis, treatment, and post-treatment. Participants reported that these beliefs and prayers resulted in feelings of being comforted, less anxious and fearful, and optimistic and hopeful.

A Faith in God's Ability to Heal and Cure

This was a religious belief discussed among 11 (35 %) of these participants. This religious belief was a faith and trust that God had the power to heal or cure them of cancer. Participants reported that this belief enabled them to overcome negative interactions encountered with others who were fearful they might die but also when worried themselves. One woman who recently completed treatment was rethinking her negative encounters with others during treatment and the manner in which her faith in God enabled her to overcome these interactions:

> I deal with it [negative comments from others] by standing firmly in my faith and knowing that God has already told me that it's a done deal, that I am healed. Then, I try and express to them that no matter what they are going through, they can stand in the same manner knowing that God has already completed the work and is already done.
> Another woman spoke of how this belief helped when she was worried:
> But sometimes, when you are alone, you think, "Why? Why did this happen?" God comes in and I say "I am healed, I am not sick." And then you forget about that.

Similar reports were from men who described the manner in which God heals through the knowledge given to doctors. One participant who traveled from a neighboring county to seek treatment at a NCI-funded cancer center explained this belief and the influence on his decision to seek treatment:

> Well number one, I know that all healing comes from God. God gives man the wisdom to facilitate the healing process and if I'm going to live then I have to follow God's direction for putting in the minds and hearts of man and giving him the intelligence and the know how of how to treat this. God works through the doctors. Just a normal process.

Responses from other participants that illustrate the religious belief that God was in control over whether they lived or not can be seen in the following two quotes from participants with advanced stage cancers. These quotes may also explain why participants

with this belief may continue with treatment or request life-saving measures even when death appears imminent. One woman traveled nearly 2 h for treatment in spite of being told there was no cure for her cancer:

> I mean you know he said it won't curable but he could treat it. That was the reason I started taking it. But he don't know that the Lord know what's going to be cured or not. That's what I'm sayin'.

Another quote from a participant with advanced stage cancer supports the belief that God is in control of healing. This participant had worked for many years but when diagnosed with cancer, lost her home and was forced to seek services from Medicaid to pay expenses for treatment. Her belief in God's ability to heal gave her hope and kept her coming back for treatments:

> Because God could turn it around. It could be well the doctor tell you say 'well there's nothing we can do' and then God can change that in His way, 'cause He's in charge… like I said he could turn it around like tomorrow or the next time when I come back… It could show up in my blood work that my cancer has just *poof* disappeared and I know only He did it… all the medicine and stuff it helped it along but I feel like, He's in charge. You could get well and be all right.

God's Control over Survival

This second religious belief that God ultimately had control over their survival and related events influencing their survival was expressed among 11 (35 %) of these participants. When participants believed that God was in control over whether they lived after cancer, they explained that God gave the doctors the knowledge to treat them, sent others to provide needed support, and gave them strength to overcome negative comments among families, friends, and others in their communities. One participant drove herself from a neighboring county for treatment despite the expressions from some friends that cancer was a death sentence. This participant described her belief in God's control over her decision to be treated and her ability to respond to those negative comments:

> I always believed God gave the doctors knowledge to deal with things that man himself – the common man don't know how to deal with. And I didn't hear him express to me to just simply take this and go this way [away]. So, I knew that I didn't have the knowledge within myself unless He gave it to me, to deal with it, so I went to the doctor.

Participants discussed using their religious belief in God's control over their survival as a strategy to overcome negative comments from family and friends. The following quote illustrates a form of self-talk from one participant when she encountered negative comments from fellow church members:

> Depending upon the attitude they said it with, sometimes I would want to shake them like look, I already told you, God said it's a done deal, because they are a little afraid and they are not saying they are praying for… but kinda like, "Girl, I'm so scared you're gone die"…I don't see it that way and I 'm not 'gon take that from you, and put it in my spirit and defeat myself because that is not where I am going, God already told me it is a done deal.

God's Will over Their Lives

Of these 31 participants, eight (26 %) reported an acceptance of their cancer diagnosis but also the plan that God had over their lives. Given the content of these responses, it would appear that these individuals had decided against treatment, believing that only God was needed to help them in illness situations. For these participants, the belief that "there is nothing I can do" was acceptance of the cancer, that cancer was a part of God's plan for their lives. One participant suffered from what physicians at a small rural hospital believed was emphysema for over a year, but her persistence finally led her to get a diagnosis and care for an advanced stage cancer. This belief was accompanied with the decision to seek and continue treatment:

> I said it's [cancer] there and ain't nothing I can do about it but just accept it and let the Lord have his way. If He see a way for it [the cancer] to go out or keep it, you see, it's the Lord's will.

Participants also believed that God allowed them to have cancer and reasoned that the cancer served some purpose. When there was a belief in God's will, participants understood the cancer served some purpose in their lives. However, participants were not always able to articulate that purpose. One woman had relocated to a city with a NCI Cancer Center for a better paying job. The move had separated her from her family, and she now believed the cancer was God's way of communicating to her that she should move back to her home place:

> I said, why this happened to me? Maybe God wanted me to go home because it was a shock… maybe God is saying to me, I shouldn't be here.

Another participant currently in treatment was initially told by her primary care physician that she had only a few months to live. In talking about this experience, she discussed her belief in life after death and reasoned that if her life ended with cancer, then it was because God wanted her in Heaven:

> And I said my God is a good God. I said, when I step out of this life He must want me for something over there. I said, if He does that's all well and good.

A final response in this category was from a man who was affiliated with a church in his formative years, but not currently. He remembered religious teachings from his mother, a frequent church goer, taught when he was younger. As he remembered his mother, he voiced his belief that there was a reason for his having cancer, although that reason was not clear:

> I believe in God and my mother used to say everything happens for a reason. I didn't know the reason I was going through this but I knew there was a reason.

God's Promise for Health and Prosperity

The least frequently used religious belief among six of the 31 (19 %) participants was that God rewarded those who believed in and adhered to a religiously based covenant. This covenant specified a reciprocal relationship with God wherein believers would be rewarded for their faithfulness and obedience with blessings of health and prosperity. One participant described how this religious belief affected her mental health, transforming her from a negative mood to one more positive:

> I think I may have had more negative thoughts about my situation than positive. Like now I'm pro-positive because I'm a believer and I have faith and I believe what God's word said that His desire for me is to prosper and be in good health…. and so that's what I'm standing on. I'm gonna be in good health.

A Connectedness to God and Others Through Religious Practices

Participant responses in this category and included in this report illustrate the positive influence of religious practices such as praying, reading the Bible, and singing religious songs on the utilization of cancer care services. Praying is a form of communication to God and used as means of making requests or expressing gratitude. However, participants in this report also described the influence of prayer on managing symptoms and utilization of cancer care services.

Participants described praying and praising God as instructed in Bible verses they had read or remembered hearing, and these verses were a form of distraction from emotional and physical symptoms during cancer treatments. One participant continued radiation treatments despite the pain he was experiencing:

> And one of the most positive things that I know that I do and I continue to do…is just praise God. The scriptures say in everything give God thanks. So I can thank God. Even in the midst of pain. When I'm having real bad pain. Sometime pain comes hard and it be rough it be tough with me. But… I turn to God and I just praise him and thank him.

For another participant, a focus on God was also a distraction that kept her calm and from thinking about having cancer:

> … just focus on God. And just remove that mind that telling you have cancer, don't think about that… and this help you… the emotional and all this [thinking about cancer]….focus on God, God is real, forgetting you are sick, something other than cancer. Cancer is just like any other disease. Focus on something that will help you calm down.

The positive influence on the utilization of health-care services can be seen in quotes from participants who when prayed for by their oncology health-care team, described a sense of feeling cared for and a confidence that the outcome of treatment would be positive. An exemplar quote comes from a man who recently completed chemotherapy and radiation therapy for esophageal cancer. He traveled over 2 h one way for his initial cancer care but spoke positively of his life in a small rural town in the Appalachians and the support from his church and the health-care team of a recently opened cancer center:

> Before I even started all my treatments, the main doctor, the cancer doctor, he said, "Do you have a praying church?" I said they sure will, I said I have a loving church family. He said "as long as you have a loving church family that will pray for you, everything will be okay."… and I met people walking by that you would never think… you didn't know who you was going to run into and during the radiation, some of the people giving me the radiation, when I come out of treatment, they'd say, we "praying for you [name omitted], we praying that everything is going to be okay", said "you going to be alright."
> … Made me feel good…that they would pray for me. If you are a Christian and have the faith, prayer is always good. But just not anybody can pray for you. 'Cause

there's some say I'm going to pray for you and the prayers don't even reach the ceiling of the house… But after he [oncologist] said that {to have his church pray for him], that gave me even more faith to believe that I was going to be healed. And… seemed like the burden of having cancer was lifted off of my shoulder.

Discussion

Although several studies have indicated that religion negatively affects outcomes in African-Americans such as delayed time to seek medical care (Gullatte et al. 2009b), non-adherence to treatment (Sawesi et al. 2014), and distress (Gall et al. 2009), the findings in this study indicate that religion positively affected patient outcomes through faith and trust in God to heal and cure them, God's control over their survival, God's will over their lives, God's promise for health and prosperity, and through the use of prayer, religious song, and Bible verses. Participants described the challenges associated with a cancer diagnosis and how their relationship with God transformed their negative outlook to one more positive and the way in which religion influenced their utilization of cancer care services. These findings are consistent with research where religion has had a positive influence on the use of cancer care services for early detection of cancer but also during post-treatment. For example, the use of religion promoted post-treatment use of cancer care services for the monitoring of cancer recurrence among African-Americans diagnosed with colorectal cancer (Le et al. 2014). Religion has also positively influenced the utilization of cervical and colorectal cancer screening tests (Leyva et al. 2014).

Our findings contribute to the body of research that demonstrate the positive influence of religion on cancer outcomes; whereby, the ways in which religious beliefs and practices assist specifically to the utilization of cancer care services among African-Americans. Consistent with previous studies on religion and psychological adjustment to cancer, a strong belief in God is an important mechanism for coping with cancer (Lagman et al. 2014). As found in other studies, religion promotes a consciousness that a superhuman entity is in control of the universe, and this same control applies to control over health and healing after a cancer diagnosis (Luhrmann 2013). Consistent with other research, the participants in this study reported that religion influenced their images of God which were associated with feelings of peace, comfort, and a life after death in Heaven (Schreiber and Edward 2014). Among these participants, perceptions were that God was real, tangible, central to every aspect of their lives, and worked through health-care providers; therefore, they felt at peace knowing that God was in control over the actions of health-care providers in charge of their treatment and cancer care. The participants also believed that God made health care available for their use to provide healing from their cancer. For these participants, if it was the will of God for them to survive, they would survive regardless of comments or opinions from health-care providers. These cancer patients acknowledged that it might not be God's will for them to live; nevertheless, they had a determination to continue treatment until death occurred. Knowing that God was in control provided them with peace even in the face of death. This finding is in contrast to studies where African-American cancer patients reported that their fears of cancer being a "death sentence" hindered their decision to initiate and continue treatment for a cancer diagnosis (Lin et al. 2014).

Another finding from this study relates to the religious practices used among these participants that encouraged them to utilize cancer care services during diagnosis and treatment. During episodes of depression, African-Americans with cancer and other life-threatening

illness have used religious practices, such as reading the Bible, singing religious songs (Hamilton et al. 2013b; Zhang et al. 2012), and praying to God for mental health outcomes (Zhang et al. 2013), as a way to connect with God and others (Hamilton et al. 2013a; b) and manage illness (Sterba et al. 2014). In addition, these religious practices also connected them to their health-care providers which promoted a sense of trust and encouragement that in turn motivated them to complete their cancer treatment. Research findings on this topic suggest that health-care providers may not be comfortable praying for their patients (King et al. 2013). However, the findings from this report suggest that while patients may appreciate health-care providers who pray with them, our results suggest that patients would benefit even from health-care providers acknowledging their religious beliefs.

Limitations

One limitation of this study was the small sample size and lack of a sampling plan that permitted the comparison of participants' religious beliefs according to factors known to influence access to care. For example, whether religious beliefs and practices varied among cancer patients according to insured status, educational level, social support, and distance from treatment site. In spite of these limitations, the findings suggest that religion, at least in part, might influence whether cancer care services are used when encountering other cultural barriers.

Implications

Although the focus of this report was on the positive influence of religion on the utilization of cancer care services, we also observed that many of these participants were diagnosed with late stage disease. A question for future research might be to explore whether this set of religious beliefs is relevant to persons prior to cancer diagnosis and usefulness in the promotion of early cancer detection efforts. For example, if these beliefs of God being in control over one's health and healing motivated these cancer patients to seek health care for diagnosing and enduring treatment services, would these beliefs also motivate African-Americans to use health-care services for cancer screening. Hence, exploring how religious beliefs and practices impact the utilization of cancer care services among African-Americans prior to and after a cancer diagnosis may provide important contributions to health interventions focused on increasing the use of preventative services while decreasing cancer mortality disparities among racial/ethnic minority populations.

The participants in this report also described the way in which religion served as a form of distraction, an aid to relax, and even reduce pain. Researchers have focused on alternative and complementary therapies such as yoga and mindfulness-based stress reduction for the relief of symptoms associated with cancer and cancer treatment (Johns et al. 2014; Taso et al. 2014) and the benefit of secular music to the burden of disease (Burrai et al. 2014; Pauwels et al. 2014). However, the benefits to symptom management and burden of disease from the use of religious practices such as prayer and religious music have yet to be evaluated in this population (Young et al. 2014).

Conclusions

In this African-American population, religion was used to positively influence the use of cancer care services and trust in health-care providers through religious beliefs that God

used health-care providers as instruments, and He [God] was in control of their healing. Participants believed that God had the ability to heal and cure them if this was His will; however, these same participants were encouraged and motivated to initiate and continue treatment even if the outcome was death. The cancer diagnosis enhanced their relationship and closeness with God which allowed these participants to accept and embrace the belief that God had a purpose for them. Probably, the most profound take away message from this report is the way in which a strong faith in God motivated these participants to overcome challenges to accessing cancer care, traveling back and forth to cancer centers, struggling with a lack of finances, and in spite of the expressed views of others that death was eminent. These participants sought out cancer care and completed the treatments prescribed in part to their belief that it was God who determined their fate from cancer.

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References

Aizer, A. A., Wilhite, T. J., Chen, M. H., Graham, P. L., Choueiri, T. K., Hoffman, K. E., et al. (2014). Lack of reduction in racial disparities in cancer-specific mortality over a 20-year period. *Cancer, 120*(10), 1532–1539. doi:10.1002/cncr.28617

American Cancer Society. (2013). Cancer facts & figures for African Americans 2013–2014. Atlanta: American Cancer Society. Retrieved from http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-036921.pdf

Balboni, T. A., Vanderwerker, L. C., Block, S. D., Paulk, M. E., Lathan, C. S., Peteet, J. R., et al. (2007). Religiousness and spiritual support among advanced cancer patients and associations with end-of-life treatment preferences and quality of life. *Journal of Clinical Oncology, 25*(5), 555–560. doi:10.1200/JCO.2006.07.9046

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77–107. doi:10.1191/1478088706qp0630a

Brawley, O. W. (2013). Health disparities in breast cancer. *Journal of Obstetrics and Gynecology Clinics of North America, 40*(3), 513–523. doi:10.1016/j.ogc.2013.06.001

Burrai, F., Micheluzzi, V., & Bugani, V. (2014). Effects of live sax music on various physiological parameters, pain level, and mood level in cancer patients: a randomized controlled trial. *Holistic Nursing Practice, 28*(5), 301–311. doi:10.1097/hnp.0000000000000041

Cone, J. H. (2002). *God of the oppressed*. Maryknoll, NY: Orbits Books.

DiIorio, C., Steenland, K., Goodman, M., Butler, S., Liff, J., & Roberts, P. (2011). Differences in treatment-based beliefs and coping between African American and white men with prostate cancer. *Journal of Community Health, 36*(4), 505–512. doi:10.1007/s10900-010-9334-6

Gall, T. L., Kristjansson, E., Charbonneau, C., & Florack, P. (2009). A longitudinal study on the role of spirituality in response to the diagnosis and treatment of breast cancer. *Journal of Behavioral Medicine, 32*(2), 174–186. doi:10.1007/s10865-008-9182-3

Gordon, T. F., Bass, S. B., Ruzek, S. B., Wolak, C., Rovito, M. J., Ruggieri, D. G., et al. (2014). Developing a typology of African Americans with limited literacy based on preventive health practice orientation: Implications for colorectal cancer screening strategies. *Journal of Health Communication*. doi:10.1080/10810730.2013.872725

Grossoehme, D. H., Ragsdale, J. R., Cotton, S., Meyers, M. A., Clancy, J. P., Seid, M., et al. (2012). Using spirituality after an adult CF diagnosis: Cognitive reframing and adherence motivation. *Journal of Health Care Chaplaincy, 18*(3–4), 110–120. doi:10.1080/08854726.2012.720544

Gullatte, M. M., Brawley, O., Kinney, A., Powe, B., & Mooney, K. (2009a). Religiosity, spirituality, and cancer fatalism beliefs on delay in breast cancer diagnosis in African American women. *Journal of Religion and Health, 49*(1), 62–72. doi:10.1007/s10943-008-9232-8

Gullatte, M. M., Hardin, P., Kinney, A., Powe, B., & Mooney, K. (2009b). Religious beliefs and delay in breast cancer diagnosis for self-detected breast changes in African-American women. *Journal of National Black Nurses Association, 20*(1), 25–35.

Hamilton, J. B., Crandell, J. L., Carter, J. K., & Lynn, M. R. (2010). Reliability and validity of the perspectives of support from God scale. *Nursing Research, 59*(2), 102–109. doi:10.1097/NNR.0b013e3181d1b265

Hamilton, J. B., Moore, A. D., Johnson, K. A., & Koenig, H. G. (2013a). Reading the Bible for guidance, comfort, and strength during stressful life events. *Nursing Research, 62*(3), 178–184. doi:10.1097/NNR.0b013e31828fc816

Hamilton, J., Powe, B., Pollard, A., Lee, K., & Felton, A. (2007). Spirituality among African American cancer survivors. *Cancer Nursing, 30*(3), 309–316. doi:10.1097/01.NCC.0000281730.17985.f5

Hamilton, J. B., Sandelowski, M., Moore, A. D., Agarwal, M., & Koenig, H. G. (2013b). "You need a song to bring you through": The use of religious songs to manage stressful life events. *Gerontologist, 53*(1), 26–38. doi:10.1093/geront/gns064

Henderson, P., Gore, S. V., Davis, B. L., & Condon, E. H. (2003). African American women coping with breast cancer: A qualitative analysis. *Oncology Nursing Forum, 30*(4), 641–647.

Johns, S. A., Brown, L. F., Beck-Coon, K., Monahan, P. O., Tong, Y., & Kroenke, K. (2014). Randomized controlled pilot study of mindfulness-based stress reduction for persistently fatigued cancer survivors. *Psychooncology*. doi:10.1002/pon.3648

King, S. D., Dimmers, M. A., Langer, S., & Murphy, P. E. (2013). Doctors' attentiveness to the spirituality/religion of their patients in pediatric and oncology settings in the Northwest USA. *Journal of Health Care Chaplaincy, 19*(4), 140–164. doi:10.1080/08854726.2013.829692

Lagman, R. A., Yoo, G. J., Levine, E. G., Donnell, K. A., & Lim, H. R. (2014). "Leaving it to God" religion and spirituality among Filipina immigrant breast cancer survivors. *Journal of Religion and Health, 53*(2), 449–460. doi:10.1007/s10943-012-9648-z

Lambe, C. E. (2013). Complementary and alternative therapy use in breast cancer: Notable findings. *Journal of Christian Nursing, 30*(4), 218–225.

Le, D., Holt, C. L., Pisu, M., Brown-Galvan, A., Fairley, T. L., Lee Smith, J., et al. (2014). The role of social support in posttreatment surveillance among African American survivors of colorectal cancer. *Journal of Psychosocial Oncology, 32*(3), 245–263. doi:10.1080/07347332.2014.897293

Leyva, B., Nguyen, A. B., Allen, J. D., Taplin, S. H., & Moser, R. P. (2014). Is religiosity associated with cancer screening? Results from a national survey. *Journal of Religion and Health*. doi:10.1007/s10943-014-9843-1

Lin, J. J., Mhango, G., Wall, M. M., Lurslurchachai, L., Bond, K. T., Nelson, J. E., et al. (2014). Cultural factors associated with racial disparities in lung cancer care. *Annals of the American Thoracic Society, 11*(4), 489–495. doi:10.1513/AnnalsATS.201402-055OC

Luhrmann, T. M. (2013). Making God real and making God good: Some mechanisms through which prayer may contribute to healing. *Transcultural Psychiatry, 50*(5), 707–725. doi:10.1177/1363461513487670

Maliski, S. L., Connor, S. E., Williams, L., & Litwin, M. S. (2010). Faith among low-income, African American/black men treated for prostate cancer. *Cancer Nursing, 33*(6), 470–478. doi:10.1097/NCC.0b013e3181e1f7ff

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage.

McCullough, M. L., Feigelson, H. S., Diver, W. R., Patel, A. V., Thun, M. J., & Calle, E. E. (2005). Risk factors for fatal breast cancer in African-American women and White women in a large US prospective cohort. *American Journal of Epidemiology, 162*(8), 734–742. doi:10.1093/aje/kwi278

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Pauwels, E. K., Volterrani, D., Mariani, G., & Kostkiewics, M. (2014). Mozart, music and medicine. *Medical Principles and Practice: International Journal of the Kuwait University Health Science Centre*. doi:10.1159/000364873

Paxton, R. J., Taylor, W. C., Chang, S., Courneya, K. S., & Jones, L. A. (2013). Lifestyle behaviors of African American breast cancer survivors: a Sisters Network, Inc. study. *Public Library of Science One, 8*(4), e61854. doi:10.1371/journal.pone.0061854

PewForum. (2007). A religious portrait of African-Americans. *Pew Forum on Religion & Public Life*. Retrieved from http://pewforum.org

Pinn, A. B. (1999). *Why Lord? Suffering and evil in Black theology*. New York: Continuum.

Polzer Casarez, R. L., & Miles, M. S. (2008). Spirituality: A cultural strength for African American mothers with HIV. *Clinical Nursing Research, 17*(2), 118–132. doi:10.1177/1054773808316735

Raboteau, A. J. (1978). *Slave religion: The "invisible institution" in the antebellum south*. New York: Oxford University Press.

Raboteau, A. J. (1995). *A fire in the bones: Reflections on African-American religious history*. Boston, MA: Beacon Press.

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health, 23*, 334–340.

Sawesi, S., Carpenter, J. S., & Jones, J. (2014). Reasons for nonadherence to tamoxifen and aromatase inhibitors for the treatment of breast cancer: A literature review. *Clinical Journal of Oncology Nursing, 18*(3), E50–E57. doi:10.1188/14.cjon.e50-e57

Schreiber, J. A., & Edward, J. (2014). Image of God, religion, spirituality, and life changes in breast cancer survivors: A qualitative approach. *Journal of Religion and Health*. doi:10.1007/s10943-014-9862-y

Sterba, K. R., Burris, J. L., Heiney, S. P., Ruppel, M. B., Ford, M. E., & Zapka, J. (2014). "We both just trusted and leaned on the Lord": A qualitative study of religiousness and spirituality among African American breast cancer survivors and their caregivers. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*. doi:10.1007/s11136-014-0654-3

Taso, C. J., Lin, H. S., Lin, W. L., Chen, S. M., Huang, W. T., & Chen, S. W. (2014). The effect of yoga exercise on improving depression, anxiety, and fatigue in women with breast cancer: A randomized controlled trial. *Journal of Nursing Research, 22*(3), 155–164. doi:10.1097/jnr.0000000000000044

Young, W. C., Nadarajah, S. R., Skeath, P. R., & Berger, A. M. (2014). Spirituality in the context of life-threatening illness and life-transforming change. *Palliative and Supportive Care*, 1–8. doi:10.1017/s1478951514000340

Zhan, F. B., & Lin, Y. (2014). Racial/ethnic, socioeconomic, and geographic disparities of cervical cancer advanced-stage diagnosis in Texas. *Womens Health Issues*. doi:10.1016/j.whi.2014.06.009

Zhang, A. Y., Gary, F., & Zhu, H. (2012). What precipitates depression in African-American cancer patients? Triggers and stressors. *Palliative and Supportive Care*, 1–8. doi:10.1017/s1478951511000861

Zhang, A. Y., Gary, F., & Zhu, H. (2013). Initial evidence of religious practice and belief in depressed African American cancer patients. *The Open Nursing Journal, 7*, 1–5. doi:10.2174/1874434601307010001