

Role of Spirituality in Coping with Breast Cancer: A Qualitative Study of Samoan Breast Cancer Survivors and their Supporters

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Abstract

The use of spirituality for guidance and coping affects the quality of life in many cancer survivors and their supporters. Previous research has focused on coping strategies among cancer and terminally ill survivors, primarily among White and African American women. However, the length and extent to which these strategies have been researched in a cultural and communal context, such as Pacific Islanders, is not documented. The purpose of this qualitative study was to explore spiritual coping among a cross-sectional sample of 20 Samoan women diagnosed with breast cancer and 40 of their supporters (family and/or friends) in Southern California. In-depth interviews were conducted retrospectively with survivors and their supporters by trained bilingual/bicultural interviewers. The interviews were recorded, transcribed (and translated where applicable), and analyzed using the grounded theory approach to identify major themes for each group. Results illustrated that spirituality provided considerable emotional and logistical assistance to both survivors and their supporters, with particularly churches playing a potentially important role in the development of social support programs for both groups. This study supports the use of faith-based communities as forums to increase health education and understanding the further use of spiritual coping for cancer survivors, family, and friends.

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Introduction

Breast cancer is the leading site for cancer among Samoan women (Cockburn, Liu, & Deapen, 2009), and they and other Pacific Islanders are over twice as likely to be diagnosed at late stages in comparison to non-Hispanic whites (Marshall, 2008). Unfortunately, breast cancer is a private matter in the Samoan community. The silence is broken only after the disease has progressed to the point where she can no longer mask the pain, seeks medical help, and reaches out for support; but often it is too late. However, no published research exists on the unique cultural challenges and coping strategies of Samoan and other Pacific Islander breast cancer survivors. In general, Samoans lack of exposure to cancer education may influence their methods of approaching, understanding, and dealing with breast cancer (Hubbell, Luce, & McMullin,

2005; Ishida, Toomata-Mayer, & Braginsky, 2001). Culturally, the Samoan community represent sources of strength and support for promoting health behaviors as well as influencing spiritual behaviors among Samoans (Gotay et al., 2000; Puaina, Aga, Pouesi, & Hubbell, 2008). Therefore, exploring coping among both survivors and members of their social network may better surface both the cancer needs and cultural influences that affect survivors' quality of life (Stetz & Brown, 2004). The purpose of this study was to explore the role of spirituality in coping with breast cancer among Samoan cancer survivors and their supporters, defined in this study as family members and friends.

Negative beliefs about cancer

Pacific Islander communities, like Samoans, live in communal cultures, sharing advise, information, and beliefs within the group. When

disclosing information, fear, and negative feelings regarding unfamiliar cancer experiences can be traumatic. A qualitative study by Ishida, Toomata-Mayer, and Braginsky (2001) found that Samoan breast cancer survivors held negative beliefs about cancer, relating it to be an untreatable disease and ultimately, death. Hubbell et al. (2005) reported that Samoans with cancer often deal with the disease with uncertainty, fatalistic beliefs, and passiveness. Samoans failed to seek help for their emotional strife, thus, avoiding or choosing to deny the experience. This may be due to lack of knowledge, traditional stigma and fear, and failure to understand the disease.

Support from families

The emotional and physical challenges of coping with breast cancer have been expressed by both breast cancer survivors and their families (Hilton, 1996). A number of studies demonstrate positive correlations between social support and health outcomes (physical and psychological) of cancer survivors, especially breast cancer patients (Arora, Rutten, Gustafson, Moser, & Hawkins, 2005; Bloom, Stewart, Johnson, Banks, & Fobair, 2001; Lekander, Furst, Rotstein, Blomgren, & Fredrikson, 1996). With healthcare increasingly relying on outpatient care recovery, the role and involvement of family and friends in the health of cancer survivors becomes increasingly influential as well (McCorkle, Yost, Jepson, Malone, Baird, & Lusk, 1993). Pacific Islander families establish intimate ties through networks that involve churches and social gatherings to retain tradition and cultural customs, which may in turn influence individual utilization and knowledge of health. A study of Native Hawaiian women with breast cancer found that religion and spirituality were important sources of support, not only for survivors but also their family members, to cope with individual emotions, ordeals, and roles (Mokuau & Braun, 2007). Support networks and spiritual elements may influence treatment decision making, which is also vital to the cancer survivor's coping during times of diagnosis and treatment (Kagawa-Singer & Blackwell, 2001). The emotional and physical challenges of coping with breast cancer

are not limited to just survivors, as the consequences of diagnosis, treatment, and follow up involves everyone with whom the survivor interacts (Hilton, 1996; Kim, Wellisch, Spillers, & Crammer, 2007).

Spirituality and coping with cancer

Samoans rely on spirituality to cope with life stressors and give meaning to life events (Kaholokula, Saito, Mau, Latimer, & Seto, 2008). This may be particularly true for both survivors and supporters when faced with the diagnosis of breast cancer of a loved one. The National Alliance of Caregiving (2004) reported that four out of five cancer supporters used coping strategies that involved prayer to deal with its stressors (AARP, 2004). Past studies have shown that spirituality and religious resources are frequent sources of support for both survivors and caregivers (Ferrell, Grant, Funk, Otis-Green, & Garcia, 1998; Gotay & Wilson, 1998). Religious resources and spiritual coping are multidimensional where religiosity may help to increase social networking, as well as increase the perceived control over factors that could be seen as inevitable (Koenig, 2002; Koenig, McCullough, & Larson, 2001). Qualitative studies have found that minority women see God as a guide and healer, find social and family support through religious practices, and use prayer to calm feelings of mental anxiety and unrest (Choumanova, Wanat, Barrett, & Koopman, 2006; Gall, Miquez de Renart, & Boonstra, 2000; Lackey, Gates, & Brown, 2001; Van Leeuwen, Tiesinga, Jochemasen, & Post, 2007). On the other hand, some studies found that spiritual coping may not provide relief for all cancer patients, particularly those who sought answers and relief through prayer but found they had more negative feelings and distress because they could not answer the "whys" of cancer onset (Abernathy, Chang, Seidlitz, Evinger, & Duberstein, 2005; McCullough, 1995)

The purpose of this study was to identify and explore how spirituality was used by Samoan breast cancer survivors. The overarching aim was to identify the social support needs of survivors and their supporters. This study was

motivated by Samoan leaders who wanted to better meet the needs of survivors in the community.

Methods

Study design

This was a qualitative cross-sectional study that explored the breast cancer experiences of Samoan survivors and their supporters. The study was a partnership between two institutions (one academic and one community-based) and applied principles of community-based participatory research (CBPR) to the design, development, implementation, analysis and dissemination of all data activities (Israel, Schulz, Parker, & Becker, 1998; Tanjasiri et al., 2009). The community partner, the Samoan National Nurses Association (SNNA), developed the original idea for this study based upon their experience of developing and conducting support groups for Samoan cancer survivors in Southern California. Based upon their five years of experience in support group facilitation, SNNA staff questioned whether the groups were meeting the needs of Samoan survivors and their family members. In the fall of 2005, they approached researchers at the California State University, Fullerton (CSUF) to develop and submit a CBPR research proposal to further investigate the needs of survivors. The partners worked together to develop the research proposal, gain funding (from the California Breast Cancer Research Program), and implement all aspects of the data collection and analyses. In addition, a Samoan Community Advisory Board, comprised of 11 leaders (including pastors, survivors, social service professionals and supporters), met quarterly to guide the development and implementation of all data collection and community reporting activities. Lastly, two academic researchers (at the University of California, Los Angeles, and City of Hope), with expertise in multicultural cancer survivorship, served as consultants to the study team and project.

Participants and in-depth interviews

Semi-structured exploratory interviews were conducted with 20 survivors and 40 of their supporters (two per survivor) by trained,

bilingual Samoan interviewers. Study inclusion criteria included women who were self identified as Samoan, had a breast cancer diagnosis at any stage (I, II, or III), and lived in Southern California. Women were recruited through a variety of means, including presentations/announcements at local Samoan churches, word of mouth through SNNA's support groups, and flyers at community agencies throughout Los Angeles and Orange Counties. Out of the 20 women survivors, 10 were recruited from SNNA's monthly social support group. Each of the 20 survivors was asked to nominate two people in her social network who provided support during her diagnosis and/or treatment events to participate on her behalf. The survivor was also told that the purpose of interviewing these people would be to identify ways in which they have supported her previously and/or currently. Contact information was asked from the survivors about each of the nominees. The CSUF IRB approved all human consent procedures, and bilingual (English/Samoan) signed consent forms reassured all participants of their voluntary and confidential involvement and withdrawal protections. Interviews with survivors lasted approximately 2 hours each, and interviews with supporters lasted approximately 1 hour. At the conclusion of each interview, the interviewee was provided a small compensation as a token of appreciation for their time and participation in the study.

The interview guide for both survivors and supporters explored their coping experiences during breast cancer diagnosis, treatment, follow-up, challenges with sexuality and intimacy, as well as use of religion/spirituality, and support services during different periods of their experience. A supplemental demographic questionnaire was also developed to obtain general information about demographics and lifestyle (e.g., age, marital status, highest education, employment status, quality of life). The remainder of this paper focuses on the spirituality section of the interview, as well as any comments regarding their spiritual experiences throughout the interview. Open-ended questions were developed to explore religiosity and spirituality of breast cancer

survivors and supporters. The questions used as prompts by the interviewer to the survivors and supporters included how religious/spiritual they

were, if their church congregation had provided any aid, and how did their faith help them during the cancer process (see Table 1).

Table 1

Interview Questions on Religion/Spirituality.

Participant	Interview Questions
Survivors	Are you religious/spiritual (denomination/church)?
	In what way did faith help you during your breast cancer experience?
	In what ways did your church help you?
	What else might have been provided to you by your church that would have helped you during your breast cancer experience?"
Supporters	How important is religion or spirituality to you?
	In what way did faith help you during your family member's/friend's breast cancer experience (in what ways did spirituality affect your ability to support your family member/friend during her cancer experience)?
	In what ways did your church spiritual group help you during the time your family member/friend was going through diagnosis and treatment?
	In what ways could the church/spiritual group have helped you more during your family member's/friend's breast cancer experience?
	What else might have been provided to you by your church that would have helped you during your family member's/friend's breast cancer experience?"

Data Analysis

All interviews were audio-recorded using digital recorders, and downloaded and transcribed by bilingual Samoan study staff at SNNA. Interviews in Samoan were simultaneously translated and transcribed by staff. Transcripts were imported and analyzed using Atlas.ti version 5.0 (Muhr, 1997) to identify and code emergent themes. The study team used open coding procedures to identify and organize codes into larger categories of themes. The approach of ground theory was used to develop the codes and themes for the qualitative analysis (Strauss & Corbin, 1990). This approach states that theory emerges inductively from the data, with the discovery and creation of themes and codes from the data using "constant comparison" of quotes and categories throughout the process. The academic researchers took the lead in all data analyses, meeting with all study staff a total of five times to discuss emerging themes, examples, and identify new areas for comparison and description. These iterative discussions were essential to the analytic process, and helped to

not only code but confirm the relevance of findings for the Samoan study population.

Two personal spiritual coping themes were created: (1) meaning making and (2) turning to God. These were then expanded into categories. The meaning making theme included spirituality as an integral part, appraisal, and despair. Turning to God relationship included God as a reliever, mediator, partner, provider, and as the all-mighty. Direction of the quotes by either a survivor or supporter is shown, especially if one is speaking about themselves, about others, or vice versa.

The analysis was then compiled into tables, shared with all study staff and the Community Advisory Board members for comments and reflections. Lastly, a final report-back session was held, and the community and academic members of the entire study team shared the study findings, explored any overlooked areas for future analysis, and initiated discussion about future programs and services to meet the identified needs of survivors and their supporters.

Results

A total of 24 women were approached to participate in this study, and 20 survivors agreed (response rate of 83.3%). A total of 45 supporters were approached and 40 agreed to participate (response rate of 88.9%). As shown in Table 2, most of the survivors (80%) and supporters (62%) were over 55 and half of the participants were married. In addition, the majority of survivors (75%) and supporters (82.5%) had one or more children, and over half of all the participants worked full-time during the cancer diagnosis. Amongst the supporters, 6 were spouses, 14 were children of the survivors, 11 were parents and siblings, 6 were other family members, and 3 were friends. All of the survivors (100%) and the majority of the supporters (95%) identified their religious faith as some type of Christianity. All the participants found themselves to be religious or spiritual, and most of the survivors (95%) and supporters (82.5%) joined spiritual groups (see Table 2).

Spiritual coping among survivors

As shown in Table 3, content analysis revealed that both survivors and supporters generally expressed two similar ways of using spirituality to cope with the cancer experience: (1) give meaning to the survivor or supporter regarding cancer, and (2) turning to God for guidance and relief.

For survivors, the importance of religion and spirituality was long held in their lives, using it as a way (1) to give their cancer experience significance. For instance, as an older, devout Christian survivor stated,

“Since I was brought up, I was 11 or 12 years old, in the school that belongs to the Christian Church of Samoa for all girls. Maybe that’s the reason I’m kind of like, consider myself, ‘I’m a Christian lady,’ because all my life, church, church. Yeah, I was brought up that way.”

After being diagnosed with breast cancer, many survivors described it as a challenge to their spirituality, as explained by one early stage survivor who said,

“To me, I didn’t feel like that (cancer associated to death). I felt strong. I knew that my faith was being tested.”

A few other survivors referred to the challenge as bringing new meaning and purpose to their lives, as in the words of another survivor who stated,

“I think that why the Lord, that God, gave me this sickness so I can help out every and any Samoan. If I try, if I save one Samoan lady from cancer, that will be my praise to God.”

Aside from the personal meaning of cancer, survivors also described (2) turning to God for support throughout their cancer experience. First, God was seen as a reliever and healer, in the sense that he could lessen the mental and physical pain of the illness, or lessen the illness itself. Diagnosed with stage III breast cancer, a mother of five stated,

“I leave everything to God for his guidance and his cure for me. . . . I rely on God that he will be the healing person for me and that is where we are at my treatment at this point.... I manage very well, because I rely on God.”

Another survivor born and raised in American Samoa described depending on God’s healing:

“My main witness and belief, my disease was in God’s hands. I used to smoke, at the time. I took one puff and I said, ‘God, I give you this. Please take this and let me live to take care of my children.’ And He did. He healed me.”

One way that God healed was through the strength that he brought to the survivor. A young pregnant survivor, who was asked to choose between cancer chemotherapy or keep her unborn baby, explained how God assisted her emotionally:

“Courage is something that will let you become a lot of things. But, you have to find the courage within you and depend on yourself to bring yourself out. And for me, my courage came from God. You’re not the only one. And you are not

Table 2.

Demographics of Study Participants

	Survivors (n=20)	Supporters (N=40)
Age		
< 30	0 (0.0)	6 (15.0)
30 - 39	1 (5.0)	10 (25.0)
40 - 49	3 (15.0)	6 (15.0)
50 - 59	3 (15.0)	9 (22.5)
60 - 69	11 (55.0)	5 (12.5)
70+	2 (10.0)	4 (10.0)
Stage		
I - II	14 (70.0)	N/A
III	4 (20.0)	
IV	2 (10.0)	
Birthplace		
Samoa	18 (90.0)	23 (57.5)
Marital		
Single	0	11 (27.5)
Married	12 (60.0)	21 (52.5)
Widowed	5 (25.0)	2 (5.0)
Divorced	3 (15.0)	5 (12.5)
Relationship to survivor		
Parent	N/A	1 (2.5)
Husband		6 (15.0)
Child		14 (35.0)
Sibling		10 (25.0)
Other Family		6 (15.0)
Friend		3 (7.5)
Parity		
None	5 (25.0)	7 (17.5)
1 or 2	6 (30.0)	16 (40.0)
≥ 3	9 (45.0)	17 (42.5)
Employment		
Full-time	12 (60.0)	27 (67.5)
Retired	5 (25.0)	0
Disabled	0	7 (17.5)
Unemployed/other	2 (10.0)	6 (15.0)
Education		
≤ High school	11 (55.0)	20 (50.0)
College/Vocational	9 (45.0)	20 (50.0)
Religion		
Christian	13 (65.0)	24 (60.0)
Mormon	3 (15.0)	7 (17.5)
Congregational/Pentacostal	2 (10.0)	
Catholic	1 (5.0)	2 (5.0)
Protestant	1 (5.0)	4 (10.0)
No answer	0	2 (5.0)
Spiritual/Religious groups		
Yes	19 (95.0)	33 (82.5)
Yrs since Diagnosis		
≤ 5	8 (40.0)	N/A
6 to 10	6 (30.0)	
11 to 15	1 (5.0)	
16 to 20	4 (20.0)	
21 ≤	1 (5.0)	

cursed, because God doesn't put you into something that you can't get through. I'm living proof that you can get through it."

Survivors also credited God as influencing those around them. A survivor who was a young newlywed at the time of diagnosis expressed,

"It was my family and my husband that actually got me back on track. And from there, I knew God was working, because I'd be depressed sitting in my room in the dark. I can't sleep. But, I learned to deal with it with patience and prayer."

Lastly, many survivors saw God as a companion and a beacon of optimism watching her every move. Survivors described experiencing a relationship with God as an emotional connection, such as in the words of a survivor and mother of four, who shared,

"I wasn't sure if I should tell anybody . . . I was just fear. But God's way, He just encourages me not be afraid. Then that's when I went to see my doctor. . . . (It was) most of all, God's encouragement."

Through all these roles of healer, supporter, mediator, and companion, Samoan survivors credited God as the source to help them make meaning of, and overcome, their many breast cancer challenges.

Spiritual coping among supporters

Like cancer survivors, supporters in this study also found ways to understand their experience through spirituality by (1) exploring the meaning of the cancer occurrence and identifying ways to cope and grow from the experience. Most of the supporters expressed that religion and/or spirituality were very important in their personal and daily lives. One sister of a survivor stated,

"It's like medicine to my soul. It is the only way to talk to God and ask Him (for) our needs, like helping to heal my sister."

Another supporter, a daughter of a survivor, stated,

Table 3

Aspects of Spiritual Coping among Survivors and Supporters

Participant	Spiritual Coping
Survivors	Meaning making Past influence during childhood/family Spiritual awakening with cancer diagnosis
	Turning to God Reliever/healer Mediator Partner/companion
Supporters	Meaning making Past influence during childhood/family Spirituality prior to cancer experience Learning experience and spiritual growth Spiritual bond between supporter and survivor
	Turning to God Reliever Relational Partner/companion

"(Religion) plays a big part. It keeps me in tune. It plays a really big part in my life, if I didn't have patience, if I didn't pray, if I didn't ask the Lord to give me strength to carry on my duties, I think I would have a break down...At the time, it was all about taking care of mom, doing this for her."

With preexisting faith in a higher being, supporters reported trying to understand their roles during the survivor's cancer experience. Some believed there was nothing more that they could do but pray and hope that the survivor's health was in God's favor. One survivor's daughter, who felt rejected and isolated during her mother's cancer, stated,

"Our faith helped us more to understand and to learn and to help and to support mom."

Another daughter shared how her mother brought her closer to God,

“My mom was always brought up in our prayers. That’s what kept us going: our faith in God. It was unexplainable.”

Some supporters may have also been able to accept the survivor’s cancer with the help of their faith, as in the case of another daughter who stated,

“Cancer is a horrible disease (for) anyone to have. In its entirety, depending on how you look at it, there are good things that do come out of it. Relationships with family are mended, strengthened, and your faith is tested.”

Clearly, supporters went through personal meaning-making during their loved one’s cancer experience. They expressed many ways of how spirituality and faith helped them to not only understand the experience, but to become strong supporters of the survivor throughout their survivorship experiences.

Like survivors, supporters also described (2) turning to God for many aspects of personal support. For instance, many supporters described experiencing psychological and mental stress during the cancer experience, and turned to God for respite and relief. One survivor’s husband expressed,

“Well, after all the doctors have done, I was sad. I thought maybe after the surgery her cancer might get worse or spread even more. But I gave it to God...Our knowledge doesn’t comprehend God’s plan. I was weak, but I always gave it to God...I think I’ve gotten use to it... I don’t feel worry. I just give to God. It’s up to him now. I’m ok.”

Prayers to God included negotiations and bargaining for better survivor outcomes. For example, one mother who sacrificed much of her time to take care of her daughter asked God for the following:

“Take the cancer away from her and put it in me. If I could have, I would... As a mother...it is very hard to deal with because I kept saying to myself, ‘Oh God, please why don’t I get, she just

started a family.’ And I prayed and I hoped to God that (the cancer) would not reoccur.”

Some supporters also believed God to have a larger plan that involved them and the survivors. For example, a friend of a survivor reflected upon the cancer experience by sharing,

“I think God works in mysterious ways. He put (the survivor) and her husband together at a perfect time.”

Another husband stated,

“Whatever treatment that were needed, that was God’s intervention. That’s my belief, and God used doctors and nurses so now she’s doing good.”

Lastly, God was seen by supporters as a partner and companion to the supporter and survivor. One husband, who said that he would never give up on his wife, stated that at the time of his wife’s treatment,

“It was hard to look at her after chemo. I needed help, but I didn’t have any. I just prayed to God to help me.”

Another husband, who had a difficult time during his wife’s treatment, described God’s role in strengthening both of them:

“Before, we didn’t have anybody. We had each other...and you just kept praying...At the time, you don’t know what you’re feeling, and the only person you can talk to is the Lord. He’s the one that . . . strengthens, and we manage to go on.”

Hiding worry of relapse from her sister, a supporter shared how she remained composed during cancer treatments:

“The main thing was asking the Lord to comfort me and make me brave in front of my sister.”

Whether it was finding meaning, strength, or solace, supporters turned to their faith to cope with their own anxiety as well as to better fulfill their many care giving roles.

Discussion

Spirituality has been shown to be an important emotional and psychological factor affecting the quality of life in survivors and caregivers, and the extent to which this has been researched in a highly cultural and spiritual society, such as Pacific Islanders, is lacking. In this study, both Samoan survivors and supporters described turning to their faith in God to cope with the many challenges brought on by cancer. Samoan survivors had various ways of spiritual coping: personal coping through meaning making and connecting with God through his multiple roles. This exemplifies what Cattich and Knudson-Martin (2009) describe as spirituality extending beyond a collection of principles and thoughts, to its integrations in people's reaction to their stressful situations. Importantly, the few studies on coping in multiethnic populations of breast cancer survivors underscore to the universality of faith as part of healing (Ashing, 2003; Gall & Cornbalt, 2002). Interestingly, our study did not find any form of negative coping among Samoans, which may be a reflection of either the embeddedness of the church within the community and culture, or a function of selection biases (discussed later in this section); in either case, further research on this aspect would be warranted.

For Samoan breast cancer supporters, spirituality and prayer were used for coping. Supporters, unlike the survivors, hardly asked others to pray for them; rather, they turned to their own prayers to strengthen their emotional and physical resolve to be better supporters of their survivors. Many of the supporters were also full-time workers, with children and families of their own. Although care giving may have brought added emotional and physical pressures to their already busy roles and lives, majority of the supporters sought out spiritual help and guidance by accessing any resource available through their faith-based and/or extend family communities. In addition, supporters learned to adjust to the conditions and moods of the survivor through their own spiritual relationship with God. All of the supporters expressed a respect of the

survivor's spiritual autonomy, an approach that has also been found by others (Cattich & Knudson-Martin, 2009).

A diagnosis of cancer tends to challenge each individual, survivor and supporter, to reflect upon the person within (also called the inner self) (Weaver & Flannelly, 2004). All of our study participants were found to hold strong spiritual beliefs, which may have helped them accept cancer in their lives. The Samoan survivors discussed how cancer brought new meaning to their lives, influencing and/or strengthening their relationships with their spiritual/religious affiliations, family members, and relationships with God, which was similar to the study findings of Overcash, et al. (1996). The supporters used the opportunity of cancer in their lives as a way to understand their faith, as well as cope and grow spiritually (Carver, 1998). An element of spiritual bonding was also apparent in both the survivors and supporters, which may have affected the type of care received and given (Forbes, 1994; Theis, Moss, & Pearson, 1994). All the survivors and most of the supporters reported better well-being and health activities since completion of cancer treatment.

Limitations

Several limitations should be considered when comparing our findings to the larger Samoan or Pacific Islander population in the U.S. This was a cross-sectional study, where the median time from primary diagnosis for all 20 survivors was 10 years (ranging from 2 to 28 years), and thus results are biased towards the experiences of cancer "thrivers" (i.e., those who had successfully overcome their cancer). We also asked survivors and supporters to retrospectively describe their experiences during cancer diagnosis and treatment, and recall biases may have resulted in more positive rather than negative or challenging recollections. Lastly, while we asked a few questions on spirituality, the purpose of the study did not focus solely on this topic; hence, it is very likely that our inclusion of more questions and probes would have surfaced more information relating to the topic of this paper.

Implication

Since all survivors and supporters mentioned turning one way or another to their faith and/or religious community, future research could focus on the potential roles that faith-based institutions play in promoting cancer early detection, follow-up, treatment and survivorship in Samoan and other Pacific Islander populations; for instance, clergy and leaders of religious communities could be educated and knowledgeable about various health disciplines (Puaina et al., 2008). Due to the sensitivity of social stigma and traditional views, Samoans can use these communal settings to increase education, dissolve uncertainty, and improve emotional support towards the disease. Negative beliefs about cancers within the community can dissipate as family and friends become progressively more involved in understanding and disseminating health information throughout the faith-based community and personal extended members of the Pacific Islander community. Since this study was a retrospective cross-sectional, a longitudinal study design would be crucial to understand how spiritual coping addresses the many unfolding challenges involved in breast cancer diagnosis and treatment, as well as whether survivors' perceived needs for spiritual support match supporters' provision of such support. In addition, capturing spiritual adjustment and interaction over time may help to further understand how minority groups with a stronger spiritual affiliation differ in coping with non-minority groups or those who lack any spiritual/religious association. Methods and models for scale assessment in obtaining spiritual information qualitatively that accounts for emotional, physical, and socio-cultural characteristics need to be further researched.

Clinically, much more information is needed about how health care providers, including physicians and nurses, can provide culturally tailored information and support to Samoan and other Pacific Islander breast cancer survivors and their supporters. Ethnic-specific social

support groups are one common way that hospitals have responded to these needs, but none such groups exist for Samoans in Southern California. During the community report-back phase of this study, community leaders resoundingly endorsed the development of church-based support mechanisms, including training pastors and church leaders to promote education and early detection, along with training survivors and other church members to serve as cancer navigators. Currently, members of this CBPR collaborative are working on new research projects to develop and pilot test such interventions. The hope is that they demonstrate increased outreach to, and increased provision of quality health care and social support services to, Samoan breast cancer survivors and their many family members and friends who are touched by this disease in the future.

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