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A Qualitative Exploration of Health and Cancer-Related Experiences Among Native Hawaiian Adults

Jade Ching
University of Hawai'i at Mānoa

Mapuana C. K. Antonio
Native Hawaiian & Indigenous Health, Office of Public Health Studies, University of Hawai'i at Mānoa

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Abstract

Cancer disproportionately affects the Native Hawaiian community. Understanding health and cancer-related experiences of Native Hawaiian adults may inform effective health interventions to improve quality of life for cancer survivors in this community. Qualitative methodologies guided the exploration of health and cancer-related experiences from the perspectives of four Native Hawaiian adults with cancer experiences and three Native Hawaiian adults without cancer-related experiences (n = 7). Based on the Social-Ecological Model, four core themes emerged: (1) Individual health including an understanding of health and responsibility for individual health; (2) Social support; (3) Knowing there are options; and (4) Spirituality and reflections of the Native Hawaiian community. This study provided strong evidence that family has a substantial role in the perspectives of health for Native Hawaiians. Participants with cancer-related experiences reported resilience, coped with medical adversities in positive ways, expressed a deeper appreciation for life, and relied heavily on Akua and spirituality compared to those without cancer-related experiences. Based on the findings, cancer programs that honor Native Hawaiian perspectives of health, family, and cultural values in healthcare may play a central role in cancer prevention and treatment, reducing overall cancer burden in this community. Findings contribute to literature focusing on familial and cultural components of Native Hawaiian health in the context of cancer care. Despite the remarkable growth in literature on Native Hawaiian and Pacific health, cancer burden remains high. Future directions include better alignment of research with culture and Native Hawaiian worldviews of health that may enhance overall quality of life.

Introduction

Cancer is characterized as an uncontrollable and abnormal growth of cells in the body (American Cancer Society, 2021). Cancer mortality is particularly high among the Native Hawaiian community in Hawaiʻi, especially for mortality related to breast and lung cancer (Green, 2010). In 2015, the breast cancer mortality rate for Native Hawaiian and other Pacific Islander (NHOPI) communities in Hawaiʻi was 72.9 deaths per 100,000 women, exceeding the overall breast cancer mortality rate of 18.7 deaths per 100,000 women (Hawaiʻi Health Matters [HHM], 2017). In the same year, lung cancer mortality rate was 104.7 deaths per 100,000 for NHOPI in Hawaiʻi, compared to the overall lung cancer mortality rate of 31.3 deaths per 100,000 (HHM, 2017). NHOPIs experience cancer diagnoses at younger ages and in advanced stages of cancer, which is strongly associated with poorer survival outcomes, 5-year survival rates, and less treatment options (Look et al., 2013). Compared to 29.4% of Caucasian women and 22.4% of Japanese women, 35.4% of Native Hawaiian women are diagnosed with breast cancer at advanced stages (Aitaoto et al., 2009).

A cancer diagnosis is a stressful situation that requires a patient to develop coping strategies. Social support is frequently cited as a critical source of dealing with stress associated with a cancer diagnosis, especially for NHOPIs who are generally communal. ʻOhana (family) plays a pronounced role in cancer survivorship for NHOPI (Mokuau et al., 2012). A cancer diagnosis is not perceived as an individual burden, but as a burden on the collective ʻohana. This aligns with the Native Hawaiian value kākou (we, inclusive of the individual), which demonstrates the importance of social support in Native Hawaiian coping (Calumet, 2017). Other Native Hawaiian ways of knowing that foster coping include Akua, spirituality, and manaʻolana (hope) (Calumet, 2017).

More than 60,000 premature deaths can be avoided each year with effective cancer prevention and early detection, making preventative behaviors critical in cancer survivorship (National Cancer Policy Board, 2003). Health interventions for the Native Hawaiian community often fail due to cultural inappropriateness (Braun et al., 2002). Furthermore, this community faces unfavorable social determinants of health linked to settler colonialism, structural racism in healthcare, barriers to cancer screening including a higher chance of being medically-uninsured, underrepresentation in healthcare professions, and lack of awareness and access to culturally-appropriate cancer screenings (Taparra et al., 2021). Understanding the cultural context of health from a Native Hawaiian worldview is vital in addressing health and cancer disparities. Native Hawaiian health encompasses physical, mental, social, and emotional health and includes Kānaka (relationship with oneself and others), ʻĀina (land, nature, and environment), and Akua (spiritual realm including ʻAumākua, or family deities) (Paglinawan et al., 2020).

Previous literature focusing on Native Hawaiian health emphasizes the need for cultural values, engagement of ʻohana, and community support within the context of cancer care. Research prompts healthcare providers to consider the role of family in cancer care and healthcare decisions for NHOPI communities, whose culture is collectivistic-oriented (Mokuau & Braun, 2007). In studies by Phyllis Eide (2006) and Lana Kaʻopua (2008), Native Hawaiian cancer survivors held an "altruistic desire" to help their community by sharing their stories with those in similar health situations. Other studies have shown that key leaders or champions in community, such as elders or church leaders, can increase outreach to Native Hawaiian communities and are consistent with similar studies involving collectivistic-oriented groups (Aitaoto et al., 2012; Ho et al., 2010). Overall, studies that employed culturally-sensitive methods appeared to be effective in understanding the cancer narratives of Native Hawaiian communities (Kaʻopua, 2008; Kaʻopua et al., 2008; Mokuau & Braun, 2007). Native Hawaiian values integrated in health interventions play a substantial role not only for NHOPIs, but also for other diverse ethnic groups disproportionately affected by cancer.

Understanding and identifying the health and cancer-related experiences of Native Hawaiians may enhance cancer survivorship, promote health and resilience, and lead to a better quality of life for this community. Therefore, the purpose of this paper was to qualitatively explore the narratives and cancer-related experiences for Native Hawaiian adults compared to Native Hawaiian adults without cancer-related experiences. A qualitative approach was taken to honor cultural narratives and lived experiences of Native Hawaiians adults, while exploring emerging themes to provide public health recommendations.

Methods

Participants

Key informant interviews were conducted with seven Native Hawaiian adults who were recruited by leaders in Native Hawaiian communities. Community leaders had a strong rapport with participants recruited for this study as well as the faculty mentor of this project. Storytelling, through methodologies such as key informant interviews, is a method that promotes healing through a resilience process in which participants may share more about their experiences. Moreover, this study is grounded in cultural values, which are important to consider when exploring lived experiences of severe health situations that invoke substantial amounts of stress that affect health and well-being. All interviews were conducted and transcribed by the faculty mentor. The interviews were then reviewed by the faculty mentor and student author of this project as a secondary data analysis and as part of a summer research program, which cultivates student researchers to address cancer disparities in Hawaiʻi and the Pacific under a faculty mentor. The program's goals informed the purpose of this project to qualitatively explore health and cancer-related experiences among communities disproportionately burdened by cancer. The Native Hawaiian community was specifically chosen due to the student author and mentor's interests in addressing cancer as a prevalent issue among many Native Hawaiian families.

Procedures

This study was approved by the University's Institutional Review Board on July 14, 2021 (Protocol Number: 2021-00503). Prior to the interview, all participants completed a demographic questionnaire summarized in Table 1. During the interview, participants were asked for experiences related to cancer as a health condition for themselves or a loved one. Of the seven participants, four described experiences related to cancer for themselves or their family members, while three participants did not identify with experiences related to cancer. After receiving consent from the participants, the seven interviews were audio recorded and transcribed verbatim by the faculty mentor. De-identified audio transcriptions were then reviewed by the student researcher and faculty mentor for qualitative data analysis.

Framework of Analysis

A common framework used in public health prevention programs is the Social-Ecological Model (SEM) (McLeroy et al., 1998). According to this model, an individual's health and behavior are influenced by multiple levels including the interpersonal (e.g., family and friends), organizational (e.g., schools), community (e.g., neighborhood), and public policy (e.g., local laws) levels (McLeroy et al., 1998). The findings of this study implicate the relevance of the SEM in informing public health recommendations.

This qualitative study identified Native Hawaiian adults with cancer experiences (*n* = 4) compared to those without cancer experiences (*n* = 3) and investigated how cancer experiences affect Native Hawaiian individuals' viewpoints on health. From a Native Hawaiian worldview, good health is not merely the absence of illness. Native Hawaiians trust their naʻau (gut) to make pono (good, just, morally upright) decisions and maintain lōkahi, or being physically, mentally, and spiritually-balanced. Lōkahi is central in Native Hawaiian ontologies of health and is referred to as the Lōkahi Triangle (Paglinawan et al., 2020). The Lōkahi Triangle is a Native Hawaiian framework of health that guided this study and states that a balanced and harmonious life maintains interconnectedness between Kānaka (people), ʻĀina (land), and Akua (God).

Qualitative Analysis

Audio transcriptions were analyzed using a narrative analysis approach, guided by the SEM and Lōkahi Triangle, and informed public health recommendations and implications provided in the discussion. A codebook was created after the student researcher and faculty mentor coded the first audio transcription together. Intra-rater reliability was then assessed by the student researcher and faculty mentor independently coding 4 of the 7 transcriptions using the pen-and-paper method to identify themes and subthemes throughout the transcriptions. Consensus coding was achieved in cases of discrepancies. Subsequent revision of themes and subthemes occurred as needed. The lead author, the undergraduate student, reviewed and coded the remaining transcriptions independently. The faculty mentor was contacted for additional support throughout the coding process. Major themes and subthemes were continuously improved upon as each transcription was read in full. Direct quotes were picked from the transcriptions that best represented the overall themes and subthemes. The final themes, subthemes, and quotes were reviewed and revised by the faculty mentor to ensure accuracy and appropriateness.

Results

Characteristics of participants and summary of themes

Of the four participants with cancer-related experiences, three (75%) were women and three (75%) were at least 55 years of age. The marital status of the four participants with cancer-related experiences were as follows: two (50%) were single and never married, one (25%) was married, and one (25%) was widowed. Half (50%) of these participants had children, while the other two did not. Participants had a range of cancer-related experiences including: pancreatic, breast, kidney, colon, and other general cancers. Of the three participants without cancer-related experiences, two (67%) were female and one (25%) was male, with the majority (67%) being adults less than 55 years of age. The marital status of the three participants without cancer-related experiences were as follows: one (33%) was single and never married, one (33%) was married, one (33%) was widowed, and two (67%) had children. A summary of the participant characteristics is displayed in Table 1.

<*Table 1 Around Here*>

The data are presented as four core themes based on the SEM and Lōkahi Triangle. These themes include: (1) Individual health including an understanding of health and responsibility for individual health; (2) Social support; (3) Knowing there are options; and (4) Spirituality and reflections of the Native Hawaiian community. All themes encompassed the Kānaka aspect of the Lōkahi Triangle while themes three and four encompassed all aspects of the Lōkahi Triangle (Kānaka, ʻĀina, and Akua). Table 2 shows the themes and subthemes accompanied with a codebook definition and a quote that best represents them.

<Ta*ble 2 Around Here*>

Individual level: Individual health (Kānaka)

Individual health was categorized as four separate subthemes: (1) Responsibility for individual health; (2) Understanding health through ʻohana (family); (3) Barriers to health including stress and natural bodily limitations (i.e., aging) affecting individual health; and (4) Positive mindset and deeper appreciation for life.

When participants were asked to share their perceptions of "perfect" health, all seven emphasized the importance of taking responsibility for their own health and understanding their body's limitations. Someone with "perfect" health, as described by one participant with kidney cancer experiences, strives "to have their best health that they can have" (Native Hawaiian man, 18-54 years). In contrast, someone who does not strive to take care of their health could eventually "hit bigger walls" as mentioned by a Native Hawaiian woman (55 years or older) with pancreatic and other cancer experiences. As individual health deteriorates and recovery efforts become more challenging and expensive, one may lose their sense of being in good health and become dependent on others to take responsibility for their health. The majority of participants (*n* = 5) included physical activity as an essential component of good health. They also discussed making healthy dietary choices and getting sufficient sleep as imperative for one's health. To some participants, responsibility for individual health meant prevention and doing one's best to minimize visits to the doctor and interactions with medical science.

Participants' perception of health was largely influenced by their ʻohana (family); thus, the second subtheme is understanding health through ʻohana. Health communication was prominent for those with cancer-related experiences. Compared to their counterparts, participants with cancer-related experiences seemed more receptive to having open dialogues about cancer history in the ʻohana, encouraging pro-preventative measures, sharing of their health status and bodily limitations, and promoting discussion of all aspects of health including illness and life's painful events (e.g., death) with loved ones. Through personal experiences and by witnessing their ʻohana's experiences with health adversities, participants were compelled to take better care of their own health. One participant with pancreatic and breast cancer experiences stated, "As I watch family and friends, and see how their illnesses can debilitate them…The emotional trauma they're going through [as a result of medical treatment]…They lose sight of themselves and confidence and they feel like they have no value. I decided I didn't want that" (Native Hawaiian woman, 55 years or older). A participant with colon cancer experiences spoke of the importance of communicating to loved ones about life's painful events, including death, "We make sure that my kids and my grandkids know about life and death. It's not something you want to hide. That's how we grew up. My mom and [other family] never used to take us to funerals and all of a sudden our family dying and what? Nobody told us about this. Letting my grandkids know about life and death…That's the most important thing" (Native Hawaiian woman, 55 years or older). Conversely, a participant without cancer-related experiences mentioned, "I envision my dad. Even though he's kind of old in age. I think he's pretty healthy…He's able to wake up at a time during the day and have his coffee and do some yard work and relax and go out for lunch and go fishing and just very carefree" (Native Hawaiian woman, 18-54 years).

Encompassing the third subtheme, barriers to health including stress and natural bodily limitations (i.e., aging) affecting individual health, participants reported the importance of having a "reality check," or being cognizant of the natural deterioration and limitations of mind and body that come with increasing age, "In my family case, it's because they're already in mid-80s...And the body and the mind is depreciating (sic). And it's falling apart. I don't think you can find a car that's 100 years old that can still run as it once was" (Native Hawaiian woman, 55 years or older). While all seven participants cited ʻohana as a key source to turn to when faced with health adversities, all but one (*n* = 6) reported that ʻohana, particularly their children, can fuel feelings of stress. Participants with children (*n* = 2) reported increased levels of stress stemming from their desire to ensure their children were also in good health. Other sources of stress were competing priorities such as work and school (*n* = 5), feelings of imbalance in either their physical, mental, or emotional state (*n* = 2), and other daily life stressors. When asked how participants relieved their stress, the majority (*n* = 5) responded that they took part in some form of physical activity (i.e., going to the gym or walking their dog) or immersed themselves in other creative outlets (e.g., hobbies). Finding comfort in Akua and their spirituality was highly reported among those with cancer-related experiences (*n* = 3) but will be expanded upon in Theme 4 of this section.

The fourth and final subtheme consisted of a positive mindset and deeper appreciation for life. Those with cancer-related experiences reported resilience and coped with medical adversity in positive ways. One survivor with colon cancer and general cancer experiences stated, “I would not change anything. I would live life and I would want my kids to experience the good, the bad, and the ugly because that’s life” (Native Hawaiian woman, 55 years or older). When faced with adversity, participants searched for goodness, persevered, worked hard, and accepted the reality of their health situations by doing their best to move forward. Overall, participants showed a deep appreciation of health and recovery.

Interpersonal level: Social support (Kānaka)

Social support was categorized as three separate subthemes: (1) Social support from ‘ohana (family); (2) Social support from friends; and (3) Social support from kaiāulu (community).

Social support from ‘ohana is a crucial component of Native Hawaiian health and cancer care. Participants assumed roles in support and caregiving through emotional, instrumental, and informational means. Emotional support refers to words of encouragement and reassurance in recovery given to ailing ‘ohana members. Participants exhibited instrumental support by helping around the household and taking care of children when their ‘ohana were in the hospital. Informational support included providing advice, information, connections, and resources to ‘ohana who may need it. Notably, participants emphasized kuleana (responsibility) to ‘ohana, kaiāulu, and lāhui. A Native Hawaiian woman (55 years or older) without cancer-related experiences demonstrated a strong sense of kuleana to her ‘ohana by sharing their illness-related burdens. This participant’s kuleana and pride in her role in taking care of her ‘ohana, kaiāulu, and lāhui were strongly associated with her perseverance in stressful situations. Talking to ‘ohana for support was pronounced among participants with cancer-related experiences, “Just talking. That’s the *most* important thing is talking to your immediate family, your loved ones. They all got to know what you want" (Native Hawaiian woman, 55 years or older).

Friends were another important resource for participants to rely on in times of hardship but appeared secondary to ʻohana. Participants (*n* = 4) relied on friends for emotional support including lending an open ear, giving verbal encouragement, and knowing they are not alone.

All seven participants held a desire to help others within their kaiāulu (community) and the larger lāhui (Hawaiʻi nation). Participants (*n* = 4) received social support from their kaiāulu and vice versa, aligning with the ʻōlelo noʻeau (Native Hawaiian proverb), kōkua aku, kōkua mai (extend help where need, receive help when need). Participants reported a sense of intimacy and connectedness within their respective communities. Some sought to promote learning throughout the community, particularly by passing on knowledge, ideas, and other skills to youth so that their generations flourish. This sentiment was well-captured by a Native Hawaiian woman (18-54 years) without cancer-related experiences, "I would envision a place where there was a sense of community. Meaning where people knew each other and that people would help one another in times of need or, just in times of pleasure, just always there for each other." Some participants also mentioned sharing their own resources for the betterment of the community such as growing lāʻau for teaching the community to make different recipes to take home.

Organizational level: Knowing there are options (Kānaka, ʻĀina, Akua)

Participants in both sets (*n* = 3) discussed optimizing healthcare with the help of doctors and western medicine; however, there is a time and place for western medicine. One should minimize their interactions with doctors and medical science. One participant with pancreatic and breast cancer experiences commented that one should not be completely dependent on medical science for good health, but to know these resources for health exist if needed, "And the other thing is to maximize what you know you can do with your health. And then again, use wisdom by keeping in contact with your doctor" (Native Hawaiian woman, 55 years or older). Alternative options besides western or "regular" medicine mentioned by a Native Hawaiian man (18 to 54 years) with kidney cancer experiences included natural ways of healing including lāʻau (lapaʻau, curing medicine), herbal teas (e.g., Māmaki), and powders from traditional Native Hawaiian plants. Healing with pule (prayer) was common among participants, especially those with cancer-related experiences and helped them cope with their health situations such as cancer, diabetes, high blood pressure, and cholesterol. Participants also pule for ‘ohana facing difficult health and life situations.

Community level: Spirituality and reflections of the Native Hawaiian community (Kānaka, ‘Āina, Akua)

Almost all participants with cancer-related experiences (*n* = 3) reported finding spiritual comfort in times of personal and familial hardships. Through prayer and faith, these participants persevered in difficult situations, as exemplified by one participant who had breast and pancreatic cancer experiences and endured many losses of loved ones, “Akua was the one that helped me because he was the one that was there when I left my parents and my siblings. A lot of people go down, down, down, and if it wasn’t for god and that faith, then I wouldn’t be where I am today” (Native Hawaiian woman, 55 years or older). In addition to attributing their perseverance to Akua, participants thought of their body as a gift to be treasured and illness as a spiritual message to “slow down” or to fulfill their kuleana to take care of others in similar health situations.

When participants were asked how they perceived the changes in Native Hawaiian health from the past, most participants without cancer-related experiences (*n* = 2) expressed that contemporary society impacted Native Hawaiians, “It’s interesting because when I think of healthy Hawaiian, honestly, I think of 50 years ago. I think 100 years ago, I don’t necessarily think of a healthy Hawaiian as someone in the present” (Native Hawaiian woman, 18-54 years). These participants highlighted feelings of less connectedness to self, environment, and community, increased intake of processed and canned goods, and less physical activity. Despite the health adversities they faced, participants’ exhibited resilience through their hope for future generations to redirect these losses by establishing a tight-knit community, “I envision a healthy community that has a really good relationship with their environment. That protects, nurtures and sustains...Just very harmonious” (Native Hawaiian woman, 18-54 years).

Discussion

The purpose of this paper was to qualitatively explore health experiences for those with cancer-related experiences compared to those without cancer-related experiences. Our objective was to understand the cancer-related experiences of Native Hawaiians through oral narratives and storytelling, a method that promotes healing through a resilience process. We found qualitative evidence that ʻohana (family) has a profound impact on perspectives of health. We also identified intersections between the SEM and aspects of the Lōkahi Triangle deeply embedded in all of the themes. Four prominent themes emerged throughout the cancer narratives of Native Hawaiian adults: (1) Individual health including an understanding of health and responsibility for individual health; (2) Social support; (3) Knowing there are options; and (4) Spirituality and reflections of the Native Hawaiian community. These themes align with other qualitative research that explored cancer-related experiences among Native Hawaiian communities (Eide, 2006; Kaʻopua, 2008; Kaʻopua et al., 2008; Mokuau & Braun, 2007).

While similar themes emerged for those without cancer-related experiences, they did not discuss themes (1) Individual health including an understanding of health and responsibility for individual health and (4) Spirituality and reflections of the Native Hawaiian community as intimately. Health communication was prominent among Native Hawaiian adults with cancer-related experiences. Participants not only communicated their health status and history of illness with loved ones, but they also encouraged others to do the same and take pro-preventative measures. Participants did not shy away from “difficult” conversations about illness and death. Participants without cancer experiences expressed their desire to have better health role models for their ʻohana, particularly for their children.

It is critical to acknowledge the fierce resilience and strength of Native Hawaiian communities who continue to flourish and ground their future generations despite settler colonialism and cancer disparities. Indeed, most impressive were participants’ remarkable resilience, positive mindset, and vigor for life when facing health adversities. Participants without cancer-related experiences mentioned positive attitudes and perseverance in challenging situations; however, those with cancer-related experiences demonstrated an unflagging spirit to overcome challenges. They found the good in all aspects of life and turned their struggles into learning opportunities. They accepted the reality of their health situations which led to a strong desirability for options moving forward.

Akua and spirituality were frequently cited as a coping strategy among participants with cancer-related experiences, while their counterparts did not mention this theme in their narratives as frequently. Through prayer and faith, participants persevered even in difficult situations, as exemplified by one Native Hawaiian woman who endured many losses of loved ones. Some participants attributed illness as a spiritual message from Akua telling them to “slow down” or "teach others" about their illness. All seven participants held a desire to help their ʻohana, friends, and lāhui. Although participants stated that Native Hawaiian health has changed from the past, they were optimistic for future generations. When asked about their vision of a "perfect" world, they often mentioned a sense of community and harmony (lōkahi) with each other (Kānaka), the land (ʻĀina), and their spirituality (Akua).

The role of culture and family within Native Hawaiian and Pacific health has been well-documented (Eide, 2006; Braun et al., 2002; Kaʻopua, 2008; Kaʻopua et al., 2008; Mokuau & Braun, 2007; Mokuau et al., 2008; Mokuau et al., 2012). Our findings highlight the important role of ʻohana in health and cancer care and emphasize that individual health affects the collective ʻohana. These results are consistent with previous studies that explored the impacts of cancer among patients and their families from collectivistic-oriented groups (Aitaoto et al., 2009; Aitaoto et al., 2012). This study's findings may add to burgeoning literature focusing on familial components of cancer care among Native Hawaiians.

Findings are limited by its small sample size (*n* = 7) and may not be indicative of the Native Hawaiian community as a whole; however, such is the nature of qualitative research. In fact, qualitative samples of this size are "inevitable" in order to truly grasp the rich detail in the unique narratives of our participants (Emmel, 2013). Furthermore, quotes selected to capture the various themes were often from individuals 55 years or older; therefore, it is possible other factors (e.g., life wisdom, age, generational factors, etc.) influenced personal narratives rather than the actual cancer experiences. Nonetheless, this study strongly emphasizes family support and spirituality of this community in cancer care which are overlooked aspects in healthcare (Santos, 2001).

All themes exhibited aspects of the Lōkahi Triangle, a Native Hawaiian framework of understanding health. Themes (3) Knowing there are options and (4) Spirituality and reflections of the Native Hawaiian community encompassed all aspects of the Lōkahi Triangle. Within these themes, participants illustrated good health and a harmonious community are results of fostering relationships (Kānaka), taking care of the land (ʻĀina), and being spiritually-connected (Akua). Based on the findings, public health recommendations, with emphasis on cultural humility and the importance of the SEM and Lōkahi Triangle, include: (1) Individual level: increase responsibility of health through family and other social supports, promote opportunities to enhance positive mindsets and appreciation of the body, foster awareness of natural bodily limitations (i.e., aging) through encouraging one to trust in their naʻau (gut) to make pono (right, balanced) choices for the body; (2) Interpersonal level: identify social supports for Native Hawaiian cancer patients as well as their caregivers and include them in general health and cancer care options; (3) Organizational level: increase awareness of cultural humility, integrate education, capacity, Native Hawaiian worldviews in healthcare, and prioritize family in Native Hawaiian health and cancer treatment or prevention; (4) Community level: identify and uplift community strengths and resources, highlight the importance of Native Hawaiian youth bringing forward knowledge and skills to pave the way for their own future generations, and acknowledge the importance of spirituality in Native Hawaiian health and cancer care; and (5) Policy level: implement policies that support these initiatives. The Native Hawaiian Health Task Force (NHHTF) policy recommendations are community and land-focused, as well as grounded in Native Hawaiian values. The NHHTF supports Native Hawaiian communities to address their health on their terms and aims to advance health equity for Native Hawaiians and Hawaiʻi's other diverse ethnic groups (NHHTF, 2017).

Implications for health promotion

Understanding Native Hawaiian worldviews of health is necessary for promoting more favorable health outcomes, while reducing cancer burden in this community. The importance of Native Hawaiian values, beliefs, and family in health interventions have been widely reported in literature (Aitaoto et al., 2009; Braun et al., 2002; Eide, 2006; Kaʻopua, 2008; Kaʻopua et al., 2008; Mokuau & Braun, 2007; Santos et al., 2001). The recommendations have implications for future research in integrating Native Hawaiian values and family for better health outcomes. Honoring cultural values may increase utilization of healthcare services due to receptivity and alignment through cultural concordance. Improved access to healthcare and awareness of cultural humility among healthcare professionals when caring for Native Hawaiian patients may enhance the overall care for this community. Other literature highlights the impact of interactions between Native Hawaiian patients and physicians (Eide, 2006; Hughes & Higuchi, 2004; Kaʻopua, 2003; Mokuau & Braun, 2007). Physicians must play a role in providing resources that utilize cultural and spiritual-based treatment and intervention (Hughes & Higuchi, 2004). By conducting health interventions in culturally-respectful and responsive manners, there may be shifts from an individual-focused treatment to a collective treatment, which is essential for those from communal cultures. This shift may ultimately promote the family's role in health and decision-making processes related to health.

Conclusion

A surge of research highlights similar recommendations provided in the discussion section (Aitaoto et al., 2009; Braun et al., 2002; Eide, 2006; Kaʻopua, 2008; Kaʻopua et al., 2008; Mokuau & Braun, 2007). However, cancer disparities continue to exist among Native Hawaiian communities. This qualitative study exemplifies the importance of implementing cultural humility in healthcare. We found that the respect and reciprocity displayed in participants' commitment to their ʻohana (family including hānai members) and to their kaiāulu (community) aligns with Native Hawaiian values that emphasize taking care of one another as reflected in kōkua aku, kōkua mai (Give help where need, receive help when need). Western healthcare lacks spaces for Native Hawaiian patients and caregivers to express their spiritual needs. The research team expects that if Native Hawaiian values are emphasized in healthcare, cancer patients and caregivers can better support themselves and loved ones diagnosed with cancer. This study represented the experiences of four Native Hawaiian adults with cancer-related experiences and three Native Hawaiian adults without these experiences. Although small in sample size, identified themes and recommendations support literature emphasizing cultural values on all levels of the SEM and Lōkahi Triangle. Future directions include better alignment of research with culture and Native Hawaiian worldviews of health that may enhance quality of life for this community and all patients of Hawaiʻi. When working with patients from diverse ethnic groups, it is necessary to conduct interventions in a culturally-respectful manner by accounting for cultural nuances, values, beliefs, and ideas. Policies are needed to ensure these recommendations are followed. Based on current research in Native Hawaiian cancer care, health interventions are more likely to succeed if they ensure Native Hawaiian values, spirituality, and loved ones are emphasized in cancer care. Ideally, Native Hawaiian worldviews, values, practices, and perspectives will be integrated in healthcare.

References

Aitaoto, N., Braun, K. L., Estrella, J., Epeluk, A., & Tsark, J. U. (2012). Design and results of a culturally tailored cancer outreach project by and for Micronesian women. *Preventing Chronic Disease, 9*(4), 1-8. http://dx.doi.org/10.5888/pcd9.100262

Aitaoto, N., Braun, K. L., Tomiyasu, D. W., Tsark, J. U., & Yamashita, B. (2009). Strategies to increase breast and cervical cancer screening among Hawaiian, Pacific Islander, and Filipina women in Hawaiʻi. *Hawaiʻi Medical Journal, 68*(9), 215-222. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4850232/

American Cancer Society. (2021). *Cancer facts & figures 2021*. Atlanta: American Cancer Society, Inc. 2021. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf

Braun, K. L., Mokuau, N., Hunt, G. H., Kaanoi, M., & Gotay, C. C. (2002). Supports and obstacles to cancer survival for Hawaiʻi's Native People. *Cancer Practice, 10*(4), 192-200. https://doi.org/10.1046/j.1523-5394.2002.104001.x

Calumet, K. M. (2017). *Breast cancer, mana'olana/hope, and the experience of Native Hawaiian women* (Publication No. 4354) [Doctoral dissertation, Walden University]. Walden Dissertations and Doctoral Studies. https://scholarworks.waldenu.edu/dissertations/4354/

Curry, S. J., Byers, T., & Maria, H. (2003). *Fulfilling the potential of cancer prevention and early detection*. Washington (DC): National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK223926/

Eide, P. (2006). Native Hawaiian women and the experience of breast cancer. *Women & Health, 44*(4), 41-59. https://doi.org/10.1300/J013v44n04_03

Emmel, N. (2013). *Sampling and choosing cases in qualitative research: A realist approach*. SAGE Research Methods. https://dx.doi.org/10.4135/9781473913882

Green, M. D. (2010, September). *Hawaiʻi cancer facts & figures 2010: A sourcebook for planning & implementing programs for cancer prevention & control*. Honolulu, HI: American Cancer Society, Cancer Research Center of Hawaiʻi & Hawaiʻi State Department of Health. https://health.hawaii.gov/about/files/2013/06/Hawaii_Cancer_Facts_and_Figures_2010.pdf

Hawaiʻi Health Matters. (2017, February). *Breast cancer death rate*. Retrieved from http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=1232&localeId=14&localeChartIdxs=1|3

Hawaiʻi Health Matters. (2017, February). *Lung cancer death rate*. Retrieved from http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=2387&localeId=14&localeChartIdxs=1|3

Ho, R., Muraoka, M., Cuaresma, C., Guerrero, R., & Agbayani, A. (2010). Addressing the excess breast cancer mortality in Filipino women in Hawaiʻi through AANCART, an NCI Community Network Program. *Hawaiʻi Medical Journal, 69*(7), 164-166. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3118029/

Hughes, C. K., & Higuchi, P. (2004). Ka Lōkahi Wāhine: A culturally based training for health professionals. *Pacific Health Dialog, 11*(2), 166-169. https://pubmed.ncbi.nlm.nih.gov/16281695/

Kaʻopua, L. S. (2008). Developing a culturally responsive breast cancer screening promotion with Native Hawaiian women in churches. *Health & Social Work, 33*(3), 169-177. https://doi.org/10.1093/hsw/33.3.169

Kaʻopua, L. S., Mitschke, D. B., & Kloezeman, K. C. (2008). Coping with breast cancer at the nexus of religiosity and Hawaiian culture: Perspectives of Native Hawaiian survivors and family members. *Journal of Religion & Spirituality in Social Work: Social Thought, 27*(3), 275-295. https://doi.org/10.1080/15426430802202187

Look, M. A., Trask-Batti, M. K., Agres, R., Mau, M. L., & Kaholokula, J. K. (2013). *Assessment and priorities for health & well-being in Native Hawaiians & other Pacific peoples.* Honolulu, HI: Center for Native and Pacific Health Disparities Research, University of Hawaiʻi. https://www2.jabsom.hawaii.edu/native/docs/community/DNHH_Asssessment&Priorities_Report_2013.pdf

Mokuau, N., & Braun, K. L. (2007). Family support for Native Hawaiian women with breast cancer. *Journal of Cancer Education, 22*(3), 191-196. https://doi.org/10.1007/BF03174336

Mokuau, N., Braun, K. L., & Daniggelis, E. (2012). Building family capacity for Native Hawaiian women with breast cancer. *Health & Social Work*, *37*(4), 216-224. https://doi.org/10.1093/hsw/hls033

Mokuau, N., Braun, K. L., Wong, L. K., Higuchi, P., & Gotay, C. C. (2008). Development of a family intervention for Native Hawaiian women with cancer: A pilot study. *Social Work, 53*(1), 9-19. https://doi.org/10.1093/sw/53.1.9

Native Hawaiian Health Task Force. (2017). *Native Hawaiian Health Task Force report: Highlights and recommendations*. https://www.hawaii.edu/govrel/docs/briefings/2017/nhhtf_briefing-factsheet_01-17-17_hre-hwn-cph.pdf

Paglinawan, L. K., Paglinawan, R. K., Kauahi, D., Kanuha, V., Kalahele, I., & Pukui, M. K. (2020). *Nānā i ke kumu. Helu'ekolu = Volume three* . Lili'uokalani Trust.

Santos, L., Mokuau, N., Abrigo, L., Braun, K. L., Tsark, J. U., Mackura, G., Kuhaulua, R., & Chong, C. D. (2001). 'Imi Hale: Establishing an inheritance for Native Hawaiians on cancer awareness, research and training. *Pacific Health Dialog, 8*(2), 436-445. https://pubmed.ncbi.nlm.nih.gov/12180528/

Taparra, K., Miller, R. C., & Jr, C. D. (2021). Navigating Native Hawaiian and Pacific Islander cancer disparities from a cultural and historical perspective. *American Society of Clinical Oncology, 17*(3), 130-134. https://doi.org/10.1200/OP.20.00831

Appendix A. List of Abbreviations

SEM = Social-Ecological Model
NHOPI = Native Hawaiian and Other Pacific Islander
NHHTF = Native Hawaiian Health Task Force

Table 1.

Characteristics of key informants

Characteristics	Values *N* (%) for participants with cancer-related experiences (*n* = 4)	Values *N* (%) for participants without cancer-related experiences (*n* = 3)
Gender		
Male	1 (25%)	1 (33%)
Female	3 (75%)	2 (67%)
Ages		
18–54 years	1 (25%)	2 (67%)
55 years or older	3 (75%)	1 (33%)
Marital status		
Single or in a relationship but not married	2 (50%)	1 (33%)
Married	1 (25%)	1 (33%)
Divorced, separated, or widowed	1 (25%)	1 (33%)
Children		
Yes	2 (50%)	2 (67%)
No	2 (50%)	1 (33%)

Note: In the table above, N refers to mean and % refers to the percent of participants.

Table 2.

Summary of themes and direct quotes

Codebook themes	Sample quotes from participants with cancer-related experiences	Sample quotes from participants without cancer-related experiences
Individual level: Individual health (Kānaka)		
(1) Responsibility for individual health	"I think mostly everybody strives to have their best health that they can have. I know I do."	"And, I just see that as being more, like mental, emotional, physical balance would be my definition of an overall healthy person."
(2) Understanding health through 'ohana	"As I watch family and friends, and see how their illnesses can debilitate them... The emotional trauma they're going through [as a result of medical treatment], and the mental [impact]...They lose sight of themselves and confidence and they feel like they have no value. I decided I didn't want that."	"I envision my dad. Even though he's kind of old in age. I think he's pretty healthy...He's able to wake up at a time during the day and have his coffee and do some yard work and relax and go out for lunch and go fishing and just very carefree."
(3) Barriers to health including stress and natural bodily limitations (i.e., aging) affecting individual health	"In my family case, it's because they're already in mid-80s...And the body and the mind is depreciating. And it's falling apart. I don't think you can find a car that's 100 years old that can still run as it once was."	"You know, if something happens to my kids and I'm not expecting it, that's going to cause me stress."
(4) Positive mindset and deeper	"I would not change anything. I would live life and I would want my kids to	"No sense of stress or worry or obligation. Just take everything for

appreciation for life	experience the good, the bad, and the ugly because that’s life.”	what it is. ”
Interpersonal level: Social support (Kānaka)		
(1) Social support from ‘ohana	“Oh no, just talking. That’s the *most* important thing is talking to your immediate family, your loved ones. They all got to know what you want.”	“In terms of support, I feel like they’re present in my life. But in terms of talking to them for support, that’s not really necessary. I can manage that on my own.”
(2) Social support from friends	“We know that we don’t have to see each other for months. We know that we’re best friends. She has her own friends. And I have mine. But we know that if you need me. Call me.”	“If something really critical comes up that I am really having difficulty managing or handling, then I definitely have family or friends or people closest to me that I will reach out to.”
(3) Social support from kaiāulu	“I know the co-op is trying to do a lā‘au series...Where they teach people different recipes...Even if I’m growing it, then they can have it, you know? It’s for whoever in the community so everybody can learn how to do lā‘au.”	“I would envision a place where there was a sense of community. Meaning where people knew each other and that people would help one another in time of need or, just in time of pleasure, just always there for each other.”

Organizational level: Knowing there are options (Kānaka, ʻĀina, Akua)		
(1) Doctors and Western medicine	"And the other thing is to maximize what you know you can do with your health. And then again, use wisdom by keeping in contact with your doctor."	"I feel like it's about prevention. So how do we even prevent it from getting to that stage. Or even if it is at a stage four, you know, what are our options so that we can address what's going on so that we can move forward."
(2) Optimizing healthcare to include culture integrated other healthcare systems	"Good health is in that direction knowing that you have them there, but try to be responsible for yourself."	Optimizing healthcare to include culture integrated other healthcare systems did not emerge significantly.

Community level: Spirituality and reflections of the Native Hawaiian community (Kānaka, ʻĀina, Akua)		
(1) Finding comfort in spirituality	“A lot of people go down, down, down, and if it wasn’t for god and that faith, then I wouldn’t be where I am today.”	Spirituality did not emerge significantly.
(2) Changes in Native Hawaiian health from past to present	“A lot of the younger generation, from what I can see, is so involved in technology that nobody talks to each other anymore or does physical activity outside or anything...So because of that I think we lost a lot of what we used to have before.”	“It’s interesting because when I think of healthy Hawaiian, honestly, I think of 50 years ago. I think 100 years ago, I don’t necessarily think of a healthy Hawaiian as someone in the present.”
(3) Strengths and resilience of the Native Hawaiian community	“We have to be here because we have to learn. If those kids in their class didn’t come to this and work in the community. They wouldn’t know anything about the Hawaiians losing everything. So they got to learn a lot about our culture and loving life in a different way.”	“I envision a healthy community that has a really good relationship with their environment…Just very harmonious.”