

Developing a Spiritually Based Breast Cancer Screening Intervention for Native Hawaiian Women

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Background and Purpose

Despite the availability of screening, benefits of early detection are not realized by Native Hawaiian (NH) women who as a group have the highest breast cancer incidence and mortality rates of all major ethnic groups in Hawai'i. According to the American Cancer Society, the incidence and mortality rates for NH women are 162.4 and 31 per 100,000, respectively, in comparison to women of all races, for whom the incidence and mortality rates are 128.3 and 18.1, respectively.¹

Disparities are attributed to a significantly larger proportion of advanced disease at diagnosis and are associated with low participation in mammography.^{1,3} Of concern are NH women living in medically underserved yet culturally rich communities where participation in conventional, Western mainstream screening programs may be compromised by lack of access, historic discrimination, and distrust of health services that promote behavioral change without an understanding of the cultural norms and systemic barriers involved in change enactment.^{4,6} Recommendations to overcome these barriers include interventions reflecting an appreciation of health literacy challenges, use of community-based approaches, and incorporation of salient spiritual and collectivist values and linguistically appropriate terms.^{4,7} Inclusion of collectivist values (eg, *malama ke kahi I ke kahi* [caring for each other]) and practices (eg, learning through "talk story" or conversation-like communication) was instrumental to screening acceptance in one NH community.^{8,9}

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Abbreviations used in this paper: NH women = Native Hawaiian women.

In addition, participation in screening by African American and Latina women increased as a result of attention to spirituality, involvement of culturally similar survivor role models, and church-based promotions.¹⁰⁻¹² Since spirituality is central to Hawaiian culture,^{4,13} screening interventions promoted through churches may be a promising means for reaching NH women; however, a tailored intervention has yet to be systematically developed.

This report describes research intended to inform the development of an intervention aimed at increasing breast cancer screening among NH women associated with Hawaiian churches located in medically underserved communities.^{14,15}

Methods

Screening experiences were obtained through focus group discussions patterned on the culturally familiar medium of talk story.^{8,9,13} Semistructured discussion questions were developed to elicit experiences of factors enabling and disabling NH women participation in breast cancer screening and to assess the potential relevance of a screening program incorporating spirituality and promoted through the social networks of women in churches. A brief survey was also used to obtain basic characteristics of participants. Purposive theoretical sampling methods guided recruitment of older (≥ 40 years) women living in socioeconomically disadvantaged, predominantly Hawaiian communities. NH women were recruited through community-based organizations (N = 5 groups) and Hawaiian churches (N = 2 groups). Participant characteristics are presented in Table 1.

Focus groups were led by female facilitators trained in the research protocols. *Ho'olauna* (culturally patterned introductions) emphasized each facilitator's connection with Hawaiian communities as well as personal and professional breast cancer experiences. Time was taken to address what women's participation involved, and written consent was secured prior to survey administration and group discussion. To analyze discussion data, we used content analysis¹⁶ and the PEN-3 model for developing culturally appropriate health promotions. Cultural

Table 1. — Characteristics of Native Hawaiian Women Participants (N = 50)

Age	Range = 44–89 M = 69.88 (SD = 11.74)
Hawaiian ethnicity	50 (80%)
Identifies as culturally Hawaiian	48 (96%)
Resides in rural community	41 (82%)
Practices some type of spirituality	49 (98%)
Identifies as Judeo-Christian	44 (88%)
Breast cancer survivor	50 (100%)

Table 2. — Content Analysis and PEN-3: Procedures

1. Discussion group completed; facilitator notes impressions of responses, relevant quotes, and emerging themes.
2. Verbatim transcription of audiotaped discussion.
3. Transcript review by two research team members; themes are noted.
4. Team review: emerging themes, impressions, and relevant quotations presented for review and discussion by research team.
5. Content analysis: themes from each group compared with themes from other groups. Major themes across groups identified.
6. PEN-3 analysis: two team members independently code major themes using a priori categories and subcategories from PEN dimensions 1 (person, extended family, neighborhood) and 2 (perceptions, enablers, nurturers).
7. Senior colleague reviews coding.
8. PEN-3 analysis: two team members apply PEN dimension 3 (positive, exotic, negative) to dimensions 2 and 3 categories and subcategories.
9. Team reviews and discusses PEN-3 coding; consensus reached on interpretation of findings.

and health literacy considerations are central to PEN-3.^{12,17} Table 2 displays procedures for analysis and ensuring accuracy of interpretation.

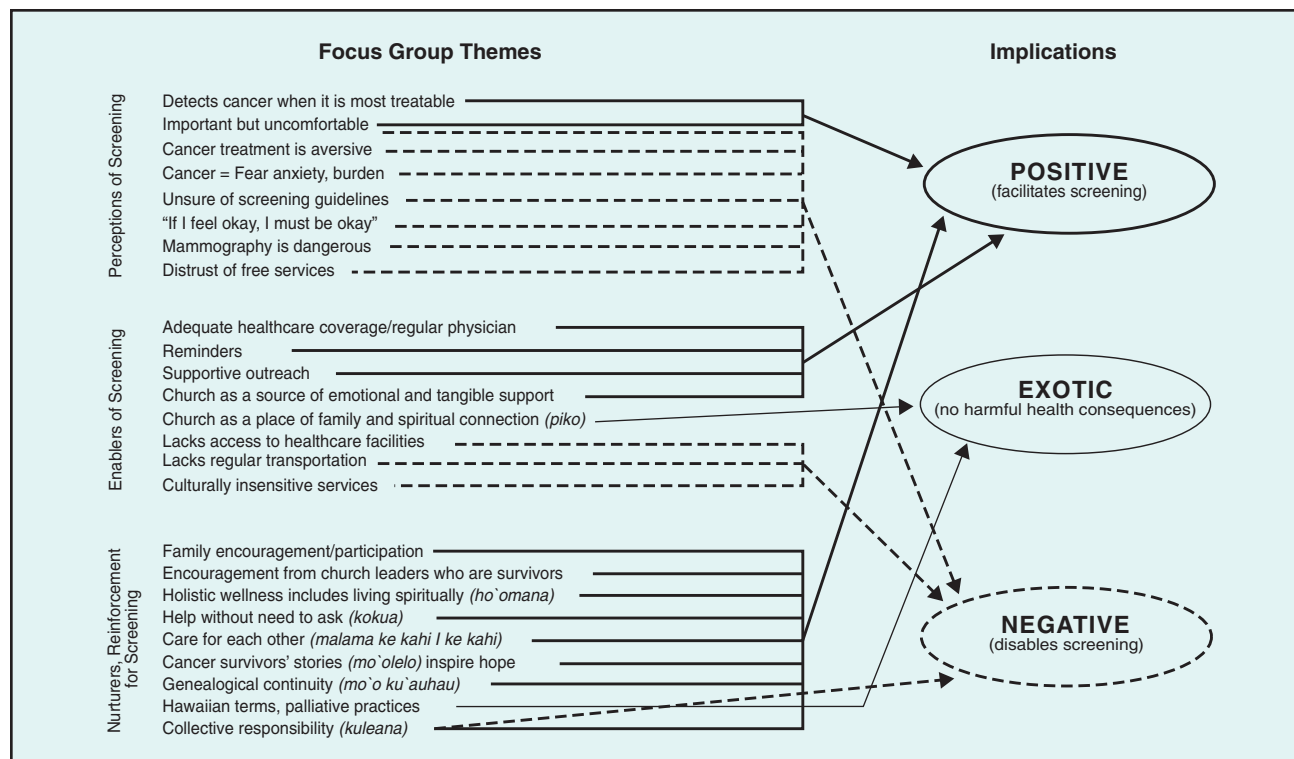
Findings

The Figure depicts attitudes toward screening (mammography, clinical breast examinations), structural fac-

tors perceived as enabling, and individual or group factors that nurtured or reinforced screening. Screening was generally perceived as beneficial but potentially distressing, and routine participation was disabled by factors related to the lack of accessible and culturally acceptable services. Collectivist norms were reflected in women's preferences for (1) family-oriented programs aimed at increasing awareness and knowledge related to screening among younger female relatives, partners, and extended family, (2) enhanced access to screening through church-based promotions that "in-reach" to congregants and outreach to women in neighborhoods surrounding churches, (3) spiritually sensitive programs involving church leaders, messages of hope in facing cancer and of screening as a means for promoting a legacy of collective well-being, and (4) educational approaches that include motivational stories by culturally similar breast cancer survivors with time for talk story discussion. Spirituality was referred to as the "*piko* (umbilical connection) of the culture"; this and other spiritual-cultural constructs were viewed as reinforcing to health services use, including screening services. (A paper focusing on cultural findings is in development.)

Discussion

Findings are restricted by several limitations. The use of a convenience sample yielded a preponderance of elderly



Implications in screening: perceptions, enablers, and nurturers. Bold line = positive, dashed line = negative, thin line = exotic. Modified from Erwin DO, Johnson VA, Feliciano-Libid L, et al. Incorporating cultural constructs and demographic diversity in the research and development of a Latina breast and cervical cancer education program. *J Cancer Educ.* 2005;20:39-44. Modified with permission of Lawrence Erlbaum Associates, Inc.

participants and findings may overlook the perspective of middle-aged women. Therefore, findings are not representative of all NH women at risk for breast cancer. Recruitment through formal organizations skews findings toward those more likely to participate in organized activities, including screening programs. The failure to collect detailed sociodemographic (eg, income and educational levels) and service-related information (eg, health insurance, use of clinical breast examinations and mammograms) further limits use of findings. Although screening use was discussed in talk story focus groups, this allows researchers to report the screening behavior of NH women only in a general way. There are several reasons why information on income and insurance were not collected. First, due to time constraints, the researchers chose to allocate less time to the survey and more time for discussion. Second, the research team believed that collection of such information might be viewed by participants as culturally disrespectful (ie, *niele* or unnecessarily intrusive, nosy). Future research might assess the concerns of middle-aged and/or women not affiliated with organizations, obtain more detailed information on access to screening and other health resources, and identify factors influencing the use of mammograms and breast examinations by age cohorts. Limitations notwithstanding, culturally literate approaches were used to engage NH women from medically underserved areas, and this is significant given the historic distrust of Western healthcare services and research.

Participants provided a rich description of their spirituality, as embedded in the collectivist-oriented norms of Hawaiian culture. We believe that group discussions were enhanced by the use of a familiar communication medium (ie, talk story), culturally appropriate etiquette (ie, *bo`olau-na*), discussions with women in social networks, and willingness to address issues related to giving informed consent. Findings offer considerations for development of culturally responsive educational approaches and messages. Spirituality, collectivist norms, and inclusion of the intergenerational family of blood relations and fictive kin within churches were viewed as potentially facilitative to routine screening. An intervention promoted through churches in medically underserved communities that incorporates these elements may increase access to and enhance acceptance of screening, thereby offering NH women the hopeful prospect of avoidable breast cancer mortality.

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