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Multidisciplinary research Initiation Grant (MIG) ***Office of the Vice President for Research*** *STUDY APPLICATION*	Office use only Received: Sent to reviewers: Review Board meeting: Applicant notified:

Title: The Development and Feasibility Test of an Innovative, Tailored Intervention to Promote Mammography Screening in Chinese American Women

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Summary: (Not to exceed 200 words)

The purpose of the proposed study is to develop and test the feasibility of an innovative, culturally appropriate intervention tailored to match individual Chinese American women's decisional style, knowledge and access to mammography screening. Despite having relatively low breast cancer incidence rates, Chinese American women (CAW) have experienced a larger annual increase in new cases than non-Asian women. The risk for developing and dying from breast cancer among CAW increases after migration to the United States. Compared to White women, CAW are more likely to have a lower mammography screening rate, larger tumors, more positive lymph nodes, and later stages of disease. These health disparities for CAW are largely due to lack of timely screening and early detection. The lower rate of mammography participation among CAW is associated with their unique cultural beliefs and attitudes. Thus, culturally sensitive intervention holds the promise of improving mammography use and reducing mortality and morbidity associated with breast cancer in this understudied, vulnerable population. Findings from this study will also be used to develop computer generated tailored messages to effectively promote mammography screening in CAW.

Abstract

Breast cancer is the most common form of cancer and second in cancer deaths among Chinese American women (CAW). The annual increases in new cases and death rates of breast cancer for CAW are larger than for non-Asian women. The risk for developing and dying from breast cancer among CAW increases after migration to the United States. Compared to White women, CAW are more likely to have a lower mammography screening rate, larger tumors, more positive lymph nodes, and later stages of disease. These health disparities for CAW are largely due to lack of timely screening and early detection. The lower rate of mammography participation among CAW is associated with their unique cultural beliefs and attitudes. Thus, there is a pressing need to develop effective interventions to increase mammography screening at regular intervals in this vulnerable, minority population. The purpose of the study is to develop and test the feasibility of an innovative, culturally appropriate intervention tailored to match CAW's decisional style and knowledge about and access to mammography screening.

The proposed study will include two phases. In Phase 1, five experts (including 3 PI and Co-PIs and 2 consultants, see Facilities page for their names and expertise) specialized in message framing and cancer education for Chinese Americans will develop and evaluate print materials based on the scientific literature and clinical practice. Fourteen Chinese American women will be invited to participate in one of 2 focus group sessions in which the print materials will be evaluated in terms of their readability, cultural sensitivity, and usefulness. In Phase 2, following baseline data collection,144 participants will be randomly assigned into one of the two groups to receive print materials featuring either a gain- or a loss-framed message. Participants will also receive individualized print messages related to access to and facts about mammography based on a computer-based assessment with the Lack of Access Scale and the Knowledge about Mammography Screening questionnaire. Two weeks after receiving the print materials, participants in both groups will receive a booster telephone call from trained research assistants to answer questions related to the print materials. Participants will complete questionnaires related to stage of mammography adoption, decisional style, perceived risk and seriousness of breast cancer, lack of access to mammography screening, and mammography screening knowledge at baseline and 2 months after intervention delivery.

The proposed study is of innovative nature because it will combine the strengths of individual tailoring with culturally appropriate targeting. Most previous studies were referred to as being culturally tailored when in fact they were only culturally targeted. In other words, many culturally appropriate interventions in this area may not include any individually tailored components.

This proposed study is part of a larger, 2-year proposed project to test a tailored intervention designed to improve mammography screening rates in Chinese American women (see Appendix 1 for the abstract of the larger project). A funding application for this larger project was previously submitted to the Prevent Cancer Foundation. Reviewers were enthusiastic about the project, saying "The proposed research is potentially significant. The applicant makes a strong case for the need for mammography promoting interventions specifically targeted to the underserved Chinese-American population. The use of a theory-based intervention is also a strength." However, the reviewers also suggested preliminary work was necessary to develop the intervention and determine its cultural and linguistic appropriateness. A second suggestion was to generate evidence for the feasibility of the study (see Appendix 2 for the review letters). Funding from the MIG program would allow us to conduct this preliminary work.

The long-term objective of this program of research is to develop computer generated, tailored messages to effectively promote mammography screening in CAW. This resource can be used at physicians' offices, kiosks, and via the internet. The applicants plan to resubmit the proposal for the larger project and seek additional funding supports from Department of Defense' Breast Cancer Program and Susan Komen Breast Cancer Foundation's Health Disparities Research Grant.