

Effective Outreach Education Strategies to Promote Cancer Screening. XuZhou International Oncology Forum on April 15 - 16, 2011 in XuZhou, China.

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ABSTRACT

Awareness of cancer screening guidelines is the key to compliance with the recommended guidelines for detection of cancers in order to improve cancer outcomes. Our studies indicated that utilizing 1) media-based education campaign and 2) theatrical preschool performance were effective in increasing the awareness and practice of breast health guidelines in early detection of breast cancer; and 3) employing physician initiated screening program exhibited efficacy in colorectal cancer screening.

1) Media-Based Education Campaign¹: The Effectiveness in Utilizing Chinese Media to Promote Breast health among Chinese Women.

To increase the awareness and practice of breast health guidelines, a media-based education campaign on breast health was launched among immigrant Chinese community in San Francisco, California. The media campaign included airing two public service announcements (PSAs) on Chinese television and radio stations and publishing the same message in Chinese newspapers during 2000. Seven-hundred-ten face-to-face interviews were conducted with women who were recruited from various settings in the city of San Francisco to evaluate the impact of the campaign. Survey participants were asked to describe the content of the PSAs. Having viewed the PSA was significantly associated with the ability to identify all four guidelines (OR = 1.96; 95% CI: 1.35-2.85), knowing how to perform breast self-exam (BSE; OR = 2.25; 95% CI: 1.53-3.29), having performed BSE within the past month (OR = 3.12; 95% CI: 2.05-4.74), and having a clinical breast exam (CBE; OR = 2.98; 95% CI: 1.82-4.90) and mammogram (MAM; OR = 1.97; 95% CI: 1.16-3.36) in the past year. The study findings support that a media campaign utilizing PSAs is effective in improving knowledge of breast health guidelines, teaching Chinese women how to perform breast self-exams, and increasing breast health practices.

2) Theatrical Preschool Performance²: Promoting Breast Cancer Screening among Chinese American Women through Young Children's Theatrical Performance

The purpose of the quasi-experimental study was to test the efficacy of a theatrical preschool performance, guided by the diffusion of innovation theory, in educating Chinese American women about breast cancer detection. The research questions sought to determine whether the performance increased the participants' knowledge of breast cancer screening guidelines and length of stay in the United States, and self-reported attentiveness were associated with knowledge gained on breast cancer screening guidelines. The preschool performance was performed in 2006 by Chinese children ages 3 to 5 who displayed breast health guidelines from the Susan G. Komen for the Cure. One hundred and seventy-seven pre- and post-performance surveys were collected from a sample of Chinese women (84% foreign born). The data were analyzed using standard linear regression analyses and bivariate logistic regressions. The findings demonstrated that promoting breast health screening guidelines among Chinese American women through a preschool theatrical performance significantly increased the participants' knowledge of the guidelines. However, no major impact was detected between knowledge score and attentiveness to the theatrical performance and any

of the demographic variables. Health care professionals can foster social change by adapting a preschool theatrical performance to educate community on cancer control guidelines for early detection.

3) Physician Initiated Screening Program³: Chinese Colorectal Cancer (CRC) Research Project- Physician Initiated Intervention Project

The project goals were to (1) assess the effectiveness of involving physicians in increasing CRC screening rates from 55% to 75%, among eligible Chinese Community Health Plan members and (2) decrease the numbers of advanced colon cancer cases through early screening by partnering with Primary Care Physicians (PCPs) to educate patients regarding the importance of FOBT. On behalf of the participating PCPs, FOBT packet mailings were sent to patients of 2-3 physicians per month (approximately n=150 patients per month) from October 2007 through December 2009. The baseline CRC screening rate was assessed in the project's Pre-study period from September 2006 through September 2007. The FOBT kits were sent to patients of the PCPs assigned to the Immediate Intervention group during Year 1 and to those of the Delayed Intervention group during Year 2. FOBT packet contents included (1) letter from patient's PCP, (2) FOBT specimen instruction sheet, (3) pre-labeled FOBT triple-slide kit, (4) completed lab order form, and (5) pre-paid postage on pre-addressed return mailer to Chinese Hospital laboratory. A total of N=1,745 patients of 54 PCPs participated in the study, with 29 PCPs assigned to the Immediate Intervention group (with FOBT mailers sent out during Year 1) and 25 assigned to the Delayed Intervention group (with mailers sent out during Year 2). A total of 915 FOBT kits were sent in Year 1, and 830 FOBT kits were sent in Year 2. Overall, 9 PCPs refused participation in Year 1, and three additional PCPs refused in Year 2. MAIN FINDINGS: 1) For Any CRC rates, 67% of the PCPs who had FOBT mailers sent attained this goal of having 50% or higher screening rates for that given year when compared to only 12% of the PCPs with no mailers sent. The multivariate GEE model estimated that sending out FOBT mailers increased 16 times the odds for a PCP to attain the goal of having 50% or higher of any CRC screening for that year [odds ratio = 15.5; 95% Confidence intervals, $p < 0.001$]. 2) For FOBT rates, 58% of the PCPs who had FOBT mailers sent attained 50% or higher FOBT rates for that given year when compared to only 6% of the PCPs with no mailers sent out. The multivariate GEE model estimated that sending out FOBT mailers increased 24 times the odds for a PCP to attain 50% or higher FOBT rate for that year [odds ratio = 23.9; 95% Confidence intervals, $p < 0.001$].

In conclusion, the data show a strong impact of CRC screening rates, particularly in FOBT rates with the physician initiated mailed intervention. The results of the study were consistent with the findings in literatures, which supported physician involvement in promoting health decision-making and behavior among patients. The study findings indicated a great impact from the physician-initiated FOBT mailers on increasing CRC screening rates. During the project intervention periods, the patients who received the FOBT mailers demonstrated an increased rate of CRC screening; however, without the intervention, patients' CRC screenings were significantly comparable to the baseline rate observed in the Pre-Study period.

¹ Sun, A., Zhang, J., Tsoh, J., Wong-Kim, E. Chow, E. The effectiveness in utilizing Chinese media to promote breast health among Chinese women. *Journal of Health Communication*, 2007, 12:157-171. PMID: 17365357

² Sun, A. (2009). Promoting Breast Screening among Chinese American Women through Young Children's Theatrical Performance (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI Microform: 3366987)

³ Sun, A., Tsoh, J., Cheng, J., Nguyen, T., McPhee, S., Yee, B., and Chow, E.A. Chinese Colorectal Cancer (CRC) Research Project; Physician-Initiated Intervention Project. Cu Expo 2011 Community University Partnerships: Bringing Global Perspectives to Local Action., Waterloo, Canada, 2011.