Health Beliefs and Breast Cancer Screening Among Korea Immigrant Women

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Purpose

• The aim of this pilot study is to identify the key health beliefs that influenced Korean women’s decision to participate in breast cancer screening so that those findings can contribute to increased Korean Immigrant Women’s (KIW) participation in breast health screening.
Background

Breast Cancer Rates by Race and Ethnicity (CDC, 2013)
Female Breast Cancer
Death Rates* by Race and Ethnicity (CDC, 2014)
Mammography Percentages by Race and Ethnicity

(CDC, 2010)

Women aged 50–74 years who reported having a mammogram within the past 2 years, race and ethnicity, in 2010

- **Race**
  - Black/African American: 73.2%
  - White: 72.8%
  - American Indian/Alaska Native: 69.4%
  - Asian: 64.1%

- **Ethnicity**
  - Non-Hispanic: 72.7%
  - Hispanic: 69.7%
• Korean immigrant women have lower morbidity and mortality rate from breast cancer than other ethnicities; however, their morbidity and mortality rate of breast cancer have increased each year, and their screening rate is lower than other ethnicities in the U.S.

• Healthy people 2020 goal of mammogram screening: 73.7% for aged women 50 to 74 years.
Literature Review

• Morbidity of breast cancer: Korean women in Korea verse Korean immigrant women in U.S.A

• KAIW breast cancer screening rate: within the previous year (22%)

• Mammogram screening rate within previous year among women 40 and older in U.S.; Non-Hispanic White (51%), African American (50.6%), Asian American (47.7%), American Indian and Alaska Native (51.6%) and Hispanic/Latina (46.5%).
Korean Immigrant Women in U.S

• **Living in different health system**
  ex) [national health insurance](#) -> private health insurance

• Western style of living
  ex) [dietary intake](#)

• Health beliefs

• Cultural beliefs
  ex) [meaning of breasts](#)
Theoretical Model

• The Health Belief Model (HBM) by Hochbaum, Leventhal, Kegeles, & Rosenstock, 1950s
  - Perceived Susceptibility to disease
  - Perceived Seriousness to disease
  - Perceived Benefits of preventive action
  - Perceived Barriers of preventive action
  - Cue to action = Health motivation
  - Fear
  - Self-Efficacy
INDIVIDUAL PERCEPTIONS

- Perceived susceptibility to disease "X"
- Perceived seriousness (severity) of disease "X"

MODIFYING FACTORS

- Demographic variables
- Sociopsychological variables

- Perceived threat of disease "X"

LIKELIHOOD OF ACTION

- Perceived benefits of preventive action minus perceived barriers to preventive action

- Likelihood of taking recommended preventive health action

CUES TO ACTION

- Mass media campaigns
- Advice from others
- Reminder postcard
- Illness of family member/friend
- Newspaper of magazine article

• Back to slide
Methods

• Setting
  - Eligibility Criteria:
    first generation Korean women who aged 35 years of older; have Korean parents; have not had a mammogram in the past 12 months; no history of breast surgery in the past 12 months; have a minimum six grade level of literacy level who live in Columbus, Ohio.
  - Collaboration with Breast Heath Education and Screening for Asian Women V (BHESAW V):
    - Community Health Advocate (CHA)
    - Korean School at Metro High School
- Fliers in Korean, word of mouth, poster on Korean community website

- A convenience sample of **36 Korean women** who made the decision to have a mammogram were enrolled to complete the **BHESAW program**
• **Instruments**
  - Demographic information
  - The Health Belief Model Scales: questionnaire by Dr. Victoria L. Champion
  - 64 questions with a Likert scale of 1 to 5;
    1 = strongly disagree and 5 = strongly agree
  - English version and Korean version of questionnaire

• **Procedure**
  - Recruitments of participants: collaboration with BHESAW project
  - Consent
  - Free mammogram
  - Questionnaire
  - Data collected at Nov. 17th 2012 at Korean School
• Data Analysis
  - Coded MS Excel, IBM SPSS Statistic 21
  - Recoded: 1 = -2, 2 = -1, 3 = 0, 4 = 1, 5 = 2; positive = agree, negative = disagree
  - Seven questions were reverse-recoded
  - Cronbach’s alpha: Reliability of the scales
  - Normality with Kolmogorov-Smirnov test and equality of variance with Levene’s test.
  - Descriptive statistics, a bivariate correlation and t-test by IBM SPSS 21
Results

- Socio-demographic and Breast Health-Related Characteristic Frequency and Percent of Sample of Korean American Women
- Korean Immigrant Women Health Beliefs
- Correlation
• The sample (N=36) of Age in years was normally distributed (p > .05).

• Correlation:
  - Age in years and seriousness (r= -. 35, <.05)
  - Susceptibility and benefits mammogram
    (r= -. 44, <.01)
  - Seriousness and health motivation (r= .398, < .05)
  - Health motivation and benefits mammogram
    (r= .66, < .01)
  - Barriers BSE and benefits mammogram (r= -.457, < .01)
  - Barriers mammogram and seriousness (r= .37, < .05)
• T-test: independent samples test
  - Normality with Kolmogorov-Smirnov test and equality of variance with Levene’s test
  - Barriers BSE for participants who had a mammogram previously and participants who did not have a mammogram previously (p < .05)
  - Health motivation between participants who have medical insurance and participants who don’t have health insurance (p < .05)
  - Barrier BSE between age group 35-50 and 51-65 (p<.05)
Conclusions

• Therefore, age, status of medical insurance and previous mammogram screening experience influenced KIW’s health beliefs.
• Seriousness, susceptibility of breast cancer, health motivation, benefits of mammogram and barriers of BSE were associated with mammogram screening among KIW.
Implication for Nursing
• Focusing on improving health motivation when health care providers educate breast health to KIW population would help this population increase participation in a mammogram screening.
• Cultural values belief and practices need to be considered in planning breast health education for vulnerable population.
• BSE and CBE methods need further exploration if these methods could be a predictor for getting mammograms.
• Further study with large sample size can expand a study with other ethnicity to find predictors among variables including cultural factors that effect women’s breast health screening behavior.
References


