Breast Cancer Screening Disparity among Korean Immigrant Women in Midwest

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Overview

Background
- Korean American women have one of the highest breast cancer mortality rates, and one of the lowest breast cancer screening rates.

Research Objective
- Using three breast cancer screening methods; mammogram, clinical breast examination (CBE) and breast self examination (BSE), this study investigated breast cancer screening rates and its associated factor.

Theoretical Framework
- The Andersen model was originally designed to predict the use of health services by individuals (Anderson, 1995).
- The model is composed of predisposing characteristics, enabling resources (including income and level of health care coverage), and need variables (such as perceived illnesses).

Methods

Research Design
- A cross-sectional research design

Data Collection
- 168 Korean immigrant women who were aged 40-79 and living in Minnesota completed the baseline survey of mMammogram intervention project

Measures
- Dependent variable: Self-reported receipt of breast cancer screening test each for breast self-exam (BSE), clinical breast exam (CBE), and mammography
- Independent variable: Predisposing factors (age, perceived barriers, and distrust towards health professionals), enabling factors (self-reported education, health insurance, and procedure knowledge on how the give screening test is done), and need factors (self-rated health status, self-reported cancer history, and family cancer history).

Data Analysis
- 3-step hierarchical logistic regression analysis was conducted.
- Data were analyzed using IBM SPSS Statistics Version 22.

Results

Receipt of Breast Cancer Screening by Age and Time Frame (N=168)

<table>
<thead>
<tr>
<th>Age</th>
<th>Year Since Last Mammogram</th>
<th>BSE</th>
<th>CBE</th>
<th>Mammography</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never (0 yrs)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1-2 yrs</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3-5 yrs</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>6-10 yrs</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>More than 10 yrs</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Predicting Performance/Receipt of Breast Cancer Screening (N = 168)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Variables</th>
<th>BSE</th>
<th>CBE</th>
<th>Mammography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Barriers</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.04</td>
</tr>
<tr>
<td>Distruz</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Enabling</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>Knowledge of BSE</td>
<td>1.97***</td>
<td>1.97***</td>
<td>1.97***</td>
<td>1.97***</td>
</tr>
<tr>
<td>Need</td>
<td>-0.09</td>
<td>-0.09</td>
<td>-0.09</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

Conclusion & Implications

Conclusion
- Study findings suggest overall low rates of breast cancer screening receipts and performance.
- Knowledge of each screening method strongly predicted screening receipts and BSE performance.
- Being old, low perceived barriers, and low educational attainment were positively associated with getting a mammogram.
- Distrust of physicians and higher education level were negatively correlated with CBE receipt, while cancer history of family members was positively related to CBE receipt.
- Health insurance was negatively associated with BSE practice.

Implications
- This study suggests to develop education to promote mammography uptake in Korean immigrant women those who have a higher level of barriers and are younger.
- To promote breast cancer screening in this population, health education should be combined with strategies to increase health care access such as providing mobile screening services or assistance of scheduling for screening.

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