PREDICTORS OF BREAST CANCER FATALISM AMONG WOMEN

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Background and Introduction

• Breast cancer continues to be a major public health issue

• Psychological, social, cultural, SES factors influence screening behaviors
Background and Introduction

Fatalism

• Events are predetermined in advance... human beings are powerless to change them
• Assumed helplessness
• Cancer is a death sentence
• Death is inevitable
• Linked to the ‘web of poverty’ (Freeman, 1989)
Fatalism

- Predictor of participation in fecal occult blood testing (Powe, 1995)

- Explanation why some women do not engage in breast cancer screening (Powe 1996; Guidry et al. 2003; Champion et al. 1997; Mayo et al. 2001)
Objective

- To examine **predictors of breast cancer fatalism** among women.

- To **extend current knowledge** about cancer fatalistic attitudes.
Methods: Data

Telephone survey of women 40 years of age and older in Mississippi - Summer, 2003

- Primary healthcare practices
- Knowledge, attitudes, and practices regarding breast cancer screening (including mammography, clinical breast exam, and breast self exam)
- Awareness of breast cancer risk factors
- Attitudes towards treatment
- Perceptions of the healthcare system, and
- Socio-demographic characteristics.
Methods: Variables

- **Outcome variable -- breast cancer fatalism**, verbalized as: “Breast cancer is a death sentence.”

- Three sets of **explanatory variables**
  1. Socio-demographic and other lived experiences
  2. Perceptions of the health care system
  3. Knowledge/attitudes towards breast cancer
Methods: Data Analysis

• Bivariate analysis using t-tests or chi-square tests, as appropriate.

• Logistic regression
Results: Description of the Sample

1050 women responded to the survey.

Analytical sample size: 958 women.

- High school degree or less: 52.2%
- Annual household income ≤ $30,000: 51.8%
- White, non-Hispanic: 70.8%
- Married: 61.0%
- Living in rural areas: 57.7%
- Reported fair-poor health status: 30.1%
- Reported family history of breast cancer: 32.6%
- Average age: 59 yrs
Results: Bivariate Analysis

Women who were ‘fatalistic’ relative to those who are not ‘fatalistic’, more likely to:

**Sociodemographic and lived experiences:**
- Be African American
- Have low education and household income levels
- Be older and unmarried
- Report a family history of breast cancer and fair/poor health status

**Perceptions of the health care system:**
- Rate their quality of care as fair/poor
- Believe that hospitals sometimes did not tell patients the truth, doctors sometimes hid information from patients of their race, and doctors did not take the medical complaints of people of their race seriously.

**Knowledge/attitudes of the disease:**
- Agree that there isn’t much one can do to keep from getting breast cancer
- Agree that getting treated can be worse than the disease
- Surgery exposes cancer to the air and causes it to spread
- Believe that they could not afford the cost of treatment
- Prefer not to know if they had the disease
- Not believe that breast cancer can be cured if found early
### Logistic Regression Analysis of Breast Cancer Fatalism

<table>
<thead>
<tr>
<th>EXPLANATORY VARIABLE</th>
<th>Odds Ratio Of Fatalism</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociodemographic and lived experiences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>1.02</td>
<td>1.00, 1.03</td>
</tr>
<tr>
<td>Education (high school or less vs. college education)</td>
<td>1.58</td>
<td>1.10, 2.28</td>
</tr>
<tr>
<td>Race/ethnicity (African American vs. White, non-Hispanic)</td>
<td>1.59</td>
<td>1.09, 2.30</td>
</tr>
<tr>
<td>Family history vs. not</td>
<td>1.43</td>
<td>1.03, 2.00</td>
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<tr>
<td>Perceptions of the health care system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of care (fair/poor vs. excellent/good)</td>
<td>1.80</td>
<td>1.08, 3.00</td>
</tr>
<tr>
<td>Doctors hide info from patients of your race vs. not</td>
<td>2.14</td>
<td>1.49, 3.08</td>
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<td>Knowledge/attitudes about breast cancer</td>
<td></td>
<td></td>
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<tr>
<td>Not much you can do to prevent breast cancer vs. other</td>
<td>1.38</td>
<td>1.00, 1.91</td>
</tr>
<tr>
<td>Breast cancer could not be cured if found early vs. other</td>
<td>2.14</td>
<td>1.10, 4.16</td>
</tr>
<tr>
<td>Surgery causes cancer to spread vs. not</td>
<td>1.68</td>
<td>1.20, 2.35</td>
</tr>
<tr>
<td>Treatment can be worse than the disease vs. not</td>
<td>2.16</td>
<td>1.56, 3.00</td>
</tr>
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Discussion

• Strong predictors –
  – Perceptions of the health care system
  – Knowledge and attitudes about breast cancer

• Beliefs about health and health care, may explain some of the differences in SES
Limitations

• Unable to disentangle the ‘web’ of poverty. Clear pathways cannot be fully articulated from this analysis.

• Self-report responses are subject to biases associated with respondent recall and desire to report the ‘correct’ answer.
Implications and Next Steps

Policy and Practice

• Education to dispel myths and negative attitudes
• Health care organizations work towards improving overall perceptions of delivery systems

Research

• Web of poverty
• Impact on screening/utilization
Acknowledgment

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