

Breast Cancer Risk among Immigrant Women: Assessing the Influence of Family Cancer History on the Prevention of Breast Cancer

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January 12, 2017

Breast Cancer in the U.S.

- ❑ Breast cancer death rates and incidence rates have been constantly decreasing since the early 1990's.
 - ❑ Still the second leading cause of cancer death among women in the U.S.
 - ❑ Most deaths from breast cancer are caused by late detection of the disease.
 - ❑ Access to health coverage and cancer treatment remain a big challenge for immigrant groups and ethnic communities.
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Previous Research on Breast Cancer

- ❑ Early detection and reductions in breast cancer deaths can be achieved by promoting clinical breast exams and mammography use (Lanin et al 1998).
 - ❑ Poverty is linked to greater breast cancer incidence and death rates (Maly et al. 2011).
 - ❑ Disparities in breast cancer incidence rates can be explained by different lifestyles and behaviors (Baquet et al 2000).
 - ❑ Psychological factors linked to sociodemographic characteristics can exert an influence on women's behaviors related to the prevention of breast cancer (Lanin et al 1998).
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Breast cancer and immigration

- ❑ Immigrants make up an increasing share of the U.S. population (Grieco et al. 2010).
 - ❑ Immigrants are more likely to be poor and less likely to have health insurance (Grieco et al. 2012).
 - ❑ Lack of access to healthcare is one of the main barriers to breast cancer screenings (Wu et al. 2005).
 - ❑ Lower breast cancer screening rates should be explained by other factors such as linguistics barriers, and traditional health beliefs (Parsa et al. 2006).
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Research Hypotheses

- ❑ H1. The odds of ever having a breast cancer exam will be different among women from different regions of birth, net of SES and other covariates.
 - ❑ H2. The odds of ever having a breast cancer exam will be higher among women who have family cancer experience, net of region of birth and other covariates.
 - ❑ H3. Women living in poverty and with no family cancer experience will have significantly lower odds of ever having a breast cancer exam, when compared to women with family cancer experience.
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Data and Methods

- ❑ National Health Interview Survey (NHIS) 2000, 2005 and 2010 pooled sample.
 - ❑ Four multilevel models were estimated to examine variations in the odds of ever having received a physical breast exam.
 - ❑ The statistical procedures incorporate sample design information.
 - ❑ The two main purposes of this study are to examine if the region of birth exerts and influence in attitudes towards breast cancer prevention among immigrant women.
 - ❑ In addition, to examine if variations in attitudes are attenuated after accounting for previous experiences with cancer.
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Measurements

❑ **Outcome variable:**

- Ever had a physical breast exam (Yes, No)

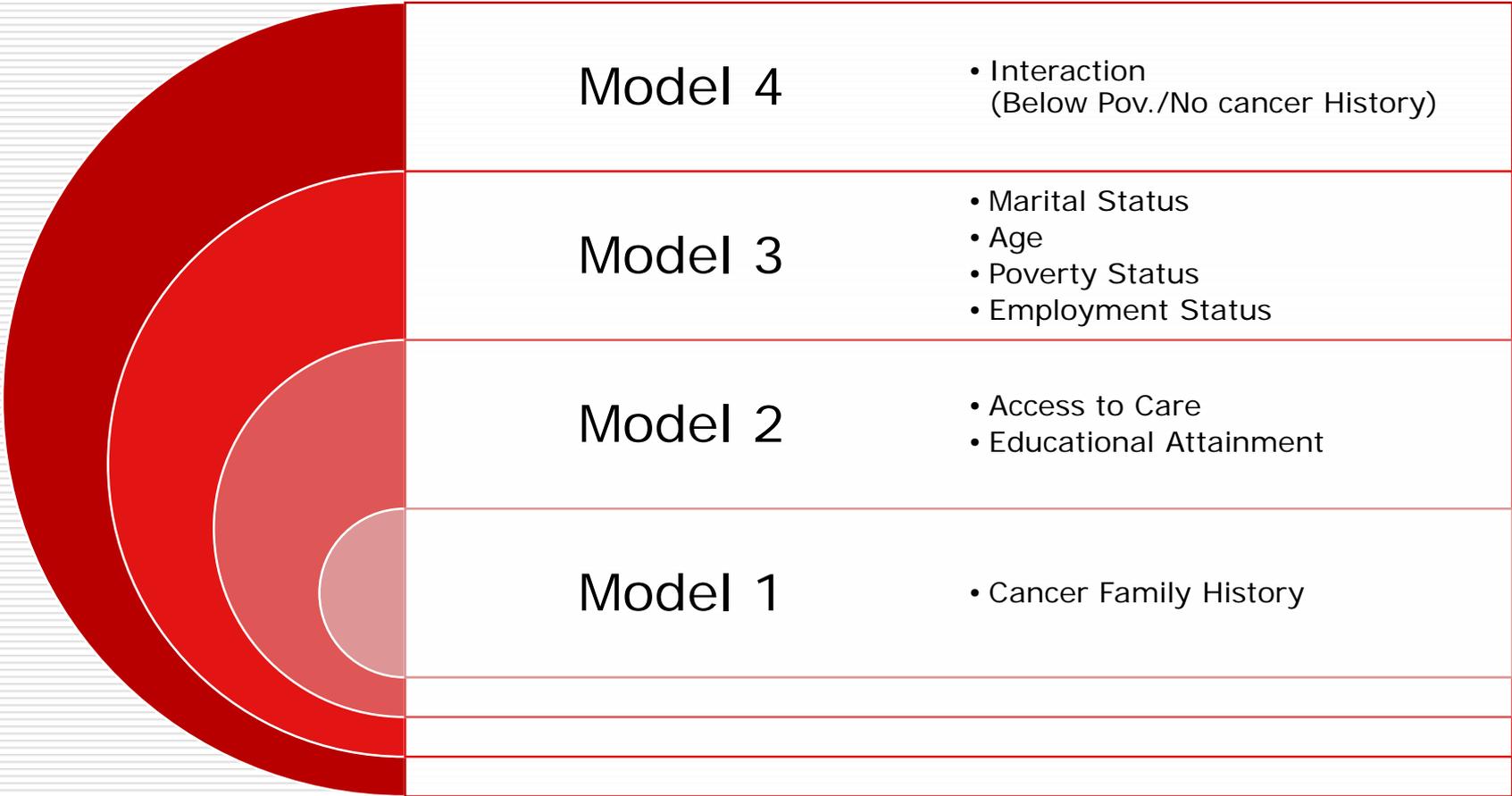
❑ **Explanatory variables:**

- Region of birth (Divided into eleven categories.)
- Cancer history in the family (Yes, No)

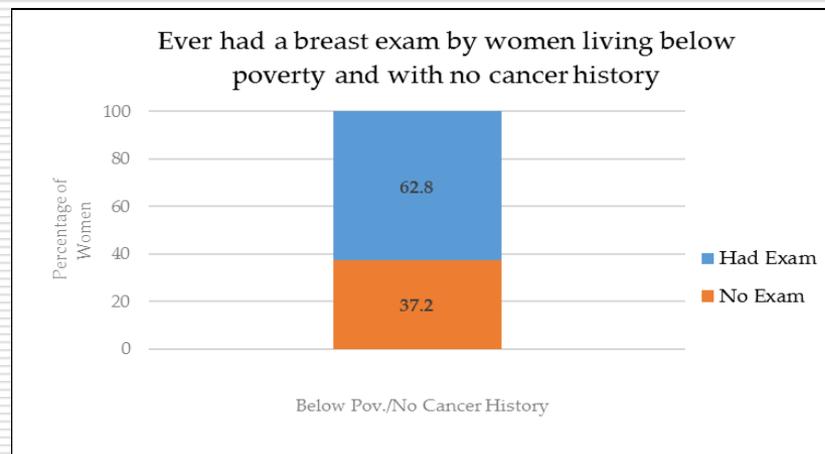
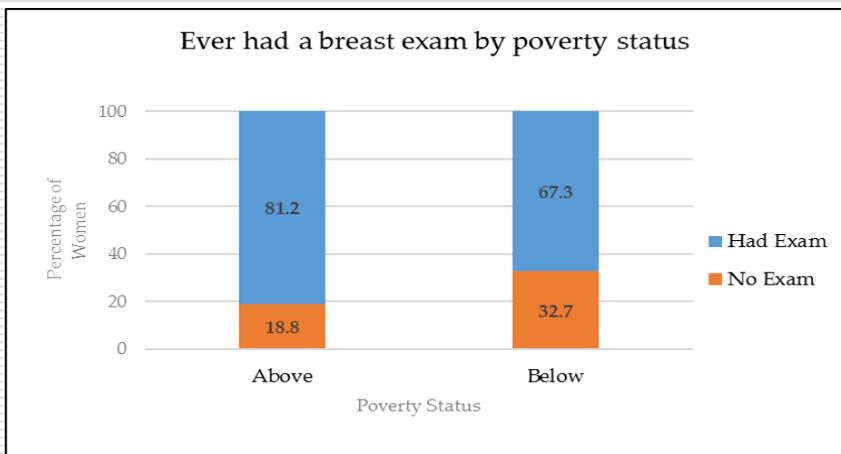
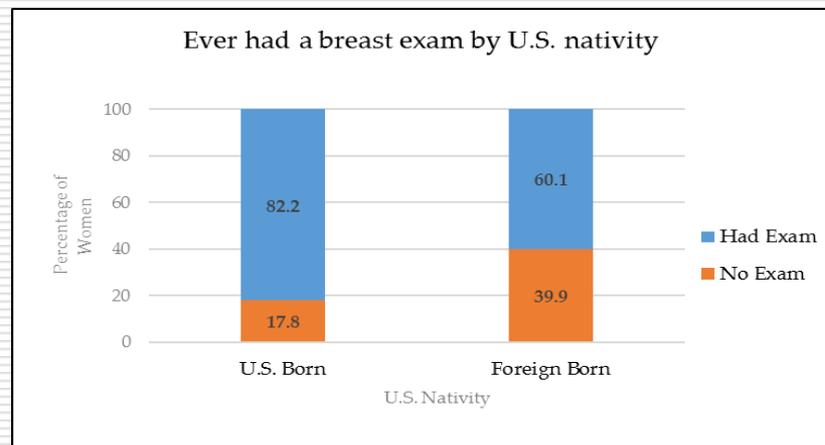
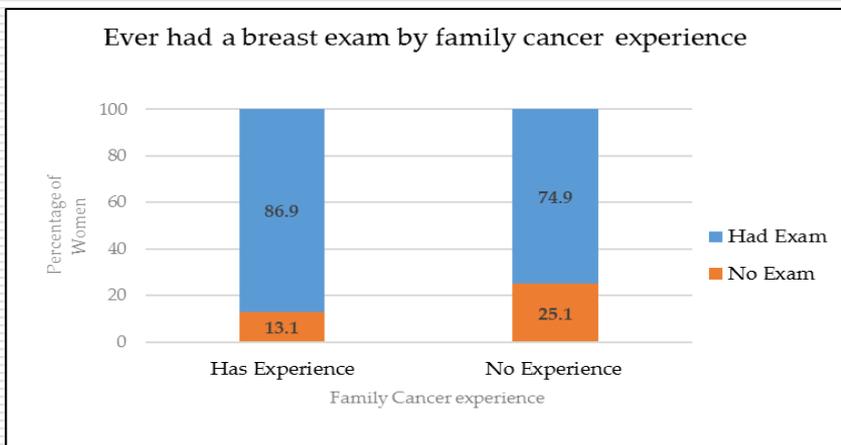
❑ **Control variables:**

- Educational attainment (Elem or Less, H.S degree or some H.S., Assoc degree or some College, Bachelor, Master or more)
 - Access to care (Yes, No)
 - Age (Less than 39, 39 to 59, 60 to 79, 80 or more)
 - Poverty Status (Above poverty threshold, Below poverty threshold)
 - Marital status (Married/Cohab, Sep/Divorced, Never Married, Widowed)
 - Employment status in past 1 or 2 weeks (Currently Working, Not in Labor Force, Out of Work)
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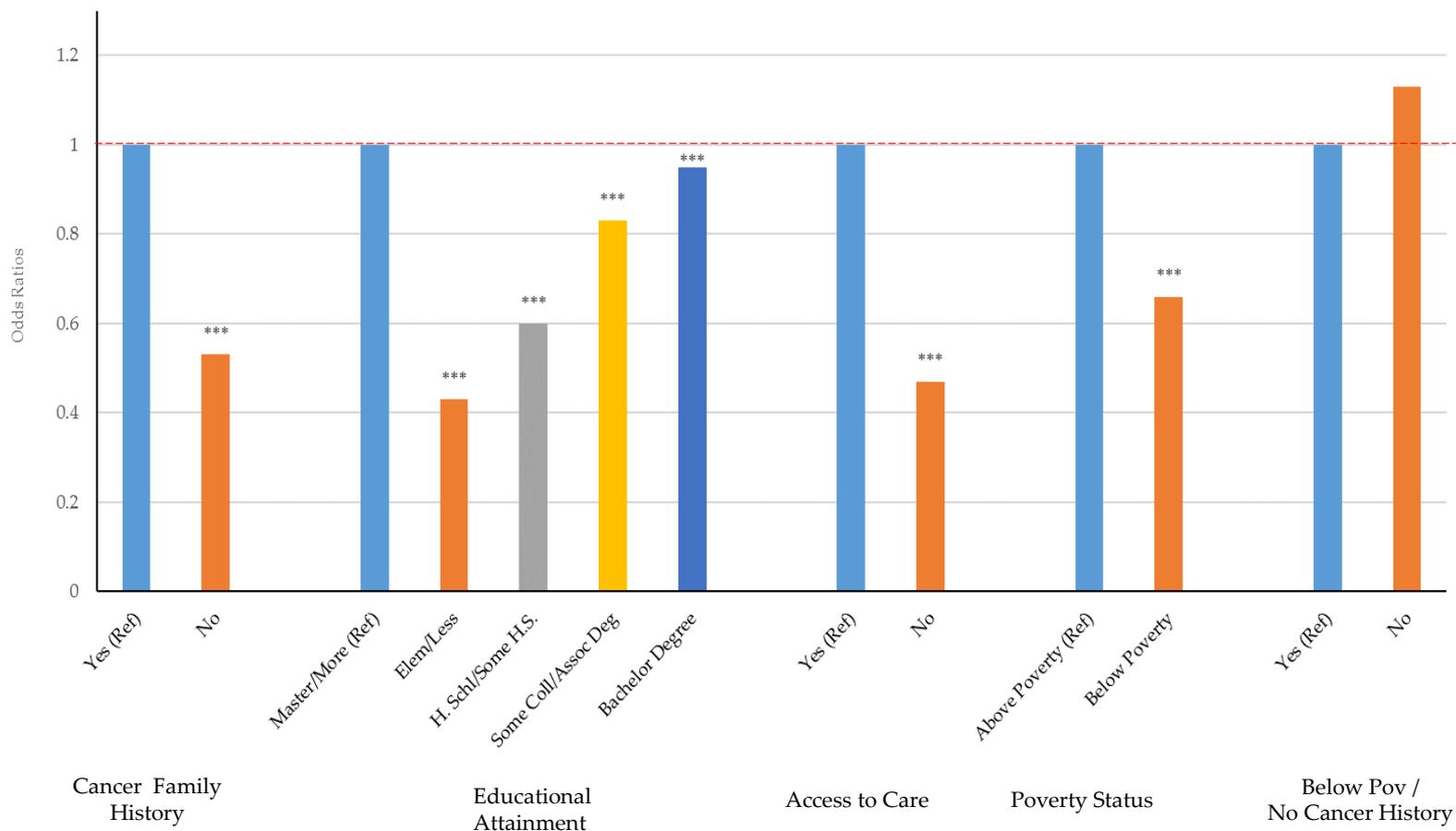
Model Specification



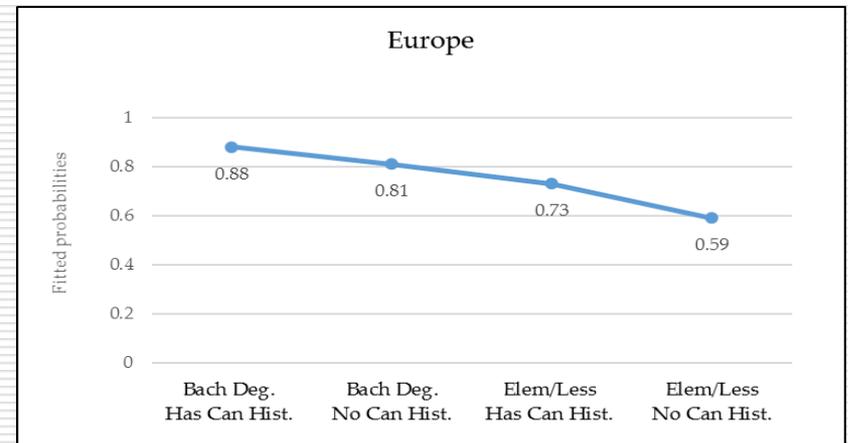
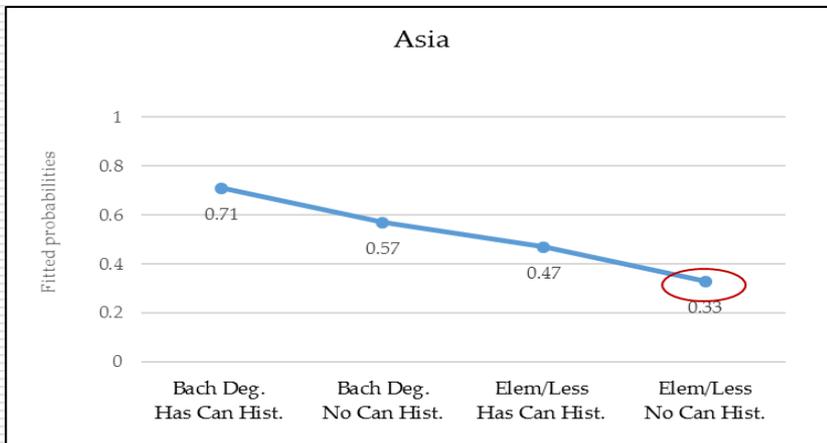
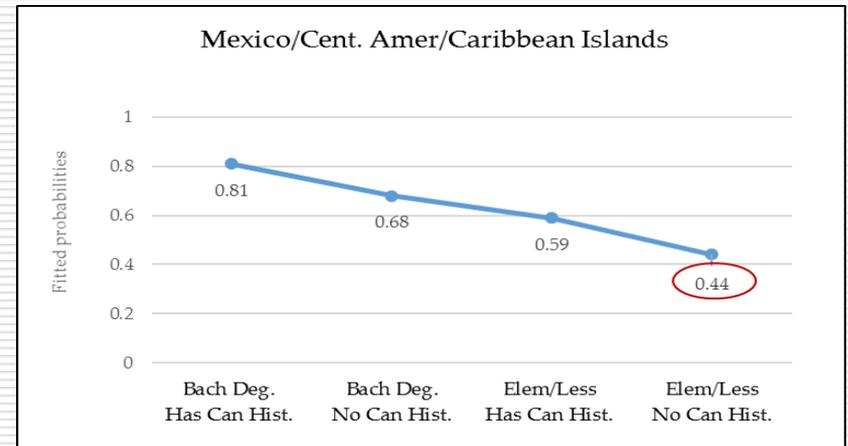
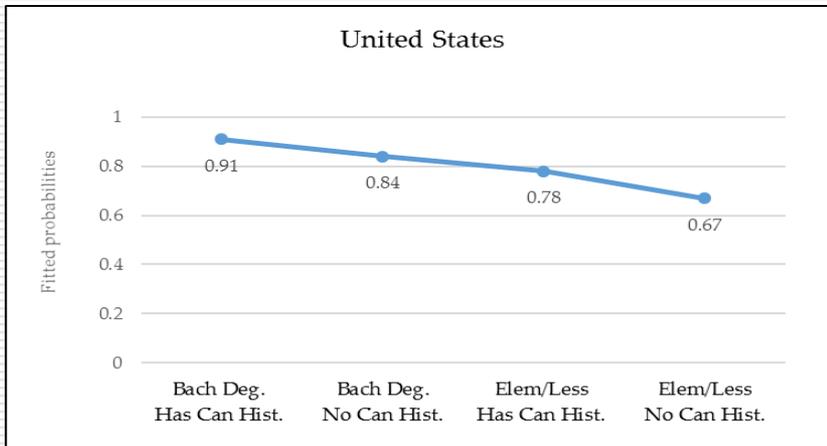
Who Had a Physical Breast Exam?



Odds Ratios of Ever Having a Physical Breast Exam



Fitted Probabilities of Ever Having Physical Breast Exam, by Region of Birth.



Discussion

- ❑ H1. Differences in the odds of ever having received a clinical breast exam based on region of birth was supported by the results.
 - ❑ H2. Differences in the odds of ever having received a clinical breast exam based on having or not past cancer experiences was also supported by the results.
 - ❑ H3. Not supported by the results. The interaction between poverty and cancer family history was not significant.
 - ❑ Immigrant women in the U.S. face and increased risk of breast cancer.
 - ❑ Immigrant women go through an acculturation process. However, behaviors linked to the breast cancer prevention are highly influenced by the characteristics of the group where immigrant women come from.
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Discussion

- ❑ The burden of cancer for the society is expected to growth due to the increases in cancer survival rates, longevity, and the growth and aging of the population.
 - ❑ The financial and emotional burden of cancer may be important, and greatly affect the fragile economy of many immigrant families.
 - ❑ Prevention and early detection are key elements to avoid the heavy load represented by breast cancer.
 - ❑ Designing and implementing specifically targeted interventions employing community health workers, could help to reduce the impact of breast cancer in most vulnerable populations.
 - ❑ Health education programs, addressing personal and cultural barriers can motivate breast cancer screening participation among immigrant women.
 - ❑ All adult women, immigrant or not, should know how to perform basic breast cancer exams, and when to look for help.
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Questions?

Thank you for your attention!
