



Associations Between Religiosity and Mammography Adherence Among Older African American Women

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Introduction

- ❖ African American (AA) women receive fewer mammograms, are less likely receive follow-up regarding their mammograms, and as a result, are more likely to die from breast cancer when compared to White women (Jones, Reams, et al, 2007)
- ❖ Religion plays a significant role in AA lives; interventions with faith-based communities have been found to be helpful in reducing health disparities (Watkins, et. al, 2015)
- ❖ There is a lack of data on the relationship between religion and expressing religious views and mammography adherence among AA women.

Primary Aims and Hypothesis

This study aims to:

- ❖ Examine the relationship between religiosity, church attendance and mammography adherence
 - ❖ Higher religiosity will be associated with greater mammography adherence
- ❖ Examine the frequencies of reasons women choose to or choose not to get mammograms

Materials and Methods

Data for this study came from a church-based cohort of 1,827 African Americans recruited between 2008-2013. Of the participants from this study only women over 40 were used in the sample (N=718.)

Participants completed a computer-based survey with multiple questionnaires, which included self-reported participant characteristics: age, sex, employment (employed for wages and self-employed VS all other options), marital status (married or living with a partner VS divorced or separated), income, and church attendance (weekly or more vs less than weekly). Self reported religiosity was measured through ASDE questionnaire (total score <31 (low religiosity vs total score >31 (high religiosity)). Recommended on time mammography was measured with (at least once per year (on time) vs less than once a year. From this sample N=446 reported having had at least 1 mammogram in a year and N=227 had no mammograms in a year.

Frequencies and descriptive statistics were used to describe participant characteristics. Differences in demographic and social environment by outcome status were tested using chi-square and t-test. Multiple logistic regression analyses were conducted to determine if there was any associations between religiosity, church attendance, and on-time mammography uptake, controlling for potential confounding variables (age, education, income, employment status, and marital status). Reasons AA women chose to get or not to get mammograms were also examined using frequencies and percentages.

Results

Table 1. Participant characteristics

Variables	All (n=718) Mean(SD) / n(%)	By group		p-value
		No Adherence (n=228) Mean(SD) / n(%)	Adherence (n=446) Mean(SD) / n(%)	
Covariates				
Age	51.9 (7.9)	51.8 (7.7)	52.6 (7.8)	0.163
Education				0.081
<BS	364 (50.7)	128 (56.1)	210 (47.1)	
BS	223 (31.1)	61 (26.8)	148 (33.2)	
>=MS	131 (18.2)	39 (17.1)	88 (19.7)	0.081
Household income				0.277
<40K	178 (25.3)	57 (25.4)	98 (22.4)	
40-79.9K	289 (41.1)	98 (43.8)	178 (40.6)	
>=80K	237 (33.7)	69 (30.8)	162 (37.0)	
Marital status*				0.013
No	422 (58.8)	149 (65.4)	247 (55.4)	
Yes	296 (41.2)	79 (34.6)	199 (44.6)	
Employment status**				0.325
No	181 (25.2)	53 (23.2)	119 (26.7)	
Yes	536 (74.8)	175 (76.8)	326 (73.3)	
Predictors				
Church attendance weekly or more				0.755
No	60 (8.4)	20 (8.8)	36 (8.1)	
Yes	658 (91.6)	208 (91.2)	410 (91.9)	
High spirituality score (31 or greater)				0.167
No	332 (46.3)	112 (49.3)	195 (43.7)	
Yes	385 (53.7)	115 (50.7)	251 (56.3)	
Outcome				
Adherence to mammogram recommendation				
No	228 (33.8)			
Yes	446 (66.2)			

Table 2. Association between church attendance and breast cancer screening

Variables	OR (95%CI)	P-value
Church attendance weekly or more (Yes)	1.201 (0.665 - 2.170)	0.544
Age	1.013 (0.990 - 1.038)	0.268
Education (Reference: <BS)		
BS	1.488 (1.006 - 2.200)	0.046
>=MS	1.396 (0.865 - 2.252)	0.172
Household income (Reference: <40K)		
40K-79.9K	0.942 (0.606 - 1.463)	0.790
>=80K	0.983 (0.582 - 1.660)	0.948
Marital status (Yes)	1.549 (1.067 - 2.249)	0.022
Employment status (Yes)	0.883 (0.577 - 1.353)	0.568

Table 3. Association between spirituality and breast cancer screening

Variables	OR (95%CI)	P-value
High spirituality score (31 or greater)	1.265 (0.911 - 1.757)	0.161
Age	1.012 (0.988 - 1.036)	0.326
Education (Reference: <BS)		
BS	1.464 (0.990 - 2.166)	0.056
>=MS	1.370 (0.848 - 2.212)	0.198
Household income (Reference: <40K)		
40K-79.9K	0.960 (0.618 - 1.491)	0.855
>=80K	0.980 (0.580 - 1.655)	0.939
Marital status (Yes)	1.545 (1.063 - 2.245)	0.022
Employment status (Yes)	0.877 (0.572 - 1.344)	0.546

Conclusions

- ❖ Religiosity is not associated with mammography adherence in older AA women
- ❖ Church attendance is not associated with mammography adherence in older AA women
- ❖ Marital status was associated with adherence, with married women being 1.5 times more likely to receive mammograms than never married/separated or divorced women = 1.545 , p-value= 0.002)

Future studies should continue to study barriers for mammography adherence in AA women, and more research should be conducted on whether religion influences other cancer prevention behaviors.

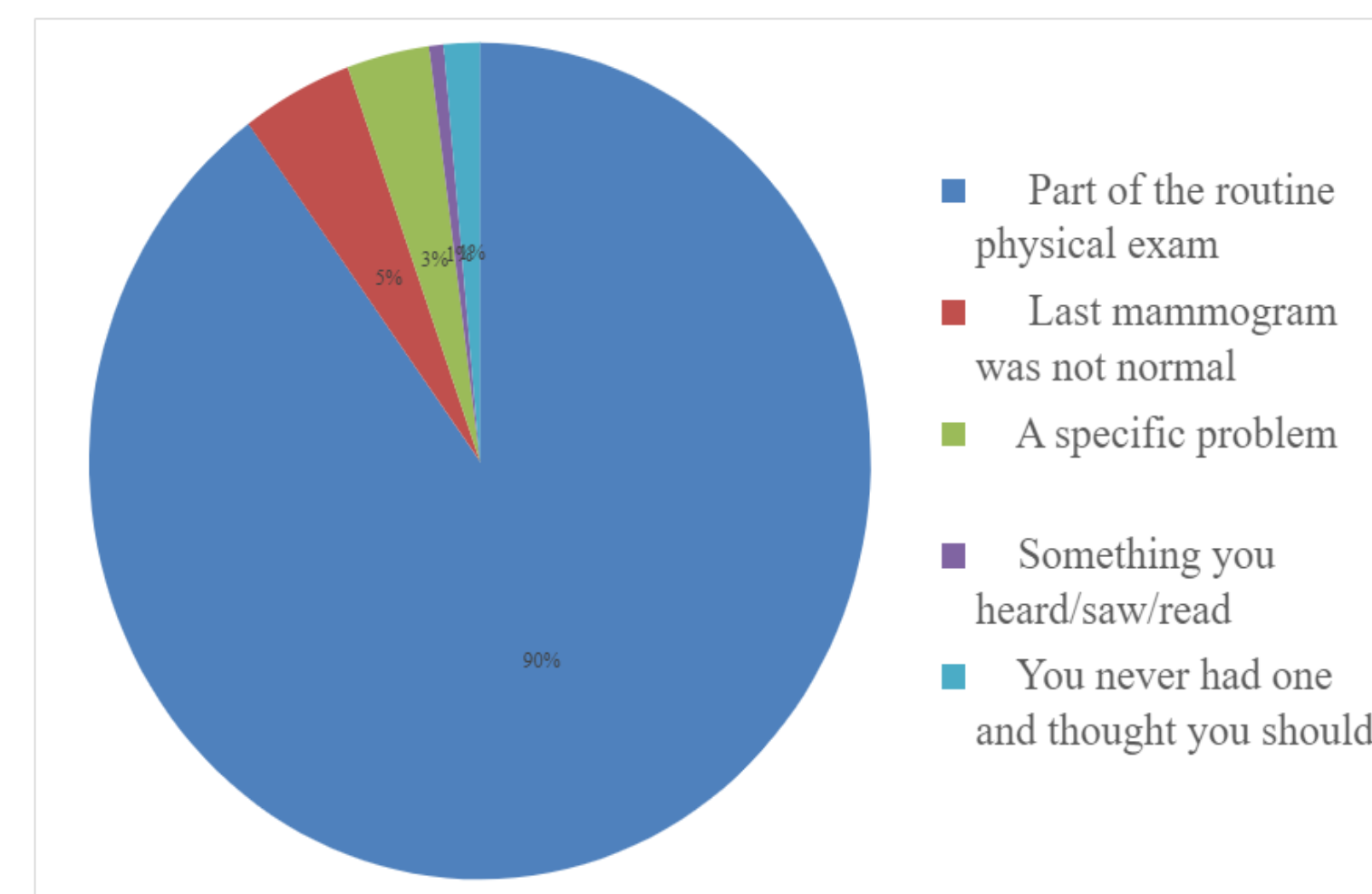


Figure 1: What is the MAIN Reason Participants had a mammogram (N= 674)

Literature Cited

- Beth A. Jones, Kam Reams, Lisa Calvocoressi, Amy Dailey, Stanislav V. Kasl, and Nancy M. Liston, 2007: Adequacy of Communicating Results From Screening Mammograms to African American and White Women American Journal of Public Health 97, 531-538, <https://doi.org/10.2105/AJPH.2005.076349>
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