Reviewer's report

Title: Predictors of regular mammography use among American Indian women in Oklahoma: a cross-sectional study

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Reviewer: Sharon Laing

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BioMed Central – Women's Health

Mammography Screening Article

The study aims to assess psychological, social and environmental factors predicting mammography utilization among a sample of non-reservation dwelling AI women in order to promote regular screening among this group.

The strengths of the study are as follows:

1. The topic is indeed an area requiring exploration. The authors note that in Oklahoma, AI women make up 11% of the total population but are significantly more affected by breast cancer incidence and late stage BC relative to non-Hispanic Whites.

2. The authors explore known psychological factors that have historically served as barriers to accessing healthcare among minority women including fatalism and cultural mistrust – these factors are also identified as components of a comprehensive behavioral model -- Theory of Planned Behavior. The author also identified physician recommendation as a traditionally motivating factor for engagement in preventive care and attempted to assess this factor for this subgroup of women.

3. The authors did find that the odds of reporting engagement in recent screening are lower for women having higher cultural affiliation and perceived fatalism. Indeed this result deserves additional exploration.

The major weaknesses of the study are as follows:

1. The findings from the study do not provide new information about motivators for breast cancer screening—access to care remains the primary motivator to engagement and this is especially true for minority women. The data in this initiative support this as:
   • 93% of women with a primary physician reported having a mammogram within the past 2 years
   • 90% of women who visited a primary physician within the last year reported having a mammogram
   • 64% of women with private health insurance had a mammogram within the past 2 years
• 56% of employed women had a mammogram within the past 2 years
So, it would appear that no new information is obtained by the study

2. Although women who are likely to screen have a primary physician, a very large proportion of women who do not screen also have a primary care physician
• 85% of women not screening have a primary care physician
• 85% of women not screening visit their primary care physician at least once every year
The above was surprising and was not addressed by the authors in the discussion and requires some interpretation.

3. The sample may not represent the people who the authors really sought to understand. The majority of women were well-educated (58% with post high school education), 59% of population had private health insurance and 91% had primary care physician. Do these women represent the bulk of Oklahoma AI women presenting with 34.2% of late stage cases and who may not be adhering to screening guidelines?

Minor weaknesses:
• Typographical errors

When assessing the work, please consider the following points:
1. Is the question posed by the authors well defined?
The question was well-defined
2. Are the methods appropriate and well described?
Methods are appropriate
3. Are the data sound?
Data are sound
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Adherence to relevant standards are observed
5. Are the discussion and conclusions well balanced and adequately supported by the data?
No.
   a- The author speaks to the fact that findings support the importance of physicians in promoting mammography screening but did not address the fact that a substantial proportion of non-screeners also had access to a primary care physician (85%) or visited a primary care doctor within the past year (85%) – this needs to be addressed
   b- Authors spent too much time discussing cultural affiliation and fatalism in discussion section
6. Are limitations of the work clearly stated?
c. Authors presented few limitations of their work. An important limitation is the fact that the sample might not represent the group about which the authors seek to understand screening behavior. The sample was fairly well educated, had access to care (including private health insurance and a physician).

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
   d. Yes

8. Do the title and abstract accurately convey what has been found?
   e. Yes

9. Is the writing acceptable?
   f. Yes

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

none