5-1-2007

Barriers to Mammograms Among Women Who are Homeless

Lucinda M. Ramirez
San Jose State University

SAN JOSE STATE UNIVERSITY
SCHOOL OF NURSING

MASTER'S PROGRAM PROJECT OPTION (PLAN B)
PROJECT SIGNATURE FORM

STUDENT NAME Lucinda Ramirez

SEMESTER ENROLLED Spring 2007

TITLE OF PROJECT Barriers to Mammograms among Women who are Homeless

NAME OF JOURNAL Journal of the American Academy of Nurse Practitioners

The project and manuscript have been successfully completed and meet the standards of the School of Nursing at San Jose State University. The project demonstrates the application of professional knowledge, clinical expertise, and scholarly thinking. An abstract of the project and two copies of the manuscript are attached.

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San José State
UNIVERSITY

School of Nursing
One Washington Square
San José, CA 95192-0057
Voice: 408-924-3131
Fax: 408-924-3135
E-mail: www.sjsu.edu/depts/casa

Director:
Dr. Jayne Cohen

May 16, 2007

Charon A. Pierson, PhD, FAANP
Editor-in-Chief
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Dear Ms. Pierson:

We are submitting the enclosed manuscript, "Barriers to Mammograms Among Women Who are Homeless," for sole consideration for publication in Journal of the American Academy of Nurse Practitioners. This student-faculty project contains a title page, an abstract page, 12 pages of text, reference list and 2 tables. We are confident that this research will be a valuable asset to your readership for it will enhance the knowledge and awareness of nurse practitioners, nurse leaders and healthcare organizations regarding barriers to mammograms among women who are homeless. This research also identifies nursing implications for advanced practice clinicians and community health care organizations.

The study was carried out in accordance with the ethical standards and requirements of San Jose State University's Human Subjects Institutional Review Board. The manuscript was formatted according to the American Psychological Association fifth edition, guidelines and standards.

This research has not been submitted for publication to any other journal. This work was supported in part by a Professional Nurse Traineeship Grant number 5NU00432-10 funded by the U.S. Department of Health and Human Services. There are no issues of conflict-of-interest with any of the authors. All authors developed, read, and approve the manuscript.

Thank you for your time and consideration.

Sincerely,

Lucinda M. Ramirez, RN, MS, FNP Jayne Cohen, DNSc, RNC, WHCNP

Phyllis M. Connolly, PhD, APRN-BC, CS

To: The Editor-in Chief of the JAANP

Submission Title: Barriers to Mammograms Among Women Who are Homeless

Authorship Information:

The signatures below certify that this is original work, has not been published previously, and is submitted for the sole consideration of the Journal of the American Academy of Nurse Practitioners.

Lucinda M. Ramirez, RN, MS, FNP
Contact Author
San Jose State University
School of Nursing
[redacted]

Lucinda M. Ramirez_____ Date_____

Jayne Cohen, DNSc, RNC, WHCNP
Director and Professor
San Jose State University
School of Nursing
One Washington Square
San Jose, CA 95192-0057
[redacted]

Jayne Cohen_____ Date_____

Phyllis M. Connolly, PhD, APRN-BC, CS
Professor
Graduate Coordinator
San Jose State University
School of Nursing
One Washington Square
San Jose, CA 95192-0057
[redacted]

Phyllis M. Connolly_____ Date_____

Phyllis Connolly

From: Charon Pierson [redacted]
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Barriers to Mammograms Among Women Who are Homeless

Lucinda M. Ramirez, RN, MS, FNP

Abstract

Purpose: The purpose of the study was to identify barriers to mammogram screening among women who are homeless. Knowing the barriers to mammogram screening will be useful to advanced practice nurses for it provides insight to understanding the perceived susceptibility, benefits, and barriers of women potentially amendable to intervention.

Data sources: A descriptive survey was used with a convenience sample of 41 women who were homeless, between the ages of 20-70 years, and agreed to participate in this study. The research was conducted at two homeless shelters in an urban county in Northern California.

Findings: Findings reflected positive perceptions recognizing the benefits of mammogram screenings, and minimal concern about potential negative aspects of having mammogram screenings. Additional data indicated that the sample believed they were less likely to get breast cancer during their life. The majority had no financial resources for a mammogram and did not know how to obtain a mammogram. However, if a free mammogram was available, 95% responded that they would take advantage of this essential screening test.

Conclusions: Breast cancer is the second leading cause of death for all racial and ethnic populations in the United States. Since 1991, the National Health Care for the Homeless Council has integrated a human rights viewpoint to assure healthcare for "everyone" (National Health Care for the Homeless Council, 2006). Therefore, it is up to the community and healthcare providers to make sure that everyone, including women who are homeless, have access to mammography screening by eliminating barriers that prevent access.

Implication for practice: Advanced practice clinicians, with their vast knowledge of community resources, must advocate for everyone, including women who are homeless, to promote access to mammography screening. The goal is to eliminate barriers that prevent this population from having a valuable screening procedure.

Keywords: Mammogram; breast cancer; women who are homeless, health belief model

Running Head: BARRIERS TO MAMMOGRAMS AMONG WOMEN WHO ARE HOMELESS

Barriers to Mammograms Among Women Who are Homeless

Lucinda M. Ramirez, RN, MS, FNP, Jayne Cohen, DNSc, RNC, WHCNP,

and Phyllis M. Connolly, PhD, APRN-BC, CS

San Jose State University School of Nursing

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Introduction

People who are homeless are among an at risk underserved population who frequently lack access to health care. This population is commonly poor, less educated, do not have health care insurance or resources necessary to obtain health care (National Cancer Institute, 2005). The Healthy People 2010 agenda for the nation includes health promotion and disease prevention. Two goals of Healthy People 2010 are to increase quality and years of life, and eliminate health disparities. Of the 28 focus areas, one is to reduce the number of newly diagnosed cancer cases as well as the illness, disability, and demise caused by cancer. Another focus area for Healthy People 2010 is to improve access to health care services. One of the Healthy People 2010 objectives is to reduce the breast cancer death rate by 20% (U. S. Department of Health and Human Services, 2000). This vulnerable population is less inclined to have the recommended mammogram screening (National Cancer Institute, 2005).

In 2004, an urban Northern California County's homeless census was 7,646 combining both men and women. This population who are homeless is diverse. The two largest age groups were 31-40 and 41-50. Of the census survey respondents, 35% were Caucasian, 31% Hispanic/Latino, 21% African American or Black, 5% Asian or Pacific Islanders, 4% American Indian or Alaskan Native, and 5% identified themselves as other (Applied Survey Research, 2005). Of those identified at the point-in-time count, 36% were in shelter facilities, including 419 single females and 305 females in a family (Applied Survey Research, 2005). There is paucity in the research related to women who are homeless at risk for breast cancer.

Purpose of the Study

The purpose of the study was to identify the perceived susceptibility, benefits, and barriers to mammogram screening among women who are homeless. These data will be useful to

advanced practice nurses to help design relevant interventions to enhance the access of this important screening test for this vulnerable population.

Literature Review

The definition of homeless, according to the Stewart B. McKinney Act, (1994), is a person who:

> lacks a fixed, regular, and adequate night-time residence; and ... has a primary night time residency that is: (A) a supervised publicly or privately operated shelter designed to provide temporary living accommodations ..., (B) an institution that provides a temporary residence for individuals intended to be institutionalized, or (C) a public or private place not designed for, or ordinarily used as, a regular sleeping accommodations for human beings (National Coalition for the Homeless, 2006, p. 1).

There has been limited research conducted on breast cancer screening among women who are homeless. Chau et al. (2002) conducted a pilot study utilizing a survey asking about cancer screening practices, attitudes, and lifestyle risk factors. The participants were male and female who were homeless residing in Los Angeles County. The study focused on colorectal cancer, prostate cancer, breast cancer, cervical cancer, and skin cancer among the men and women. The pilot study results indicated that the clinical breast exams rates were the same for women who are homeless compared to the general population, but mammography rates were lower than optimal. This study reported 34% of the women who are homeless aged 50 and over reported having a mammogram within the past year, compared with Californians (60%) and of Americans (63%) in 1997. The study also found that 53% of the women between the ages of 40-49 were less likely to have ever have had a mammogram, versus 77% of women 50 and over who had received mammograms; this could possibly be due to Medicare covering the cost for

older women. The study cannot be generalized to women who are homeless due to different a sample, demographics, and geographical areas have different access to health care services. Furthermore, the majority (57%) of the participants were African American and no other ethnic groups were sampled other than Caucasians.

Another pilot study was conducted by Baldwin and Williams-Brown (2005), focusing on African American women's knowledge of breast cancer, the use of breast cancer screening services, and the concerns they had about breast cancer screening services while experiencing homelessness. Results reported that homeless African-American women related cancer with fear, death and loss, and believed it was family related. Some of the women stated they were knowledgeable about self breast examinations (SBE) however, when talking with the women they had little experience performing SBE, and performed the examination incorrectly. Some of the women did not have mammograms because they had no insurance, were unemployed, and had limited access to health care facilities. Furthermore, the study found that a few of the women believed in taking charge of one's own health would motivate and empower them to get involved in cancer screening. The women said their mothers played a major role providing them with health information. The study lacked generalizability to other women who are homeless due to the small sample (N=25), and the focused on one ethnic group, the African American population (Baldwin, and Williams-Brown, 2005).

Theoretical Framework

Health Belief Model

The theoretical perspective that best fits this research study was the Health Belief Model (HBM). The premise of the HBM (Rosenstock, 1974b) is that before a person takes action one must perceive that the behavior creates a serious health problem. One needs to believe that they

are susceptible to the disease (perceived susceptibility); the disease could have a moderately severe impact on one's life (perceived severity); certain behaviors could be beneficial in reducing one's perceived susceptibility or severity in the event of the disease (perceived benefits); and that these behaviors would not be impeded by factors such as cost, pain, and embarrassment (perceived barriers); and modifying or eliminating the behavior will be beneficial (Rosenstock, 1974b). The perceived barriers are important to the health promotion efforts. Perceived susceptibility and perceived severity are based on the individuals' knowledge of a disease and its perceived outcome. The HBM looks at cues to action that motivate the decision making process promoting readiness to change the behavior. This theory also addresses self-efficacy, the confidence to take action (Gorin, & Arnold, 1998).

Several studies have utilized the Health Belief Model (HMB) to examine mammogram usage (Rahman, Mohamed, & Digman, 2003, Rawl, Champion, & Menon, 2000). The model suggests action is influenced by the combination of perceived susceptibility and perceived severity of the disease, as well as perceived barriers to carry out the behavior and benefits of the behavior (Rahman et al. 2003).

Methodology

Instruments

The revised Susceptibility, Benefits, and Barriers Scale for Mammography Screening (Champion, 1999) was utilized for this descriptive study. Perceived Susceptibility, Benefits and Barriers: the summed context-specific scales assessed the health belief model concepts of perceived susceptibility (3 items), benefits (5 items) and barriers (11 items). Statements are anchored on a five-point Likert scale with markers from "strongly agree" to "strongly disagree." Established psychometric properties related to validity and reliability of both the original and

revised instrument have been established and reported (Champion, 1993, 1995, 1999 & 2000). Demographic information was gathered and is depicted in Table 1. In addition the following questions were asked: (a) are you receiving government assistance, and if so, was it food stamps, Medi-Cal (Medicaid in other states), social security income (SSI), social security disability income (SSDI), and participation in the women, infant and children program(WIC)?; (b) how many times have you been homeless?; (c) have you been homeless more than 12 straight months?; (d) how much time have you spent in the homeless shelter in the past 90 days?; (e) do you have financial resources for a yearly mammogram?; (f) are you familiar with how to get a mammogram?; and (g) if a free mammogram were available, how likely are you to take advantage of having one?

Sample and Setting

A sample of 41 women, who were homeless, between the ages of 20-70 years agreed to participate in this study. During the study a women who was approximately in her mid forties did not have time to participate in the study stating "I'm trying to find someplace to sleep tonight" and did not know what a mammogram was. The research was conducted at two homeless shelters in an urban county in Northern California. Approval was obtained from the Institutional Review Board (IRB) at the University.

Procedures

Women were asked to participate in a study on barriers to mammograms. Advertising included the posting of a sign at the two sites stating "School of Nursing; volunteers needed to participate in a research study regarding breast cancer screening and barriers; snacks provided; and free handouts on self breast examinations." The requirement to be a participant was homelessness. The participants were informed the study was completely confidential and

voluntary, and that they could withdraw at anytime. The participants were encouraged to ask questions before participating in the study and during their participation. The participants were provided a consent form to sign as well as a copy for their records.

Data were collected on four visits, three at one facility (n=26, 63.4% participants) and, one visit to the other (n=15, 36.6% participants). All participants were given information on where to obtain a mammogram, clinical breast examination, and cervical pap screening after completing the survey tool. They were also given a handout on how to perform a self breast examination.

Data Analysis

Analyses comprised descriptive statistics including frequencies, percentages, and measures of central tendency.

Results

The average age of the 41 participants was 39.8 years and the range was 20-70 years. Ninety percent of the participants had completed high school or more education. The sample included Caucasian-White (40%), Hispanic-Latina (32%), African-American (15%), other (7.5%), American Indian/Alaskan (2.5%), and Asian-Pacific Islander (2.5%) women. The majority were single, never married (63%), divorced/separated (23%), and married (15%). Thirty-two percent did not receive government assistance, 42% received food stamps, 29.3% received Medi-Cal (Medicaid), 24.4% received SSI-SSDI, and 4.9% received WIC. Approximately 46.2% had been homeless at least once, 23.1% homeless 3 times, 12.8% homeless 4 times, 7.7% homeless 2 times, 5.1% homeless 5 times, 2.6% homeless 6 times, and 2.6% homeless 13 times. There were 29.3% who were homeless more than 12 continuous months. Of these participants 61.5% spent less than half of the past 90 days in a homeless shelter

and 38.5% spent over half the time in a homeless shelter in the past 90 days of the time of survey. When asked if they had financial resources for a yearly mammogram 43.9% answered yes, 56.1% answered no. Sixty-three percent did know how to get a mammogram and 37% did not know how to get a mammogram. If a free mammogram were available 95% indicated they would take advantage of the opportunity (Table 1).

The subscales' means and standard deviations were calculated (Table 2). The means were found to be very similar to those found in Champion, et al, 1993. The Susceptibility subscale is comprised of 3 items that ask women about their likelihood of getting breast cancer. The items are written in a negative tone (e.g., I feel I will get breast cancer sometime during my life).The Susceptibility mean indicated that this sample of women who are homeless 'disagree' with the subscale statements regarding high susceptibility to breast cancer. The mean for the subscale was 2.6, which indicated the ratings fell between Disagree (2) and Neutral (3) on the rating scale. Since the items are negatively stated, a low mean indicates they believe they are less likely to get breast cancer during their life. The Benefits subscale is comprised of 5 items asking women their opinions regarding the usefulness of mammograms detecting breast cancer. The items are written in a positive tone (e.g., having a mammogram will help me find breast lumps early). The mean for this subscale was 3.8, which indicated ratings fell closely to Agree on the rating scale. Since the items are positively stated, this "higher" mean reflects a more "positive" opinion regarding the use of mammograms. The Benefits mean shows that the majority of the participants understood the positive benefits of mammogram screenings. The Barriers subscale comprised of 11 items, asked women their opinion about getting mammograms. The items are written in a negative tone (e.g., having a mammogram is too painful). The mean for this subscale was 2.1, which indicated the average rating fell near Disagree on the rating scale. Since the items are

negatively stated, a lower mean indicated a "positive" opinion regarding issues related to mammogram screening. Therefore, the participants did not perceive barriers to having a mammogram.

Limitations

There were several limitations to the study including (a) a small number of participants, (b) self reporting may be biased, (c) one geographical location, and (d) the Hawthorne effect. This study may not be generalizable due to different demographics, different resources for screening, and variations in ethnic diversity.

Discussion

Overall, the findings of this study indicate positive perceptions regarding the susceptibility to breast cancer; meaning they do not believe they are at risk for getting breast cancer. The women recognized the benefits of mammogram screenings, and were not overly concerned about potentially negative aspects of seeking mammogram screening. Breast cancer is the second leading cause of death for all racial and ethnic female populations in the United States. Since 1991, the National Health Care for the Homeless Council has integrated a human rights viewpoint to assure healthcare for "everyone" (National Health Care for the Homeless Council, 2006). Therefore, it is up to all healthcare providers to engage in their community and to advocate for women who are homeless to have mammography screening by eliminating barriers that prevent access. Recommendations for advanced practice nurses working with this population could include (a) tangible patient advocacy (e.g. assistance with making appointments); (b) reliable referrals to obtain mammograms; (c) transportation to mammogram screening locations; (d) knowledge of availability regarding mobile units with the mammogram machine; (e) expedite the readings of mammograms within 48 hours; and (f) patient follow-up.

Nurse practitioners can take a leadership role in making a difference in the lives of women who are homeless. If we fail to take action, in making mammogram screening easily accessible who will help this vulnerable population?

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Table 1

Demographic Characteristics and Homeless History (N=41)

Characteristics	Frequency	Percentage
Age		
<30	10	25
<40	9	23
<50	13	36
60-80	7	16
Ethnicity		
African American-Black	6	15
American Indian-Alaskan	1	2.5
Asian-Pacific Islander	1	2.5
Hispanic-Latina	13	32.5
Caucasian-White	16	40
Other	3	7.5
Educational Level		
Less than High School	6	15
High School	1	2.5
Vocational School	1	2.5
Community College	13	32.5
College-University	16	40

Table 1 (continued)

Characteristics	Frequency	Percentage
Marital Status		
Single-never married	25	62.5
Married	6	15
Divorced-separated	9	22.5
Government Assistance		
Not Receiving	13	31.7
Food Stamps	17	41.5
Medicaid	12	29.3
SSI-SSDI	10	24.5
WIC	2	4.9
Number of Times Homeless		
1	18	46.2
2	3	7.7
3	9	23.1
4	5	12.8
5	2	5.1
6	1	2.6
13	1	2.6

Table 1 (continued)

Duration	Frequency	Percentage
Homeless > 12 consecutive months	12	29.3
Shelter in the Past 90 days		
Less than half the time	24	61.5
Over half the time	15	38.5
Financial Resources for a Yearly Mammogram		
Yes	18	43.9
No	23	56.1
Familiar with How to Get a Mammogram		
Yes	26	63.4
No	15	36.6

Note. Numbers do not sum to 41 due to missing data.

Table 2

Results of Perceived Susceptibility, Benefits, and Barriers to Mammograms for Women Who Are Homeless

Scale	*n*	Mean	SD
Susceptibility	41	2.6	.88
Benefits	41	3.8	.82
Barriers	41	2.1	.73

Note. Rating Scale: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree