

Increasing mammography screening among low-income African American women with limited access to health information

Nicholas L. Danigelis, Ph.D.^a, John K. Worden, Ph.D.^{b,c,d,*}, Brian S. Flynn, Sc.D.^{b,c,d},
Joan M. Skelly, M.S.^e, Pamela M. Vacek, Ph.D.^{c,e}

^aDepartment of Sociology, University of Vermont, Burlington, VT 50401, USA

^bOffice of Health Promotion Research, College of Medicine, University of Vermont, One South Prospect Street, Burlington, VT 50401, USA

^cVermont Cancer Center, College of Medicine, University of Vermont, Burlington, VT 50401, USA

^dDepartment of Family Practice, College of Medicine, University of Vermont, Burlington, VT 50401, USA

^eMedical Biostatistics Unit, College of Medicine, University of Vermont, Burlington, VT 50401, USA

Available online 19 November 2004

Abstract

Background. Previous research showed low-income African American women with limited access to breast screening information through mass media to have a low likelihood of obtaining screening. This report describes a controlled evaluation of a component of a community-based breast screening promotion program focused on increasing screening among low-income African American women.

Methods. A direct-contact screening promotion component tailored to the needs of low-income African American women was conducted between 1990 and 1997 in one of two matched Florida study areas. Before and after assessments of breast screening, behavior and psychosocial mediators of screening were examined using logistic regression analyses for 1201 women with differing levels of exposure to media information about breast screening.

Results. Recent/repeat mammography use increased significantly in the program area for women with limited access to media information, although there was no significant program impact on hypothesized psychosocial mediators of screening.

Conclusions. The program led to increased mammography use among low-income African Americans having limited access to screening information through the media. For these women, using direct contact to deliver educational messages and facilitation of access to services may be the best method available to promote regular mammography.

© 2004 Elsevier Inc. All rights reserved.

Keywords: Breast cancer; Screening; Mammography; Low-income populations; African American; Medically underserved area

Introduction

At least three out of four women in the United States receive mammography at regular intervals [1]. Nevertheless, women of color with limited financial means and limited education still lag behind those in the general population in obtaining screening at recommended intervals [2,3]. In the early 1990s, as many as one third of low-income African American women had not even heard of mammography, and

only 10% participated in regular screening [2]. Lack of exposure to breast screening information through television, radio, and newspapers was found to be associated with low mammography participation by low-income African American women [4].

This paper reports the impact of a component of a community-based breast screening promotion program conducted between 1990 and 1997 that was focused on increasing breast screening among low-income African American women. As reported earlier [5], the breast screening promotion program directed toward women in the overall community population had no significant impact on their screening behavior, mainly because it was overwhelmed by a strong temporal trend toward increased breast

* Corresponding author. Office of Health Promotion Research, University of Vermont, One South Prospect Street, Burlington, VT 50401. Fax: +1 802 656 8826.

E-mail address: John.Worden@uvm.edu (J.K. Worden).

screening. In order to determine the possible impact of program components designed specifically to reach women at increased risk of nonparticipation in screening in the low-income African American population, this paper will examine effects of the community program on women with and without exposure to breast screening information through the mass media.

Methods

Study design

This study was part of a community breast screening promotion project conducted in Florida during 1990–1997 [5]. Within the larger project, two demographically similar study areas were identified that had largely African American and low-income populations. One study area was comprised of two census tracts in Lee County that received breast screening promotion programs targeting these women. A second study area was comprised of two census tracts in a comparison area in St. Lucie County that did not receive the program.

Evaluation samples

In 1990, stratified random sampling of households was used to select a total of approximately 600 women for personal interviews from the four census tracts. Independent random samples of approximately 600 women from the same four census tracts were selected for personal interviews in 1997. These tracts were included because they contained large proportions of low-income and African American women; in 1990, less than half of the residents in these areas who were age 25 or older had completed high school and the average median household income was US\$17,000 [6]. Women age 40 or older who were permanent residents of Florida were interviewed to provide information about their participation in mammography screening, exposure to breast screening information through mass media, and related factors.

Intervention program

Both the program design and the evaluation for this study were structured using a model based on social learning and related theories [5,7]. This model suggested a set of program components and changes in psychosocial mediators that were expected to result in the hypothesized increase in screening participation. Among the mediators were predisposing factors including knowing mammography screening guidelines and perceived likelihood of getting cancer, and reinforcing factors including believing that one's screening behavior matters to one's family, perceiving that most women do get regular screening, and having heard of any community programs promoting screening.

Intervention development

Project investigators gathered information during the summer of 1991 from three age-homogeneous focus groups of African American women residing in the program area low-income census tracts to explore issues raised in analysis of the survey data [8]. Participants were chosen on the basis of two primary criteria: having limited education and having low income. Each focus group session was led by two African American women, a trained moderator working with an assistant who observed and tape recorded the session.

Pilot study of small group education

Based on data gathered from the focus groups [8,9], project investigators and community program staff designed a pilot breast screening promotion program to meet the needs of low-income African American women. It was suggested that the intervention be delivered through door-to-door personal contact and that women be invited personally to attend breast screening small group education (SGE) sessions held in a safe location. Recruitment teams included a program volunteer working with a locally known opinion leader who could assure women that the program was valuable and relevant to them. A total of 84 women in the low-income African American study area were recruited to attend SGE sessions offered in recreation rooms at housing projects, church fellowship rooms, other municipal settings, and occasionally in a woman's home. The SGE format was adapted from one used with the general population of women [10] to meet the needs and interests of women in the pilot program. In the 1-hour SGE, a program staff member or trained volunteer presented brief videotapes demonstrating screening by mammography, CBE, and BSE, with time allowed for women to practice BSE, review guidelines for breast screening, and confirm arrangements to obtain mammography and CBE screening. At the end of each session, appointments were made for mammography and clinical breast exam (CBE) screening at local public health facilities. Of the 84 women recruited in the pilot program, 90% completed both the SGE and the follow-up screening.

Direct contact intervention

Using a similar approach, the community program established a goal that it would provide direct contact invitations for breast screening education to 2400 women aged 40 and older and residing in 13 postal zip code areas that contained the lowest median household incomes in Lee County (ranging from US\$17,700 to US\$23,100) between January 1995 and November 1996. Two of these zip codes contained African American women who participated in the surveys for this study. The study employed two public education approaches: SGE sessions similar to those used in the pilot program, and one-on-one education.

The one-on-one approach was implemented by staff members and volunteers setting up public information tables

Download English Version:

<https://daneshyari.com/en/article/9206219>

Download Persian Version:

<https://daneshyari.com/article/9206219>

[Daneshyari.com](https://daneshyari.com)