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# Evaluating Women's Attitudes and Perceptions in Developing Mammography Promotion Messages

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## Synopsis .....

*Breast cancer is a leading cause of cancer deaths in women. Although mammography is recognized as the most effective early detection method for breast cancer, it remains underutilized. Communications theory and practice, with its emphasis on formative research, can provide a basis for developing strategies effective in changing mammography-related behaviors. Formative research, an important component of communications planning, can offer information useful in developing suitable messages and materials.*

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**B**REAST CANCER is a leading cause of cancer deaths in women, second only to lung cancer (1, 2). The high death rate for breast cancer could be reduced significantly through early detection and prompt treatment. Mammography is recognized as the most effective early detection method for breast cancer.

Although recent studies indicate that mammography use may be increasing (3), it remains underused, particularly in some segments of the population (4, 5, 6). Researchers estimate that breast cancer deaths could be reduced 30 percent if national guidelines for mammography with clinical breast examination were followed by all women (7).

Communications theory has been successfully applied to health promotion and disease prevention programs (8-14) and provides a strong basis for developing strategies that can be effective in changing mammography related behaviors. Communications theory is based on concepts and practices designed to increase the effectiveness of messages delivered to specific audiences for the purpose of changing attitudes, knowledge, or behaviors (8, 9, 12).

*The National Cancer Institute conducted small group discussions with white and black women, ages 40 to 75, to explore their attitudes, knowledge, and beliefs about mammography. Findings reinforced the results from quantitative surveys indicating that a perceived lack of their own need for the examination, lack of a physician referral, and procrastination were the main reasons that the women reported for not having mammograms. The discussions provided detailed information about the factors that can be used to guide development of messages and materials to promote mammography use.*

*The results indicate that strategies for messages directed to either black or white women ages 40 years and older need to stress the same key message points. The points are that all women ages 40 and older are at risk for breast cancer; breast cancer can be treated successfully if it is detected early enough; mammography can detect breast cancer before a lump can be felt by a woman or her physician; women need to follow screening guidelines for age and frequency for screening; and mammography is a low-risk, quick, and painless procedure. Communication channels to reach women should include television, newspapers, magazines, and information available in physicians' offices.*

The effectiveness of specific messages in influencing attitudes, knowledge, and behavior is influenced not only by the message content, but also by such factors as channel of delivery, setting, source, format, and tone (12). Formative research is a critical component in communications planning used to guide development of messages and message strategies (8, 9, 12). Formative research can provide indepth analysis of the target audience's needs and perceptions about a given topic, or about the barriers and motivations influencing their behaviors (8, 9, 12, 15). Formative research findings are necessary in order to move from hypotheses derived from theory to concrete messages, message strategies, and complete communications programs (9).

The National Cancer Institute (NCI) is planning a campaign directed toward women ages 40 and older to increase their use of mammography for breast cancer detection. To assist in designing the program, NCI conducted a study in 1989 using a series of interviews in focus groups to assess the attitudes, knowledge, and beliefs of women regarding mammography.

Focus groups are a form of qualitative research used

Characteristics of Philadelphia, PA, and Kansas City, KS, focus groups

Group	Number of persons	Ever had mammogram	Race	Age category
<b>Philadelphia:</b>				
1 . . . . .	10	8	Black	40–49
2 . . . . .	10	8	White	50–62
3 . . . . .	10	8	Black	50–62
4 . . . . .	10	10	White	63–75
5 . . . . .	10	9	Black	63–75
<b>Kansas City:</b>				
6 . . . . .	11	2	White	63–75
7 . . . . .	11	0	White	50–62
8 . . . . .	11	0	White	40–49

to obtain information about the feelings and opinions of small groups of participants about a specific issue or topic (15). Groups usually are 8 to 10 participants, are conducted by trained moderators, and follow a set discussion guide. The limitations of focus groups must be noted when interpreting findings. Results obtained from focus groups are not generalizable to a larger population because sample sizes are too small and participants are not a random sample representative of the target population. Findings should be interpreted as suggestive and directional rather than as definitive.

We present the findings of the NCI mammography discussion groups to demonstrate how formative research can be used to advance message selection and design and to provide guidance to those who may be developing education initiatives to increase the use of mammography by women.

**Methods**

Eight focus groups, each with 10 or 11 participants, were held in June 1989. The number and composition of the groups were set so that inferences could be drawn about differences in response due to age, race, and mammography history, with at least two groups established to reflect each of the variables. The locations were selected to represent urban and suburban settings.

Participants were white and black women ages 40 to 75, with household incomes ranging from \$5,000 to \$60,000. Groups were divided by race, age, and history of having had a mammogram (see table). Five groups were held in Philadelphia, PA, and most of the participants had had at least one mammogram. Three groups were held in Kansas City, KS, and most of the women in those groups had never had a mammogram.

Respondents were excluded from a group if they had a personal or family history of cancer, had ever been told they might have breast cancer, had participated in a focus group in the past 12 months, or were employed in

health, marketing, or advertising. Respondents were screened for level of education so that the number of college-educated participants could be limited to no more than two in each group.

All eight groups were led by an experienced moderator and held in professional focus group facilities during late afternoon and evening hours. Each group lasted 2 hours, and respondents received \$30 to \$35 for their participation.

**Findings**

Survey data indicate that the main reasons reported by women for not having mammograms are a lack of perceived need, lack of a physician referral, and personal procrastination (16, 17). This article is organized to address the barriers to screening as well as to highlight potential means of facilitating mammographic screening and devising appropriate information channels. No major differences in knowledge or attitudes resulting from age or race were found among participants. Sample quotes from participants illustrate some of the findings.

**Personal risk.** The focus groups revealed some of the reasoning behind perceived lack of need, which women give in quantitative studies as one of the most common barriers to seeking mammographic screening. Focus group participants did not see themselves as personally at risk for breast cancer if they did not have either symptoms or a family history of the disease. They saw breast cancer as something that happens to other women. They did not understand that age, without symptoms or a family history, is a risk factor for breast cancer. Age was not identified as a risk factor for breast cancer in any group, even when the subject was probed by the moderator. Participants comments included:

“I never think about getting one . . . I mean I’m not opposed to it, I just never think about it.”

“Both my grandparents lived to a ripe old age; my mother is 70; I have five sisters who have no problems; my daughter has no problems . . . it’s like . . . we don’t have a problem in our family.”

“People think it’s not going to happen to them. It happens to everybody else but it won’t affect me. I think a lot of people have that attitude.”

**Preventive orientation.** Research shows that women see a physician five times a year, on average (18), but the purpose of these visits may be related to health problems, not prevention or early detection. Focus group responses pointed to the need for communication strategies that underscore the importance of preventive care. Many participants, particularly those who had not

had mammograms, said they would rely on signs and symptoms, such as a lump, to alert them to the presence of breast cancer. Some participants, particularly in the 50- to 62- and 63- to 75-year age groups, said they do not go to the doctor unless there was an identifiable problem. Their attitude was expressed by comments such as:

“Never trouble trouble ’til trouble troubles you.”

“If it ain’t broke, don’t fix it. Why spend the money?”

“No other reason than I don’t go to the doctor, unless I’m ill. I agree with preventive medicine, I really do, it’s just not for me.”

**Fear.** One explanation for women’s citing procrastination as a reason for not having mammograms may be a fear of finding out they have breast cancer. Despite the participants’ agreement that mammography could make a difference, most participants did not acknowledge that a woman has more treatment options and a greater chance of survival if breast cancer is detected early through mammography. Participants primarily associated breast cancer with mastectomy and death, and fear of the results and fear of the unknown were cited as reasons for not having a mammogram.

Fear of the test (pain or discomfort) was not an issue. Most women who had experienced mammography described the examination as a painless, routine procedure; although some had experienced discomfort, pain was not a barrier for them. Although fear about radiation and the cumulative effects of radiation from X-rays was not a major barrier, it was an underlying concern, particularly for black and older age groups. Comments included:

“You just don’t know what they’re going to find.”

“Fear of the results—not the test itself.”

“I worry about too many X-rays . . . because I’ve had a lot . . . and I’m concerned about having too much radiation.”

“I’m scared of the results. It’s a fear on the back burner whether we want to admit it or not.”

**Putting it off.** Time, expense, and inconvenience were reasons expressed by some white participants in the 40- to 49- and 50- to 62-year age groups. Some illustrative quotes are:

“If I don’t have any symptoms, why pay the money?”

“I think it’s just taking the time to schedule it . . . you have to make an appointment, go to the hospital. It’s just a matter of doing it. It’s not cheap either.”

**Physician’s influence.** Physicians play a major role in determining whether women have mammograms. Some

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studies have estimated that more than 80 percent of women would get a mammogram if referred by their physician (16, 19). The focus group responses supported this view and revealed that many women are getting mammograms on physicians’ recommendations alone, without explanations of the need for or purpose of the test. The majority of women who had not had a mammogram had not been told by a physician to do so. Most participants who had had mammograms said they did so because of their physician’s instructions. In cases in which physicians had recommended mammography, most women said their physician provided little or no information as to the reasons for the examination, or the recommended frequency of examinations. Most women were simply told to schedule one. Even when the woman was unclear about the purpose of the test or when the physician gave little background information, the physician’s advice was usually sufficient for them to do so.

Almost all participants were uncomfortable in bringing up the subject of mammography with their physician if the physician didn’t mention it first. Their attitudes were that the physician knew best. One woman commented:

“If a doctor told me to get one, I probably would. But until somebody tells me, I’m not going to call one up and say I want one.”

**Screening guidelines.** Participants were uncertain about the recommended age to begin getting mammograms and about the recommended frequency. Most women said they would defer to their physician’s judgment. When probed, participants suggested an age range to begin mammography from the early 20s to the early 50s, with most agreement centering around the mid-40s. Most suggested that once each year to 2 years seemed appropriate.

The number of participants who knew where to go to get a mammogram was high for all groups, with women reporting hospitals, laboratories, clinics, women’s centers, and mobile units as possible sources.

**Influences.** The majority of participants reported that physicians would be the persons most likely to influ-

ence them to have mammograms. Husbands and friends also were mentioned.

None of the participants wanted a friend or family member to accompany them to get a mammogram, although some said they had accompanied others. All participants reacted negatively to a message similar to that used by the National High Blood Pressure Education Program, "Do it for the loved ones in your life," saying that mammography is something a woman would do for herself.

**Sources of health information.** Most women who had had a mammogram learned about mammography from their physicians, but, as discussed, often the information provided was limited. Newspapers, magazines, and friends were cited as sources of information. Participants said they would look to their physicians, friends, newspapers, and magazines, as well as to the American Cancer Society and women's organizations, senior centers, and medical centers if seeking information on mammography.

Participants agreed that mammography was an appropriate topic for media coverage and thought that advertisements could be useful in motivating some women. Some comments included:

"I'd rather see an ad for a mammogram than Summer's Eve."

"Now-a-days on TV anything goes. I mean, you see ads for AIDS, why not mammograms?"

**Spokespersons.** Women in most groups reacted positively to the use of a noncelebrity, female breast cancer patient in TV or radio advertisements. Several participants thought the use of a physician would be convincing, with opinion divided as to whether a male or female physician would be most credible. If celebrities are used, most participants preferred what they termed serious people over glitzy people, and women over men.

## Recommendations

The focus groups yielded results in line with national surveys on mammography knowledge, attitudes, and behaviors. As a supplement to quantitative studies, the focus groups provided insights into women's attitudes regarding breast cancer, mammography, the health care system, and channels for health information. Insights provided in the groups can guide the development of communication strategies appropriate for the intended audiences.

In addition to providing information on message development and distribution, the focus group findings reinforced the critical role played by physicians in

determining mammography referral. The findings point to the need for programs directed to physicians with the objective of influencing them to recommend regular mammography more often when appropriate and to explain the need and the procedure.

The following recommendations for developing communications programs for women are based on an assessment of national surveys (3, 16, 17, 19), in conjunction with the focus group findings. Strategies for messages intended to encourage women to obtain mammograms need to reflect that

- Key message points are the same for both white and black women aged 40 and older.
- All women aged 40 and older, including healthy, active women without a family history of breast cancer or visible symptoms, are at risk for breast cancer.
- Breast cancer can be treated successfully, sometimes without the need for mastectomy, if it is detected early enough.
- Mammography can detect breast cancer before a lump can be felt by a woman or her physician.
- Screening guidelines, which provide recommendations for the age to begin mammography and the frequency of screening, need to be followed by all women.
- Mammography is a low-risk, quick, and painless procedure.

The focus groups showed that women look to multiple sources of information on mammography. The results showed that communication channels to reach women include not only television, newspapers, and magazines, but also information made available in physicians' offices. These channels effectively disseminate educational materials to supplement physician referral recommendations.

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## Using National News Events to Stimulate Local Awareness of Public Policy Issues

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### Synopsis .....

*Community leaders in Atlanta, GA, the Detroit and Lansing, MI, areas, and San Francisco, CA, participated in a demonstration of techniques to disseminate*

*information and increase public awareness of the recommendations from the Surgeon General's Workshop on Drunk Driving, held in December 1988. Local officials worked with the Public Health Service's Office for Substance Abuse Prevention, of the Alcohol, Drug Abuse, and Mental Health Administration, to educate and inform the public about the workshop recommendations as well as other alcohol-related concerns, and to encourage public involvement in their communities with the issue of alcohol-impaired driving and other alcohol-related concerns.*

*With minimal assistance from Federal agencies and Washington-based health and public interest groups, the communities developed unique approaches to generating local television, radio, and newspaper coverage of an event that had originated as national news.*

*The events demonstrated that, with minimal Federal resources and support, local groups can create media attention in conjunction with national news, and local media events can lead to successful community activism. The techniques can be applied by other community groups to gain sufficient news media attention to encourage the public to organize around issues of common concern.*

**W**HEN high-level public figures or organizations announce an action or decision, information usually is communicated to the public in a highly centralized, from-the-top-down approach.

Typically, the press office of an agency arranges national press coverage through press releases, press conferences, and direct communication with national reporters. Individual communities usually receive the