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Developing Breast Health Messages for Women in Rural Populations

In an effort at developing messages that are sensitive to societal determinants and expectations about probreast health behaviors for an underserved population, a qualitative approach was driven by the research question, "What message strategies will motivate Appalachian women to attend to breast health issues and become actively involved in their own breast health?" Based on group interviews with 77 women, two types of messages were found to be particularly motivating: messages that reflect the women's roles as care givers and the self-perceived reality that the women in this population cannot depend on anyone but themselves.

As a health communicator, there are many possible things to say about breast cancer, but it can be hard to know what specifically to say that will get attention of a particular population and motivate positive participation in breast heath activities. Being a high-profile disease brings important awareness, but people may be so aware of breast cancer that they feel adequately knowledgeable about it and stop paying attention to important information. Making matters more complicated, breast health information may be interpreted differently based on gender, economic class, geography or other cultural factors. Certain populations such as rural women may not have the same access to breast health information as others. Also, research has suggested that societal factors may oppress women in rural, at-risk populations and compromise self-efficacy, as their health may be perceived to be a function of their environments and not of volitional, prohealth behaviors. Given this complicated communications environment, research into breast health message strategy seems warranted.

In the advertising literature, message strategy refers to "what to say," whereas "creative tactic and execution" refer to "how it is said." More generally, message strategy is defined as a guiding approach to an

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institution's promotional communication efforts for its products, services or itself (Taylor 1999). Although this definition speaks of products or services, message strategy is also a relevant concern for health promotion. It has long been asserted in advertising that different messages are needed for different buying situations (Kotler 1965; Taylor 1999; Vaughn 1980). Some buying decisions (behaviors) are more motivated by "rational" concerns such as price and efficiency. Others may be more motivated by "emotional" concerns such as self-esteem and fear. Still others may be a combination of the two. Each of these situations calls for a different message strategy to attract the intended receiver's attention and ultimately motivate that receiver to perform the action desired by the communicator. The same concept is true for health promotion messages such as those regarding breast health behaviors. Depending on the population, breast health behaviors may be motivated by rational and/or emotional concerns and these motivations must be addressed through the health messages.

Regardless of how they are communicated (via PSA/advertising, brochures, video, Web sites or person-to-person), breast health promotional messages must break through the clutter of all messages in the market. Then, the messages must motivate the receiver to engage in the advocated behavior (self-examinations, diet, weight control, doctor visits, etc.). This article uses the concept of message strategy from the advertising literature to inform message design on breast health aimed at a specific underserved and at-risk population, rural Appalachian women. The research attempts to identify "what to say" in public health campaign message strategy to empower these women to be active in their own breast health.

THEORETICAL PERSPECTIVES IN HEALTH COMMUNICATION

Although this study adopts an inductive approach, several theories of health communication commonly used to inform message design in prohealth campaigns may offer potential frameworks for exploring the results and complement the advertising literature on message strategy. Sharing the assumption that threat motivates preventive action, protection motivation theory (Rogers 1975) and the health belief model (Janz and Becker 1984; Rosenstock 1974) argue that perceived vulnerability, self-efficacy and the balance of perceived risks and benefits moderate performance of health behaviors (Rimal and Adkins 2003; Wolburg 2009). These frameworks utilize a basic expectancy-value mechanism in that health messages may influence beliefs on the likely outcome

of performing a behavior; subsequent attitudes and behaviors are based on the individual evaluation of that outcome (Salmon and Atkin 2003).

One criticism of the aforementioned orientations is that they fail to fully consider social and environmental factors and the influence those factors exert on health attitudes and behaviors (Murray-Johnson and Witte 2003). Given the specific and disparate population that is the focus of this research, women in rural Appalachia, the social construction perspective (Berger and Luckmann 1966), which explores the dialectic between lived experience and social reality (Sharf and Vanderford 2003), may provide a useful framework through which to explore the study's findings. The constitutive model of communication enables us to explore difficulties in navigating between scientific "truth" and the experiences and suffering that patients, their families and health care providers endure. In health communication scholarship, the social construction approach countered and somewhat replaced the biomedical approach that had long been dominant, taking into account the lived experience of those living with illness or disease (Sharf and Vanderford 2003).

RURAL WOMEN AND BREAST HEALTH

Some populations, particularly low-income, minority and rural populations, bear a disproportionate burden from cancer death (Bland, Kuske, and Sledge 2002; Husaini et al. 2001; Viswanath et al. 2006; Wells 1992). Women living in rural areas may be at higher risk due to less access to quality health care, lower socioeconomic status and other physical and social barriers to their health management. Factors that seem to have a positive influence on breast-health behaviors include perceived benefits of breast self-examinations (BSEs), understanding that mammography is a cancer screening tool, living in an area with easy access to mammography facilities, participating in the decision about screening, access to regular health care, health motivation, feelings of susceptibility to the disease, talking with friends, strong social networks and social support, self-efficacy, higher income and education, marital status (married women reported more positive behaviors than single women), smaller families, being Caucasian rather than a member of a racial minority and increased age (Cockburn et al. 1997; Gray 1990; Grindle et al. 2004; Hurdle 2001; Husaini et al. 2001; Phillips et al. 1998; Rahman, Mohamde, and Dignan 2003; Savage and Clarke 2001; Valdez et al. 2001; Wells 1992). Taken together, these factors suggest that women living in rural areas may be at higher risk.

Given their increased risk, women in rural Appalachia represent a population in need of carefully crafted messages about breast health and are the primary focus of this study. The Appalachian population has been found to have inadequate knowledge about cancer and the importance of screening tests (Walker, Lucas, and Crespo 1994). Patients in this region may regard illness fatalistically and use religious faith to emotionally sustain themselves (Rosswurm 1996).

Appalachia, a region federally defined by the Appalachian Regional Act of 1965, contains 399 counties in portions of 13 US states. Appalachia has a history of economic instability most commonly associated with outsider exploitation of its resources (Appalachian Landownership Task Force 1983). Although Appalachia is an underserved and understudied area, some studies have examined cancer education in this area. Sortet and Banks (1997) examined the relationship between health beliefs of rural Appalachian women and the practice of BSE. Women who reported more confidence in doing BSE and perceived more benefits from doing BSE were more likely to conduct them regularly (Sortet and Banks 1997). Amonkarr and Madhavan (2002) found that Appalachian women most likely to be in compliance with cancer screening recommendations are those who have health insurance, reside in urban areas, have better health (as self-reported) and are more educated. The health beliefs of Appalachians are often different from those of mainstream Americans. Health professionals may not be aware of or understand these belief differences given that health professionals values are shaped by the academic culture of their profession rather than beliefs specific to a region (Hansen and Resik 1990). This difference in value systems can lead to misunderstandings, stereotyping and even indifference (Sortet and Banks 1997), and a basic mistrust of the health care system among many Appalachian residents often leads to delay in seeking health care (Small 1991).

Incorporating culture into health information may significantly enhance adherence to the prohealth messages advanced therein, a contention widely accepted both by practitioners and health communication researchers (Kreuter and Haughton 2006; Kreuter et al. 2004). Health intervention researchers often adopt two strategies for tapping into the underlying assumptions and traits of a culture: "constituent-involving" and "sociocultural" (Kreuter et al. 2003). According to Kreuter and Haughton (2006), constituent-involving approaches draw on the experience of group members indigenous to the culture who can help provide insight into values, norms and meanings that are not always observable to an outsider.

STUDY APPROACH

Given that incorporating culture into health information may significantly enhance adherence to the prohealth messages, this study aims to understand rural working women, their knowledge of the rural health system, their perceptions of breast health and how breast health issues fit the broad scope of their lives. The study enables women's own words to be used to craft motivating health messages. Thus, this study follows the constituent-involving approach identified by Kreuter and Haughton (2006). Specifically, the study addresses the following research question: "What message strategies will motivate Appalachian women to attend to breast health issues and become actively involved in their own breast health?"

Population Under Investigation

A key aim of this study is to identify regionally and culturally specific factors that influence how Appalachian women approach breast health and to identify ways that more positive breast health behaviors can be achieved. Women in rural Tennessee were selected as the population of interest for this study. These women are an important group to study because Tennessee ranks fifth highest among the fifty states and Washington, DC, in breast cancer mortality, with a mortality rate for breast cancer deaths per 100,000 persons of 27.7 compared with 25.02 nationally (Bland, Kuske, and Sledge 2002).

Most study participants work in industrial jobs in the Appalachian region of Tennessee. According to recent the census, 24–41% of East Tennessee residents work in industrial jobs (manufacturing of durable and nondurable goods), and approximately half of the labor force is female. According to the Department of Labor and Workforce Development, the median salary for production occupations in this area is US$10.99 per hour or $21,100 gross annual income for full-time workers. Low-wage workers such as these are medically underserved because of concern about expense, lack of insurance (many of these women are "part-time" employees), difficulty accessing clinical services and poor education.

Participants in this study were drawn from two groups within the population, those who had voluntarily participated in a local breast health outreach program (BHOP), thereby indicating some interest in breast health issues, and those who had not. A brief description of the outreach program follows.

The Breast Health Outreach Program

The BHOP began in 1996, taking one-hour educational classes and a mobile mammography unit to Appalachian East Tennessee. It is a grant-funded educational program operated out of a major research hospital in the region. Educational classes are designed to provide comprehensive information on the importance of early detection and diagnosis of breast cancer, ways to reduce controllable risks and instructions on how to do BSE. Women aged 40 and older are offered free clinical breast examinations by volunteer professional health care providers and reduced-cost screening mammography via a mobile unit.

Since its inception, BHOP has educated more than 10,000 rural Appalachian women and screened a similar number of women on the mobile unit. BHOP has established a relationship with more than fifty industries throughout remote and rural counties to provide breast health education and screening mammography.

The Research Perspective and Method

Because the study seeks depth of understanding of an underserved population, a qualitative perspective was identified as the best approach. This study not only utilized qualitative methodology but also approached the research phenomenon from a qualitative paradigmatic perspective. The basic assumptions of a qualitative paradigmatic perspective drive the methodology and evaluative standards of the study. Ontologically, the qualitative paradigm assumes that realities are multiple and socially constructed. People are active meaning makers, and the realities of any phenomenon are created by those who live the experience—such as breast health (Guba 1990). As such, the research method should allow participants to freely express their "realities" of breast health. For this study, the qualitative method of focus groups was employed.

The focus group interview is an appropriate method to this study for several reasons. First, focus groups have been successfully used in previous studies to learn more about attitudes and beliefs related to cancer (Lee 2000; Rees, Bath, and Lloyd-Williams 1998; Ryan and Skinner 1999). Second, focus groups have also been identified as an appropriate methodology to use for the conceptualization and design stage of the interactive health communication application development cycle (Eng et al. 1999). Focus group interviews are a culturally appropriate method for learning about the beliefs and health behaviors of those who are not part of the mainstream culture. A study that compared focus

groups with survey research found that the focus groups were better suited to reproduce community attitudes and patterns of practice and to explain the reasons behind survey findings (Saint-Termain, Bassford, and Montano 1993). Focus groups allow participants to set their own agenda for discussion and are user centered, thus aligning with the ontological paradigmatic assumption identified above (Rees, Bath, and Lloyd-Williams 1998).

Participant Recruitment

Participants were recruited from locations at which BHOP had conducted training sessions in the recent past. Women who had and had not attended a BHOP session were recruited. The close relationship between BHOP and the organizations it serves was reflected in this high level of willingness to participate in the focus groups.

Data collection proceeded in two stages. Stage 1, comprising five focus groups, was designed to understand the cultural issues that may affect message strategy. Among these five groups, three consisted of women who had attended BHOP education sessions and two among those who had not attended a session—even though it was available at their workplace. In total, forty-two women participated in these focus groups (twenty-seven who had attended a BHOP program and fifteen who had not). Focus group participants ranged in age from 31 to 74. Location was a factor that brought women of similar age groups together. For example, one session was held in a location that attracted primarily retired women, whereas another was in an industry that had a high number of younger female employees.

Stage 2 focused on evaluation of message strategies. The strategies explored were developed based on the information acquired from women who had participated in the first round of focus groups. Three new groups of women who had not participated in the first stage of research were recruited following similar procedures as in Stage 1. Due to time and space constraints at the host locations, these groups were mixed with regard to past BHOP session attendance. In total, thirty-five women participated in Stage 2 focus groups (nineteen who had attended a BHOP program and sixteen who had not). Two groups were recruited from a public housing project in a small rural town and one group from an autoparts manufacturing plant. Participants ranged in age from 26 to 73.

All participants received a US$20 incentive for being part of the group. Participants were given a clear statement of the research purpose, and

they provided their informed consent to take part in the focus group and to have the entire session tape recorded.

Analysis Procedure

In Stage 1, two researchers conducted focus groups using a semi-structured guide to ensure that both facilitators explored similar topics. Key topics were personal history and the health care environment, personal behaviors related to breast health, personal responses to breast health issues such as risks and reinforcements, attitudes and responses toward breast health education programs and support systems. In addition to leading discussions, facilitators collected some written responses from participants. These included personal responses to word associations, drawings that allowed participants to express their feelings and demographic data.

Stage 2 interviews focused on responses of women to a series of possible motivational statements (e.g., message strategies). These statements were generated from ideas that emerged in Stage 1 focus groups of rural east Tennessee women concerning breast health issues. All statements related to motivating women to become more involved in breast health issues. Specifically, women were asked to rank order and discuss the following statements as motivational answers to the question, "I should become more involved in breast health issues (learning about breast health, conducting self-examinations, getting a yearly mammogram, seeing my doctor, etc.) because. . .

Early detection is cost-effective.
I owe it to myself.
It is what an empowered woman should do.
If I don't take care of myself, no one else will.
I've got too much life to live; breast cancer won't stop me.
One in eight women will get breast cancer; it can happen to me.
Knowing is better than fearing.
I need to be around for those I love.
Every year my risk increases.

Message strategy statements were used instead of finished executions because the researchers did not want potential evaluations of the message channel (such as not liking advertising or brochures) or executional elements (color, model depicted, layout, etc.) to interfere with the focus on the main motivating message. Women were also given the option of

creating their own answer if none of the answers provided summed up their unique feelings.

Following each focus group, the full session was transcribed. Researchers reviewed each transcription before conducting additional focus groups. Researchers also examined written material and drawings made by focus group participants. Before conducting the next focus group, the semi-structured guide was slightly modified as needed to probe for additional insights into rural Appalachian women and their attitudes and responses toward breast health issues.

All data were analyzed by a process of analytic induction. Analytic induction consists of scanning the transcriptions and other materials for themes and categories, developing a working schema from examination of initial cases and then modifying and refining it on the basis of subsequent cases (Haley 1996). Negative instances that do not fit the initial constructs are sought to expand, adapt or restrict the original construction. The emphasis is on category construction rather than enumeration. As such, results of the study focus on description of the themes and variations within the emergent categories instead of documentation of the number of instances of each idea, as might be the case in a content analysis. Because the purpose of a paradigmatically qualitative study is to bring forth the various realities of participants, the role of theory is to enlighten the emergent findings of the study rather than provide an a priori theoretical explanation through which to frame the analysis.

To determine how many interviews were enough, the redundancy criterion was applied (Taylor 1994). That is, the number of interviews conducted was expanded until clear patterns in participants' constructions of the Appalachian breast health experience had emerged and been confirmed. By the end of the fifth focus group, significant redundancy in responses was noted, thus indicating that no additional focus groups were needed (Morrison et al. 2002).

Finally, in reporting the findings, passages of respondents' words and descriptions are used. Such low-inference descriptors constitute the principal evidence for assessing the validity of the report and give the reader a basis for accepting, rejecting or modifying an investigator's conclusions (Goetz and LeCompt 1984).

FINDINGS

Women in this study said two primary messages appealed to them more than the others. These were, "I need to be around for those I love" and "If

I don't take care of myself, no one else will." Below are comments from women in the study that explain how they made sense of these two ideas.

"I Need to Be Around for Those I Love": Perceived Social Role as Caretaker

In explaining why the message "I need to be around for those I love" would motivate them to be more active in their own breast health, women stated repeatedly that their role was to take care of others. In discussing this message, women contrasted the "be around for those I love" message to the "I owe it to myself" or "I have too much to live for" strategies. The later strategies were cited as selfish and not reflective of the women's self-perceived social role as caretaker. The following quotes from the interviews explain:

> I don't owe anything to myself. I got to take care of everybody else first. Women don't react to those types of statements [owe to myself] because that means we're not taking care of other people, we're more interested in ourselves.

> We know that being interested in ourselves is not an option. We're not a priority. Other people are. That one like "I've got too much to live for," that's too selfish, you know, too focused on me.

> Women are the caretakers. They always have been. At least that's the way I've always thought of it. It's our role.

> We have to get everybody else out of trouble.

The above comments reflect these women's feelings that their primary role in life is that of caretaker. Whether they believe it is their natural role, these women strongly felt that they did not have time to be self-interested; rather, their focus had to be on others.

"If I Don't Take Care of Myself, No One Else Will": Self-Reliance

Women in the study differentiated between being self-interested and self-reliant. That is, the women responded negatively to message strategies that were perceived as self-interested as discussed above, but the women clearly acknowledged that to perform their caretaker roles, they must be self-reliant. The comments below sum up the realization best:

> If she does not take care of herself then she can continue to take care of others, but we've had to grow to get to that point.

> I mean we're care givers and take care of everybody else, but if we don't do everything to take care of ourselves, there's going to be nobody around to take care of these other people.

Women in another life context also responded well to the "If I don't take care of myself, no one else will" message. These were women whose children were now grown and living their own lives. These particular women seem to feel forgotten and resigned to the fact that they feel those they care for are not around for them now. The following passage illustrates this idea well:

> It's where I'm at. My children are grown and nobody knows what I even do anymore. Whether I go to the doctor or anything else. So it's pretty much up to me to take care of myself if it's going to get done.

The statement "knowing is better than fearing" was also cited as a strong motivator by women in the study and is another example of self-reliance. Women who responded to this statement explained that they felt they could face anything as long as they know what it is they are facing. The difficult part is worrying about what could be wrong. They felt this worry about the unknown was very upsetting and unproductive. The following passages illustrate:

> If there is something wrong I want to know it. I don't have time to be sick.

> You're not afraid of what you know. It's like being afraid of the dark. I'm not afraid of the dark, I'm afraid of what's in the dark. So as long as you know what's going on you're nowhere near as stressed.

> It's easier to face 'cause you know how to prepare.

> Knowing is better—it catches my attention and makes me look.

Fact and Empowerment Messages

Few women in this study were primarily motivated by facts. Those who found facts to be motivating had science backgrounds (e.g., nursing) or were older and more highly educated than peers. They found the facts particularly relevant and also had the "If I don't take care of myself, no one else will" and "I need to be around for those I love" statements as a strong secondary motivations. The stronger sentiment about factual messages was best expressed as follows:

> I need to know the facts, but they aren't going to get me to pay attention. There are so many facts about health stuff out there it's hard to know what to pay attention to, especially since they seem to change all the time. But I guess at some point

> you got to know the facts, it's just these other ideas would be my attention first. They're different and they seem to know where I'm coming from, what my life is like.

Of the factually based messages options discussed, one did seem to stand out above the others, "One in eight women will get breast cancer; it can happen to me." The following comment summarizes the women's feelings:

> One in eight will get it, it can happen to me—that does get my attention. I mean you look around this room, there are 12 of us here, that means at least one of us is going to get it. That gets my attention.

The women felt this factual statement worked to get their attention because it placed the fact in terms they could easily understand and relate to. Of the other factually based messages the "cost-efficiency" message was not at all motivating. Women explained that this message was more important for insurance companies.

Some women responded negatively to statements of "empowerment." Those women felt that the message meant women were trying to be men or do things that women should not do. For example,

> No matter what the laws say that we want to go to work or be whatever we want to be, the laws of nature are such than women are nesters and men are out to conquer the world. I think that's just how it is. That's why we (women) get in trouble sometimes, 'cause we cross those lines. And get ourselves in trouble.

Those who responded negatively to the empowerment wording used terms such as "too selfish" and "sounds like Jane Fonda" to express their distaste for the message. However, when other women explained to the objecting women that taking control over their own health was an empowering thing, the objections largely went away. The implication is, though, that motivational messages to this audience should avoid "empowerment" language.

IMPLICATIONS

Messages That Motivate

The findings from this study offer breast health educators and medical practitioners a richer understanding of how to motivate rural Appalachian women to pay attention to their own breast health. Whether speaking one-on-one or through educational materials, certain messages seem to resonate with these rural women. Specifically, social messages that acknowledged the woman's role as the "glue" or "caretaker" in the household seemed to resonate well with the women in this study.

Messages such as "I need to be around for those I love" were used by women to explain why they should take care of themselves and thus pay attention to breast health issues. But the flip side to the "woman as glue or caretaker" role is the recognition that no one is there to take care of her. So the ultimate responsibility for the household comes down to her. If she does not take care of herself, then those she loves could suffer. Messages in this vein can be affirming to women by acknowledging their importance to others.

The fact that these women responded well to "caring for others" messages is supported by previous academic work. A meta-analysis of the social-psychology literature found that females appear to engage in helping behavior that is more nurturing and caring overall, whereas men are more likely to express their helping behavior more individualistically (Eagly and Crowley 1986). Thus, a message that reflects a woman's nurturing behavior would be relevant and appealing to the women in this study. Although theories such as protection motivation (Rogers 1975) and the health belief model (Janz and Becker 1984; Rosenstock 1974) successfully use vulnerability, self-efficacy and perceived harm/benefit variables to explain health behaviors, these women also very motivated to perform probreast health behaviors by messages that appealed to their responsibility to *others*, not personal considerations.

Rational messages seemed to work better than those that induced fear or worry. Specifically, the women in the study felt that fear or worry was uncomfortable and counter-productive. To alleviate worry, many of the women wanted to know their health status. These women felt they could face anything, even death, as long as they knew what they were facing. Messages that acknowledge a woman's strength to face tough situations would likely be well received. Also, such messages could focus on reducing unnecessary worry by finding out one's health status.

Yet, although these women clearly voice strength—the strength to take care of others and to face known consequences—they responded negatively to messages about the empowerment of women. The term empowerment seemed to evoke images of feminism, which these particular rural Southern women did not appreciate. Such strong reactions to the empowerment idea would likely lead to women rejecting the important breast health message and should be avoided for this population.

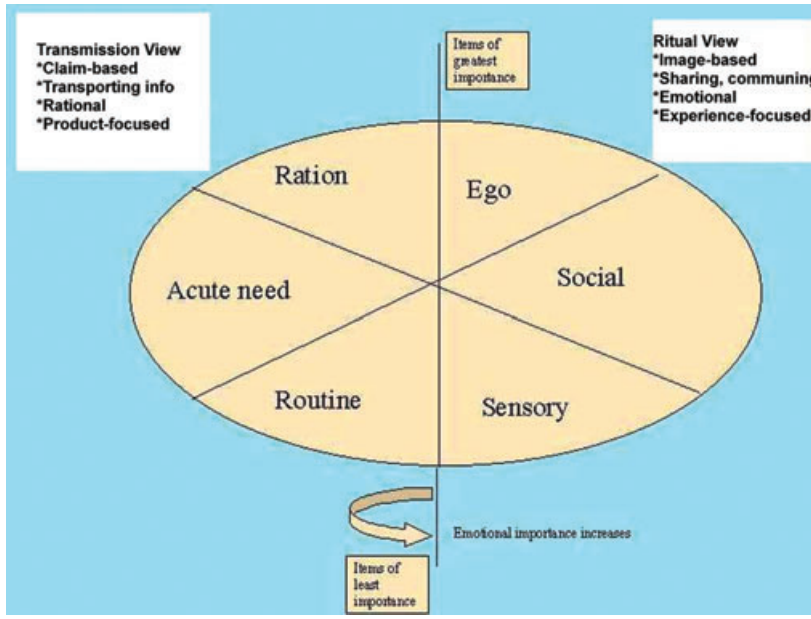
Facts and figures, although important and motivating to health educators and practitioners, should not be used as the primary message when directing breast health promotion toward Appalachian women. To these women, the primary motivators for breast health are human relationships and the woman's role in them. However, facts and figures can be used

as supporting information to lend credence to the effectiveness of breast health behaviors. The women in the study did notice the facts and figures presented in the breast health materials they were asked to evaluate during the focus groups. But the women said clearly that facts and figures would not get them to pick up a brochure about breast health. Although fact-based messages were not as effective overall, the most powerful factual statement was "one in eight women will get breast cancer; it can happen to me." This indicates the importance of perceived vulnerability to risk for some of these women, a key moderator of health behaviors in the health belief model and protection motivation theory. Also, the importance of messages that address these women's self-perceived reality that they cannot depend on anyone but themselves underscores the importance of the self-efficacy variable in health communication theories such as health belief model and protection motivation theory.

Using the Strategy Wheel to Understand Breast Health Messages

The findings in this study can also be described using the Taylor (1999) six-segment strategy wheel model (Figure 1). That model conceptualized

FIGURE 1
Six-Segment Strategy Wheel



Source: From Taylor (1999).

message strategy into six segments based on the primary motives each segment appeals to within the intended receiver. Although the model was developed for the product/service situation, the segment typology can illuminate our understanding of health messages in that the same basic human needs/motives are at play.

For example, much medical information tends to fall into the "rational" segment of the wheel. Messages classified in this segment are based on the assumption that people are rational, conscious, deliberate and calculating individuals (Taylor 1999). In this study, several motivators that arose in Stage 1 focus groups and tested in Stage 2 could be classified as rational strategies. These are: early detection is cost-effective; one in eight women will get breast cancer, it can happen to me; every year my risk increases; and knowing is better than fearing.

Many of the potential message strategies that arose from stage one of the study and were subsequently tested in Stage 2 can be classified as "ego" strategies. According to Taylor (1999), ego message refers to how a person views herself, not how others view her. The following messages would be classified as ego strategies: I owe it to myself; it is what an empowered women should do; if I don't take care of myself, no one else will; and I've got too much to live for, breast cancer won't stop me.

The third message strategy segment represented in the list of messages generated from the focus groups is the "social" segment. Social message strategies show the message subject as socially important to others. In this study, the message "I need to be around for those I love" fits the definition of a social strategy.

It is not surprising that the message strategies that emerged from the focus groups represented the rational, ego and social segments of the strategy wheel. These three segments are characterized by high involvement with the message. Certainly, breast health would likely be a high-involvement issue among women. The other three segments (sensory, routine and acute need) that are not represented usually are associated with lower involvement situations (Taylor 1999).

The findings suggest that the more effective messages for these rural women straddle the line between social and ego strategies. As Taylor (1999) suggests, a workable communication strategy often comes from the careful integration and combination of strategies. Thus, there can be two powerful motivators combined into a message strategy. The results of this study suggest such a strategy is possible; that is, "I need to be around for those I love, but if I don't take care of myself, no one else will." This type of message would be a social-ego strategy. The primary motivator for a woman's action in this message would be her

need to fulfill her important social role, and she also realizes that she is ultimately responsible for her own health monitoring. The results also suggest that a particular rational strategy could work. "Knowing is better than fearing" is a rational statement in response to an emotional behavior (fear or worry). However, other types of rational statements (cost-effectiveness, one in eight women will get breast cancer and every year my risk increases) were not seen by the women in this study as primary motivators. This insight shows that there can be variability of message motivators within strategy segments, so caution should be used when rejecting a segment as a possible strategy unless a variety of motivators that could be classified under that strategy have been considered.

Theoretical Applications and Implications

The women of rural Appalachia and in other disparate areas often neglected in academic research represent an ideal and pressing population in which to study health communication from a social construction perspective (Berger and Luckmann 1966), which explores the intersection of lived experience and social reality. Interestingly, these women rejected notions of empowerment, which seemed somehow both feminist and masculine to them, yet they also maintained roles as strong caregivers with remarkable levels of resilience. They constructed their own connotations of empowerment, which has proven to be a powerful determinant of health and healing in other populations. Facts, percentages and ratios—more objective discourse in health communication—were not persuasive to them, perhaps because their lived experience indicated that all too often, the odds were not in their favor.

Sharf and Vanderford (2003) argue invoking a social construction approach may enable scholars to "unpack the sociocultural sources of symbolic usage in health care, for people often accept it is as natural and inevitable without considering how meanings emerge from contextual and political sources in ways that mold health beliefs and behaviors, clinical judgments, and organizational routines" (p. 12). Naturalistic and qualitative studies such as this one lend themselves particularly well to the social construction approach (Sharf and Vanderford 2003), and combining the theoretical lens of these critical approaches and other advertising theory such as the Taylor (1999) strategy wheel may present promising avenues for research that seeks to inform and explain message strategy in health communication.

Furthermore, juxtaposition emerged among women who consider themselves "glue" or "caretakers" yet also reject the traditional notions of

empowerment in that rational messages worked better than fear or worry among women who also seemed relatively immune to persuasion from facts. These apparent contradictions should be explored and understood in more depth. Perhaps these women are filtering out the messages that touch them at a deeper level than conventional communication within their cultures as a self-defense mechanism. Analysis of the illness narratives of these cultures—perhaps revealing why such discrepancies exist—represents another way to illuminate theoretically the applied findings presented in this article and extend this line of research.

Illness narratives are the stories we use to talk about sickness, what it means to be sick, and implications of sickness. Disparity between explicit or implicit values within healthcare providers' and patients' narratives often leads to conflict (Geist and Gates 1996). Scholars in health communication may use illness narratives as maps to illuminate the psychological and physical journeys of patients (Sharf and Vanderford 2003). Ultimately, the goal is to interweave the discourse of medicine and of life. Perhaps this intersection could grant women comfort with empowerment and scientific data and facts, which they may have previously rejected as esoteric and intangible. Breast health messages should heighten self-efficacy to supplement and enrich the women's pervasive sense of obligation. For the women who expressed angst over having no one else to care for them, enhancing self-efficacy seems particularly pressing.

In summary, we can use illness narratives to inform message design as we better understand the lived realities of these women and their stories of health and illness. Employing these and other critical perspectives to study health communication will enhance message design and allow important themes and categories to emerge for further investigation through other methods. These women in rural Appalachia who "need to be around for those [they] love" and must take care of themselves "because no one else will" represent just one of many unique populations to consider in breast health research, and their insights reveal that breast and other health promotion campaigns must take into account the lived experience of audiences and avoid a one-message-fits-all approach.

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