The Effects of Societal Editorials on Perceptions and Behavioral Intentions Related to Heart Disease in Women

By

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The Effects of Societal Editorials on Perceptions and

Behavioral Intentions Related to Heart Disease in Women

ABSTRACT

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Objective: Chronic disease is a major health concern in the United States, and heart disease is one of the most common chronic diseases. Media advocacy offers a distinct strategy to address the issue of heart disease and particularly heart disease in women. Beyond encouraging women to eat healthy and exercise, media advocates can tackle the important societal factors related to the issue. The purpose of this study is to compare editorials on heart disease in women with a societal frame to those with an individual frame and a control group on the following areas: perceptions of heart disease as a societal-level health problem, perceptions of the importance and usefulness of organizational efforts to prevent heart disease, and behavioral intentions to prevent heart disease in self and others.
Methods: 397 participants completed a pretest posttest quasi-experiment with three conditions. Participants were emailed a link to a pretest survey. A week later, participants who completed the pretest were emailed another link. Participants were asked to read three editorials that differed by condition before completing the posttest survey. The treatment conditions included editorials about heart disease in women from a societal frame, and heart disease in women from an individual frame. The control condition included editorials about the economy and unemployment.
Results: The condition had a main effect on all four outcome variables. Furthermore, participants who read the societal editorials were more likely than those who read the

individual and control editorials to perceive the importance of general and specific organizational activities. The individuals who read the societal editorials were more likely than those who read the control editorials to perceive heart disease in women as a societal issue, and they were more likely to report intentions to prevent heart disease in themselves and others. However, when looking at the same outcomes, the societal condition did not differ significantly from the individual condition.

Conclusions: Overall, this study found that societal editorials can be used effectively in media advocacy campaigns, but they may not be significantly better than individual editorials.

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CHAPTER ONE: Introduction and Literature Review

Chronic diseases, such as heart disease, diabetes and cancer, have debilitating effects on the individuals who suffer from them and society as a whole. On an individual level, chronic disease affects patients' quality and length of life. Nearly half of all Americans, or 133 million people, reported suffering from at least one chronic disease in 2005. Some of their symptoms include extensive pain and disability. More than one of every 10 Americans, a total of 25 million people, faces major limitations in their activities because of chronic diseases (National Center for Chronic Disease Prevention and Health Promotion, 2008).

In addition, chronic disease accounts for seven of every 10 deaths in the United States every year. This amounts to more than 1.7 million people losing their lives due to chronic disease (National Center for Chronic Disease Prevention and Health Promotion, 2008). Deaths due to chronic disease are known to increase with age, and with the populace ageing, overall deaths attributed to chronic disease are predicted to increase over time (Strong, Mathers, Leeder, & Beaglehole, 2005).

The general misperception is that chronic disease is an issue of the wealthy, who are thought to be more likely to indulge in many of the risk factors, such as eating unhealthy foods, leading a sedentary lifestyle and smoking (Strong, Mathers, Leeder, & Beaglehole, 2005). In reality, chronic disease is a more significant issue for those with a lower socioeconomic status because they are unable to afford options for a healthier lifestyle (Strong, Mathers, Leeder, & Beaglehole, 2005).

On a societal level, statistics show that chronic disease is responsible for creating economic burdens. The nation's medical care costs are more than $2 trillion, and the costs associated with chronic disease are more than 75 percent of that amount (National Center for Chronic Disease Prevention and Health Promotion, 2008). Thus, treatment for chronic disease equals hundreds of billions of dollars a year in medical costs. Besides treatment expenditures, chronic disease also costs the country approximately $1 trillion in terms of loss in productivity. Loss of productivity can be measured by missed workdays and presenteeism. Presenteeism refers to the problems that arise when employees come to work despite being ill or distracted because they are caring for someone who is ill (DeVol, 2008). Another factor leading to lost productivity is that chronic diseases account for one-third of the years of potential life lost before age 65, a standard measure for age of retirement (National Center for Chronic Disease Prevention and Health Promotion, 2008).

Despite being the most prevalent and costly health problem, chronic disease is also the most preventable. Three major risk factors are the same for all chronic diseases. These risk factors are unhealthy diet, physical inactivity and tobacco use. Relatively easy and inexpensive measures can be taken to prevent chronic disease by addressing these risk factors. A financial commitment from the United States for continued interventions to fight chronic disease has proven to be effective. There has been a reduction in the overall death rate from chronic disease, and in particular heart disease (Strong, Mathers, Leeder, & Beaglehole, 2005).

Of the chronic diseases, heart disease is among the most prevalent and costly. Even with the decrease in deaths due to heart disease in recent years, it still remains the leading

single cause of death among all of the chronic diseases (Strong, Mathers, Leeder, & Beaglehole, 2005). 652,000 people died in 2005 from heart disease. In comparison, 559,000 individuals died the same year from cancer, the second leading cause of death (National Center for Chronic Disease Prevention and Health Promotion, 2008). Such a high prevalence of heart disease makes it one of the leading contributors, at $65 billion in treatment expenditures and $105 billion in lost productivity, to the overall economic burden associated with chronic disease (DeVol, 2008).

Media advocacy is a strategy to promote public health that works on the community and policy level. The goal of media advocacy is to generate coverage in the media that ultimately leads to a change in policy. This upstream approach discredits the belief that health is an individual issue based on personal decisions and instead emphasizes the societal factors, which lead key publics to call for policy change (Stead, Hastings, & Eadie, 2002; Wallack, Dorfman, Jernigan, & Themba, 1993). Because media advocacy differs from traditional campaigns in its goals and its approach to health issues, it has contrasting target audiences. The primary audience is a clearly defined group of decision makers in the community. This could be legislators, community leaders or community groups. The size of the target audience depends on the situation as well. The issue may call for targeting a number of people with power or it may be just one person. The key is to reach the people who will get involved and help enact change. Media advocacy typically deals with contentious issues and promotes public health in a way that can be threatening to those in power or who have a vested interest, such as tobacco companies and the food industry. Therefore, decision makers may require convincing to support a change in policy

(Dorfman, 2003), and the general population can be useful in putting pressure on policymakers. The public can support the cause in a variety of ways, including facilitating community organizing or contacting their elected official to state their case and let him or her know that the public is invested in this cause. Therefore, the general population serves as an important secondary audience (Wallack, Dorfman, Jernigan, & Themba, 1993; Wallack, Woodruff, Dorfman, & Diaz, 1999).

As discussed, chronic disease is a major health concern in the United States, and heart disease is one of the most common chronic diseases. Media advocacy offers a distinct strategy to address the issue of heart disease and particularly heart disease in women. Beyond encouraging women to eat healthy and exercise, media advocates can tackle the important societal factors related to the issue. The purpose of this study is to examine the effectiveness of media advocacy through a quasi-experiment with three conditions. Overall, the experiment compares editorials on heart disease in women with a societal frame to those with an individual frame and a control group.

Heart Disease in Women

The statistics on women and heart disease are staggering. Although older women are much more likely to have heart disease (one of every four women older than age 65 have some form), women aged 45-64 are also at risk. One out of ten American women in this age range suffers from the disease (National Heart, Lung, and Blood Institute, National Institutes of Health, 1998). The high incident rate of heart disease among women is an indicator of its devastating consequences. Heart disease is the leading cause of death among women in the United States. Every year since 1984, heart disease has led to the

deaths of more women than men. The latest statistics from 2005 indicate that women accounted for 52.6 percent of deaths from heart disease (American Heart Association, 2009). In particular, women account for more than 60 percent of deaths due to strokes, which makes it the third leading killer of women (Go Red for Women, n.d.).

The majority of risk factors for heart disease are the same across genders (Go Red for Women, n.d.). Risk factors include smoking (American Heart Association, 2009; Kra, 1996), high blood pressure, high cholesterol, and lack of physical activity (American Heart Association, 2009). Women also face a few unique, gender-specific risks. Women who are pregnant and/or are taking birth control pills have a higher risk of stroke. Smoking combined with the use of birth control pills greatly increases the risk of heart disease (Go Red for Women, n.d.).

Although the risk factors are mainly the same, there are biological differences between females and males that affect the manifestation of heart disease. Research has shown that symptoms present themselves dissimilarly in women. Women are much less likely to experience chest pain and discomfort (Canto, Goldberg, Hand, Bonow, Sopko, Pepine, & Long 2007; Kra, 1996; Zbierajewski-Eischeid, & Loeb, 2009), which are considered "typical" heart attack symptoms. Instead, women may experience fatigue, sleep disturbance, shortness of breath, weakness, cold sweat, back pain, upper abdominal or epigastric pain, achiness or heaviness in arms, dizziness, nausea with or without vomiting, heat or flushing, and racing heart (Women's hearts need extra attention, 2009; Zbierajewski-Eischeid, & Loeb, 2009).

Within the field of medicine, heart disease was originally considered a male disease, and women were regarded as exempt from risk (Kra, 1996). Both contributing and resulting from this false impression, women historically have been largely excluded from biomedical research. The findings for men have been simply assumed to hold true for women, because the male body has been considered the standard (Dresser, 1992; McGrath & Puzan, 2004). Much of the current research on heart disease is based on studies with male participants (McGrath & Puzan, 2004; Rogers & Ballantyne, 2008). Yet, the physiology of men and women are not the same, which changes the effects of a disease and its treatments (Dresser, 1992; McGrath & Puzan, 2004). The federal government recognized the gap of knowledge created by this oversight and passed a federal policy in 1986 specifically calling for more equal representation of women in research. However, more progress is needed not only to ensure that women are participating in studies but also that researchers are considering gender in their analyses (Dresser, 1992).

Furthermore, women are regularly neglected when it comes to medical care surrounding heart disease. Women are less likely to undergo the same basic procedures and diagnostic tests used for men (Kra, 1996). Women also tend to wait longer before going to the hospital with chest pains. When they do visit the hospital, they often leave without knowing the cause. In 2006, a total of 100,000 more women than men were diagnosed with "unspecified chest pain" (Women's hearts, 2009). As a result, women's heart problems go undetected until the disease is advanced (Kra, 1996).

Despite the fact that the death rate for women exceeds that of men and women face specific risk factors, society largely views heart disease as a male issue. Surveys of females

have found that women often do not consider heart disease to be a serious personal health risk (Lefler, 2004; Mosca, Jones, King, Ouyang, Redberg, & Hill, 2000). Instead, most list breast cancer as the greatest health problem facing women (Lefler, 2004; Mosca et al., 2000). The numbers show that 41,116 women died from breast cancer in 2005 compared to 454,613 women who died from heart disease (American Heart Association, 2009). Women also admitted that they are not well informed about heart disease and its risk factors (Lefler, 2004; Mosca et al., 2000).

Media Advocacy

Definition. Media advocacy is an approach that utilizes media coverage to bring attention to an issue and promote long-term change at the societal level. Through news articles, media events, letters to the editor and editorials, media advocacy works directly with news organizations and journalists to define the issue within a social and political context. Public health issues tend to be more complex and involve environmental factors outside of individuals' control. However, the news media and society as a whole favor simplistic definitions of health problems that tend to present the issue in terms of individual behavior change (Wallack, Dorfman, Jernigan, & Themba, 1993). By looking at public health as a social problem, media advocacy promotes a societal or thematic frame that encourages support for public policy and organizational efforts. Therefore, media advocacy strives to reframe the issue in a way that recognizes these influences (Wallack, Dorfman, Jernigan, & Themba, 1993).

Theoretical Foundation. According to Wallack, Dorfman, Jernigan and Themba (1993), framing is a "key theoretical perspective that media advocates use" (p. 74). The

media is responsible for promoting a frame of reference and the audience uses that frame to interpret and discuss the issue (Carragee & Roefs, 2004). Framing refers to how a news story is constructed, including the story's focus, organization, interpretation and exclusion (Durfee, 2006; Scheufele, 1999). Therefore, the frame of a message can influence the thoughts, feelings, attitudes, beliefs (Durfee, 2006; Scheufele, 1999) and choices of the viewer (Tversky & Kahneman, 1981). In fact, framing has been found to be an important factor in influencing who the audience judges is responsible for addressing the issue (Iyengar, 1991), a key element in successful media advocacy campaigns.

Framing helps achieve the main objectives of media advocacy, which differ from traditional mass communication campaigns. First, media advocacy uses framing to place the responsibility for health problems with society and not solely the individual (Wallack, Dorfman, Jernigan, & Themba, 1993). Many individuals do not have the resources necessary to eliminate health issues on their own (Wallack, Woodruff, Dorfman, & Diaz, 1999). Research has proven that social and economic environments play a key role in people's health (Wallack, Dorfman, Jernigan, & Themba, 1993). Poverty, racism, education and employment are important social determinants of health. Individuals have the ability to make decisions that affect their health, but several institutions—the government, industry groups, and media—create and influence the environment in which individuals make those decisions. Therefore, better outcomes are seen when society is held accountable for solutions to health problems (Wallack, Dorfman, Jernigan, & Themba, 1993). Yet, the media persists on promoting individual, also known as episodic, frames that shield public institutions and society as a whole from responsibility (Major, 2009). Much

research has shown that journalists tend to use individual frames and seldom use societal frames in health news (Major, 2009). The individual frame says the problem lies not in the flaws of the system but rather in the personal behaviors of individuals. On the other hand, media advocacy uses a societal, or thematic, frame to promote the shared responsibility for addressing the issue. Societal frames avoid blaming the victim and instead look at the issue in a broader context that holds the public accountable (Wallack, Dorfman, Jernigan, & Themba, 1993).

Once the issue has been reframed as a societal issue, the second goal of media advocacy is to employ an upstream approach (Dorfman, 2003; Wallack, Dorfman, Jernigan, & Themba, 1993). Whereas traditional campaigns deliver health messages to individuals, an upstream approach works toward policy change. Media advocacy employs the media in its efforts to enact policies addressing the environmental factors of an issue. Environmental factors, such as poverty or discrimination, can lead to social inequality and a greater risk for disease, creating a power gap between individuals with and without privilege. Although educating individuals, a function of individual frames, is an important role of public health, it is not a sufficient strategy for addressing the power gap. Media advocacy strives to frame health issues within a broader context to influence those with power to make changes. Thus, media advocacy advances long-term modifications in public health rather than short-term behavior change (Dorfman, 2003; Wallack, Dorfman, Jernigan, & Themba, 1993). By addressing policy issues rather than health messages, media advocacy aims to reduce risk for everyone rather than those solely at risk (Wallack, Woodruff, Dorfman, & Diaz, 1999).

Additionally, media advocacy differs from traditional health campaigns by having a focus on community building. By reframing the issue, media advocates can increase support in communities and initiate action. Media advocacy views the community as a partner rather than merely an audience. Conventional health campaigns use one-way communication, but media advocacy gains support by involving individuals and community groups. This involvement can take place at all the stages of media advocacy from choosing an issue of high concern to being a spokesperson for media interviews. Community leaders and groups have the skills and knowledge that make them a valuable resource. Their increased community awareness can help guide the campaign and their position within the community allows them to foster support from others (Wallack, Dorfman, Jernigan, & Themba, 1993). Most importantly, this relationship between media advocacy and the community is reciprocal. Not only do media advocacy efforts benefit from a more forceful argument, especially considering the controversial nature of the issues addressed by media advocacy, but the community also gains the capability to influence their environment. They learn important problem-solving skills and achieve an increased sense of community that promotes collaboration and teamwork. Community groups and members become confident and active in making their opinions heard, seeking out media, and bringing about change that affects their lives and their health (Dorfman, 2003; Wallack, Dorfman, Jernigan, & Themba, 1993).

Tactics. Despite a unique strategy and approach, media advocacy is not entirely different from other mass communication campaigns. It similarly requires coordinated, deliberative efforts. The overall strategy must define the problem in clear and concise

terms and offer specific, measurable solutions to the problem. Health problems often can be multifaceted and complicated while solutions require several steps. Media advocacy strives to break down both into manageable pieces, which makes them easier to communicate to journalists and the audience (Dorfman, 2003; Wallack, Woodruff, Dorfman, & Diaz, 1999).

After establishing the problem and the solution, media advocates must determine who to target and how to get their attention. Media advocacy efforts must be directed toward the people who can make the solution happen. This can be local, regional and national policymakers or it can be the general public who can influence key decision makers. The final step in developing a media advocacy strategy is to choose the tactics to get the attention of the target audience and gain their support (American Public Health Association, n.d.).

Media advocacy employs three main methods for getting its message to the audience. The first is paid advertising. This is often beneficial because media advocates have total control of the content. A disadvantage is the cost of advertising, which is especially relevant considering media advocacy efforts often operate on limited resources. The second method is asking for coverage through public service announcements. This is not an ideal method because advocates are not able to manage the message or when it will air. Public service announcements rarely receive prime time placements, which mean they may be unlikely to reach the target audience. The third, and most popular, manner of disseminating the message is by earning it through media coverage. Media advocates are proactive when it comes to media coverage by developing relationships with journalists

and constantly monitoring the media for opportunities, such as linking the issue with current news or planning an event (Wallack, Dorfman, Jernigan, & Themba, 1993). Earned media coverage can come in many forms, including news releases, letters to the editor, op-ed pieces, editorials, interviews and news events. Specifically, editorials signal the newspaper's endorsement for one side of the issue, which is the most powerful mechanism for gaining the support of key decision makers (American Public Health Association, n.d.).

Evaluation. Media advocacy employs a variety of actions, which can typically occur over a long time frame, in an effort to bring about complex changes (Stead, Hastings, & Eadie, 2002). As a result, evaluation has been challenging (Stead, Hastings, & Eadie, 2002; Stillman, Cronin, Evans, & Ulasevich, 2001). Only a small number of evaluative studies have been published, necessitating further research into how media advocacy works and if it is effective (Stead, Hastings, & Eadie, 2002).

Martinson and Hindman (2001) looked at the role of agenda setting in newspaper coverage promoting mammography screening. As part of a funded project called the Breast Cancer Screening Campaign, community action teams were created and trained to actively seek media coverage for their health issue. When compared to control communities, the treatment communities, or those with active volunteers, had significantly more coverage of breast-cancer related issues if it was a weekly newspaper. This study has important implications for the types of newspapers and communities where this strategy could be effective.

Analyses of media advocacy campaigns have mainly consisted of case studies and a few quasi-experimental studies (Stead, Hastings, & Eadie, 2002). A large number of case

studies have looked into media advocacy efforts around the public health issues of tobacco and alcohol. The U.S. Center for Substance Abuse Prevention commissioned case studies in numerous diverse communities with media advocacy campaigns surrounding tobacco and alcohol issues. As a whole, these case studies provide support for the ability of media advocacy to increase media coverage and lead to policy change (Jernigan, & Wright, 1996).

Stillman, Cronin, Evans, and Ulasevich (2001) examined the amount and slant of news coverage on tobacco control. Although the results were mixed, overall findings support that states with media advocacy efforts, known as ASSIST, were effective at increasing the amount of overall coverage of tobacco control and policy issues compared to states without it. Letters to the editor in ASSIST states tended to be pro-tobacco control, but there was no difference in the slant of editorials between states. The researchers' main hypothesis that the frequency of articles would increase over time in ASSIST states was unsupported (Stillman, Cronin, Evans, & Ulasevich, 2001).

In 1993, MADD conducted a nationwide media advocacy campaign surrounding the release of a report that rated all 50 states on several areas related to alcohol-impaired driving. The campaign has been touted as highly successful (Russell, Voas, Dejong, & Chaloupka, 1995). After analyzing the campaign, Russell, Voas, Dejong, and Chaloupka, (1995) compiled a list of why MADD's "Rating the States" program was so successful. The list includes MADD's high credibility and recognition along with people's interest in comparing their state to others. Also, by translating complex data into easily understood grades, MADD ensured that everyone familiar with the conventional school grading system would be able to understand the ratings (Jernigan, & Wright, 1996).

The Community Trials Project is one example of a quasi-experimental study of media advocacy. The goals of the campaign were to raise people's perceptions of the risk of being arrested for drink-driving, and therefore, decrease the amount of drinking and driving and alcohol-related crashes. Quantitative and qualitative measures were used to examine if training in media advocacy and increased resources for police enforcement could result in more media coverage of drink-driving and more enforcement activity. Training involved educating community members on news gathering techniques and how to use the news for advancing policy. Technical assistance was also provided to the community (Holder & Treno, 1997). The media advocacy training was found to contribute to increased media coverage, which focused public attention on ways to reduce drinking and driving (Holder & Treno, 1997; Stead, Hastings, & Eadie, 2002).

Additional controlled experimental studies of media advocacy need to be done to fully comprehend the strategy's effects. Therefore, this study attempts to fill a gap in the research by conducting a quasi-experiment with editorials on heart disease in women relating to the following areas: perceptions of heart disease as a societal-level health problem, perceptions of the importance and usefulness of organizational efforts to prevent heart disease, and behavioral intentions to prevent heart disease in self and others. This study is an extension of the work done by Dr. Stacey Hust with editorials on marijuana (Hust et al, work in progress).

Hypotheses

In accordance with previous findings, the researcher advances the following hypotheses:

H1: Those who read the societal editorials will be more likely than those who read individual or control editorials to perceive heart disease in women as a societal-level health problem.

H2: Those who read the societal editorials will be more likely than those who read individual or control editorials to perceive the importance and usefulness of general organizational efforts to prevent heart disease in women.

H3: Those who read the societal editorials will be more likely than those who read individual or control editorials to perceive the importance and usefulness of specific organizational efforts to prevent heart disease in women.

H4: Those who read the societal editorials will be more likely than those who read individual or control editorials to report intentions to prevent heart disease in self and others.

CHAPTER TWO: Methods

Development of Editorials

Twelve editorials centered on the topic of heart disease in women were developed. The editorials were specifically written with women as the target audience. The general public is an important secondary audience in media advocacy because they can influence key decision makers (American Public Health Association, n.d.; Wallack, Dorfman, Jernigan, & Themba, 1993; Wallack, Woodruff, Dorfman, & Diaz, 1999). Six editorials were written from a societal frame, and the other six were written from an individual frame. Societal editorials placed responsibility for health problems with society (Wallack, Dorfman, Jernigan, & Themba, 1993) and mentioned a community organization, which follows the media advocacy goal of community building. Finally, the societal editorials promoted policy and/or long-term changes (Dorfman, 2003; Wallack, Dorfman, Jernigan, & Themba, 1993). In opposition, the individual editorials placed responsibility with the individual, did not mention a community organization and encouraged individuals to make short-term behavior changes.

Each societal editorial was matched to an individual editorial. The matched editorials were similar in length, readability and content. Length was measured by word count and did not differ by more than 50 words. Readability was assessed by Flesch-Kincaid Grade Level, and the matched editorials were all within a 0.5 range of each other. The content was kept as similar as possible, excluding the societal frame, to allow for optimal comparison. A clinical associate professor who teaches media writing proofread

the editorials and made edits to correct for AP Style and grammar. These methods are the same used by Hust et al (work in progress).

Editorials were selected as the stimulus because the op-ed section ranks second behind the front page as the most frequently read section of news publications (Wallack, Woodruff, Dorfman, & Diaz, 1999). Editorials often reflect hot topics in the community, and many policy makers and key decision makers look at these articles to identify key issues (Wallack, Woodruff, Dorfman, & Diaz, 1999). For media advocates, another advantage of the editorials is the ability to reach audiences in a format that allows for more detailed and unmitigated arguments than news stories (Wallack, Woodruff, Dorfman, & Diaz, 1999).

Pretest

All twelve editorials underwent two separate pretests to ensure differences between treatment groups. With the permission of the human resources department at Washington State University, the researcher obtained a list of WSU female staff and faculty members from its four campuses in Pullman, Spokane, Tri-Cities and Vancouver. Due to the disparate geographic locations of the participants, the study was conducted solely online.

According to Wimmer and Dominick (2006), online experiments are a growing area of research. Using the Internet poses certain advantages. For example, an online experiment gives the researcher the ability to gather a large sample size from a geographically diverse area for no cost. Convenience is another major advantage of conducting an experiment online. Participants will be able to access the link 24 hours a day. Finally, this method eliminates experimenter bias. Online experiments also have some pitfalls, which the researcher fully acknowledges. Due to its nature, there is a lack of control

over the setting and circumstances in which the participant takes part in the study (Reips, 2000). However, the Internet is continuing to become a popular source for news. The Pew Internet & American Life Project (2006) estimates that more than 50 million people per day gather their health news from the Internet. Therefore, the study aimed to provide a realistic setting for how people receive their news. The editorials were graphically designed to mimic a news organization's Web site, including color photographs and mock hyperlinks.

For the first pretest, a random sample of 55 WSU female staff and faculty members were sent an email to their WSU account asking them to participate. They were informed that they were randomly selected and their participation is voluntary. Those who decided to participate were entered into a drawing to receive a gift card set with four $10 movie gift cards. The email also contained a link that took the participant directly to the pretest questionnaire. Due to a few number of responses, a convenience sample of nine people were sent an email asking them to participate.

A total of 22 people participated for a response rate of 34%. Each participant was asked to read six editorials and respond to a set of questions after each to confirm that the stimuli had the intended effects. The means for each scale were calculated and used to determine if the respondents perceived the editorial was written from a societal or individual perspective. Based on the results, the editorials were edited to include more or less of the societal and individual perspective. Each matched pair of societal and individual editorials maintained the same standards for similar length, readability and content.

An additional pretest was conducted to ensure that the editorials were correctly perceived as societal or individual, according to the means for each scale. The same procedure was followed for the second pretest, except that participants were asked to read only three editorials and respond to the questions. 398 WSU female staff and faculty members were emailed, and 156 participated for a response rate of 39%. Those who participated were entered into a drawing to win one of three sets of movie gift cards.

For each editorial, the means for the societal-oriented items were summed and averaged to create a score on a societal scale. The same method was run for the individual-oriented items. The societal scale included eight items and the individual included seven items. The three pairs of editorials chosen for inclusion in the quasi-experiment were based on which matched pair had the largest differences in the average means for the societal and individual scales.

Once the three pairs of editorials were chosen, an additional three editorials were selected to serve as a control. The control editorials discussed the economy or unemployment, topics unrelated to heart disease or women's health. Each control editorial matched one of the pairs of treatment editorials in length and readability.

Quasi-Experiment

Procedures. The remainder of the female WSU staff and faculty members, which totaled 2,436 people, was sent an email to their WSU account asking them to participate in an experiment. The procedure for the experiment was explained along with notification of an incentive. Those participants who completed both the pretest and the posttest were entered into a drawing to win a $200 gift card, $100 gift card, or one of eight movie gift

card sets. The email also contained a link that takes the participant directly to the pretest questionnaire.

The participants were given ten days to complete the pretest, which involved filling out a survey. 530 women completed the pretest for a response rate of 22%. After seven days, those who participated in the pretest were sent an email thanking them for completing the pretest and asking for their continued participation in the experiment. They were reminded of the topic and procedure as well as the chance for an incentive if they completed the posttest. Again, a link in the email took participants to the posttest, which contained the editorials and survey. Participants had been randomly assigned to a condition after the pretest was completed. Each participant read three editorials and immediately completed the posttest survey. The posttest was open for ten days, and 397 women completed it, which results in a 75% retention rate.

Measures. A reliable scale had not been developed for measuring perceptions of heart disease in women as a societal-level health problem.

Societal issue. A principal components factor analysis with varimax rotation was run on the individual and societal items, and they were forced into two factors. Eleven items loaded together with the majority of them dealing with societal issues. Two of the items that loaded in the category were individual items that lacked the exclusionary terms of "only" or "primarily" that were included in the other individual items that loaded together. For this reason, these two measures were dropped. Thus, an additive scale was created with nine items, including "Research on women is important", "Heart disease in women impacts the work productivity of everyone" and "Heart disease in women affects the entire community" (α=.87). See Table 2.

General perceptions of organization. Perceptions of the importance and usefulness of an organization was developed into two scales using a principal components factor analysis with varimax rotation. Items about the American Heart Association loaded into two factors. An additive scale of general perceptions was created with the following five items: The American Heart Association "helps the residents in a community", "helps women who suffer from heart disease", "helps men who suffer from heart disease", "is important to a community" and "plays an important role in the public's health." (α=.89).

Specific perceptions of organization. An additive scale of specific perceptions was created with eight items, such as The American Heart Association "helps change public policy related to research about heart disease in women", "collects statistics on heart disease in women" and "ensures research about heart disease includes female participants" (α=.95).

Behavioral intentions. In a similar manner, behavioral intentions regarding preventing heart disease was developed into two scales. One scale entails low commitment behavioral intentions while the other has high commitment behavioral intentions. Low commitment behavioral intentions was created as an additive scale with seven items, including "Visit external resources (such as a website) related to heart disease in women", "Donate time to an organization committed to heart disease in women" and "Tell your friends about issues regarding heart disease in women" (α=.91).

Sample. The responses of participants who completed the posttest were matched with their pretest responses by a unique identification number they created using their university identification number. After matching, 397 participants had completed both the

pretest and posttest. Participants' ages ranged from 21 to 69 with a median age of 48 (*M=45.44, SD*=11.48). More than 86% of the participants identified themselves as Caucasian/White, which is similar to the ethnic composition of the state, according to the U.S. Census Bureau (2010). Approximately 77% of the participants are staff members at WSU and 23% are faculty. Despite this disparity, the conditions had similar proportions of occupational type that did not differ significantly.

Although a large portion of the participants report that they mostly sit or stand during work (93%), a majority of them are physically active outside of work. 87% responded that they have participated in physical activity or exercise, other than their regular job, in the past month. Only a small percentage of the women reported they smoke every day or some days (5%) and many said they do not smoke at all (94%).

The vast majority of the participants reported that they had never had heart disease (98%), and many said they had never had certain risk factors, such as diabetes (84%), high blood pressure (72%) or high blood cholesterol (68%). Four participants (1%) reported that they had suffered a heart attack, and seven participants had suffered a stroke (2%).

Analysis. Data analysis was conducted using PASW Statistics 18. Each hypothesis was tested running a General Linear Model by condition with the posttest score as the dependent measure and the pretest score as the covariate.

CHAPTER THREE: Results

Hypothesis 1, which stated that participants reading the societal editorials would be more likely than those reading the individual editorials to perceive heart disease in women as a societal-level health problem, was partially supported. The condition was found to have a main effect on societal perceptions, F (2, 345) = 10.27, p=.00, in the predicted direction. Those participants who read the societal editorials reported the highest mean for perceptions that heart disease in women is a societal-level health problem (M=6.00). Participants reading the control editorials had the lowest mean (M=5.86), and those reading individual editorials were in the middle (M=5.61), indicating that merely reading about heart disease in women had some effect. Although the conditions were found to differ, the societal editorials only differed significantly from the control condition, F (1, 226) = 18.91, p=.00, and not the individual condition.

The results showed support for hypotheses 2 that participants reading the societal editorials would be more likely than those reading the individual and control editorials to perceive the importance and usefulness of general organizational efforts to prevent heart disease in women. General organizational perceptions differed significantly by condition, F (2, 380) = 4.95, p=.01. Participants who read the societal editorials were the most likely to perceive the importance and usefulness of an organization (M=5.29). Those who read the control editorials had the next highest mean (M=5.03) and participants reading the individual editorials were the least likely to perceive the importance and usefulness of an organization (M=4.97). In addition, the societal condition was found to be significantly

different from the individual condition, F (1, 266) = 8.77, p=.01, and the control condition, F (1, 249) = 4.68, p=.03.

The same effect was found when testing hypothesis 3 for perceptions of more specific organizational efforts. The means differed significantly by condition, F (2, 359) = 13.41, p=.00. Those in the societal condition had the highest perceptions (M=5.58) followed by the control condition (M=5.14) and the individual condition (M=5.06). Also, the societal condition was found to be significantly different from the individual condition, F (1, 250) = 20.18, p=.00, and the control condition, F (1, 238) = 15.25, p=.00.

Behavioral intentions to prevent heart disease in self and others, which was hypothesis 4, was partially supported. Behavioral intentions was found to differ significantly by condition, F (2, 360) = 6.99, p=.001, in the predicted direction. Those participants in the societal condition reported a higher mean (M=3.39) than the participants in both the individual (M=3.31) and control conditions (M=2.96). The societal condition also differed significantly from the control condition, F (1, 238) = 11.92, p=.001. Yet, the societal condition did not significantly differ from the individual condition.

In summary, the condition had a main effect on all four outcome variables. Furthermore, hypothesis 2 and 3 were supported in that the societal condition differed significantly from both the individual and control conditions. Participants who read the societal editorials were more likely than those who read the individual and control editorials to perceive the importance of general organizational activities as well as specific ones. Hypothesis 1 and 4 received partial support. In both cases, the societal condition differed significantly from the control condition. The individuals who read the societal

editorials were more likely than those who read the control editorials to perceive heart disease in women as a societal issue, and they were more likely to report intentions to prevent heart disease in themselves and others. However, when looking at the same outcomes, the societal condition did not differ significantly from the individual condition.

CHAPTER FOUR: Discussion

The aim of this study was to examine the effectiveness of societal editorials in three key areas related to media advocacy: perceptions of heart disease in women as a societal health problem, perceptions of the importance and usefulness of organizational efforts to prevent heart disease in women, and intentions to prevent heart disease in self and others. This study fills a gap in the literature on media advocacy by experimentally testing editorials on an important topic, heart disease in women. Heart disease is the leading cause of death among women (American Heart Association, 2009). This study found that societal editorials on heart disease in women can have an influence on perceptions and behavioral intentions.

The difference among the three conditions was found to be statistically significant for perceptions of heart disease in women as a societal health problem. Further analysis found group differences between the societal and control conditions. Compared to participants in the control condition, participants who read societal editorials were more likely to perceive heart disease in women as a societal issue. No significant group difference was found between the participants who read the societal editorials and those who read the individual editorials. Although the societal condition did not differ significantly from the individual condition, the means were higher and in the predicted direction. More research needs to be done to explore this relationship because it is of considerable importance to the field of media advocacy. The individual editorials had an effect on perceptions that heart disease in women is a societal health problem, which may indicate that the framing of the issue is not vital to the attribution of responsibility. Iyengar (1991)

found that framing had an influence on people's perceptions for some issues, such as poverty and racial inequality, but it did not for other issues, such as unemployment. However, the societal condition, while not significant, still produced a higher mean than the individual condition, which indicates that media advocates should still focus attention on framing their issue as a societal health problem.

Perceptions of the importance and usefulness of organizational efforts to prevent heart disease in women differed significantly by condition, and this was true for general and specific perceptions. Group differences were also found. For both general and specific perceptions of an organization, there were significant differences between societal and individual conditions and societal and control conditions. Perceptions were highest among the societal condition and were actually lowest among the individual condition. The participants in the control condition, who read editorials about the economy and unemployment, rated organizational efforts more favorably than the individual condition.

Each of the societal editorials mentioned the American Heart Association and provided its website in a call to action. Among the individual editorials, one referenced a study done by the American Heart Association, but none mention the organization as a resource for people to use. One possible explanation is that the participants in the individual condition perceived that the organization is not involved in an issue that it should be. By reading information about an issue without mentioning the related organization, people's views of the organization may decrease. According to research in public relations, expectations play an imperative role in the relationship between an organization and the public (Ledingham, 2003). The public holds beliefs about an

organization's view or position. The level of agreement between the belief and reality can help predict the nature of the relationship. The relationship can be damaged when one side's expectations are not met, according to the theory of relationship management (Broom, Casey, & Ritchey, 1997; Ledingham, 2003). Therefore, it is possible that participants expected the American Heart Association to be involved in discussions of heart disease in women, and when it was not, their perceptions of the organization were negatively affected. Participants were less inclined to report positive feelings about the American Heart Association and its activities. Future research should explore this area in relation to media advocacy to further understand the effects.

The finding that perceptions of organizational efforts are highest for editorials that include the name of an organization in a call to action may seem unsurprising, but it still has serious implications for media advocates. An essential component of media advocacy is community building. Media advocates try to work with organizations and people in the community as partners to bring about the desired change. (Wallack, Dorfman, Jernigan, & Themba, 1993). As a result, they must strive to include the name of the organization in their efforts, whether it is pitching an idea to a journalist, hosting a media event or writing a letter to the editor. Otherwise, the audience may have a more negative view of the organization, according to these results.

Finally, a main effect of condition was observed for intentions to prevent heart disease in self and others. A group effect was found between the societal and control conditions but was not present between the societal and individual conditions. Participants who read the societal editorials had the highest intentions to act and those who read the

control editorials had the lowest intentions. The behaviors that were measured include visiting a website, donating time or money and talking with friends. These activities may be informal and the time and energy put into them can be determined by the individual, but they are important steps in becoming involved with an issue and have implications for media advocacy. If media advocates wish to persuade the public to push for policy change, they must first work to actively engage community members in addressing the health problem. Simply reading an editorial may not be persuasive enough to convince a person to take action, so media advocates may need to utilize many tactics, including media events and news reports, to illicit behavioral changes. According to Wallack, Dorfman, Jernigan and Themba (1993), media advocacy efforts can easily take on momentum. A concerted media advocacy campaign will be more likely to influence behavioral intentions than any component on its own.

Limitations

This study does have its limitations. First, the study was conducted solely online. Due to the nature of online studies, there is a lack of control over the setting and circumstances in which the participant takes part in the study (Reips, 2000). In addition, the results rely on self report data. However, the benefits of an online survey outweigh the disadvantages, including a geographically diverse sample and a natural setting for gathering news. Second, because the study is a quasi-experiment, participants were exposed to three editorials on the same subject at the beginning of the posttest survey. Although this allows for a closer look at the effects of societal editorials, most people will not consecutively read three editorials about heart disease in women. Third, the research

targeted women through its sample of WSU female staff and faculty members. Males were excluded from the sample purposively because the editorials were tailored to women. Future studies should examine if societal editorials can have effects with other populations, including groups where the topic may not be salient.

Conclusion

Overall, this study found that societal editorials can be used effectively in media advocacy campaigns, but they may not be significantly better than individual editorials. For half of the outcome measures, the societal condition had higher means but they were not significantly different from the individual condition. Participants were more likely, although not statistically significant, to perceive that heart disease in women is a societal issue and have intentions to prevent heart disease in self and others. However, the societal condition was significantly different from the individual condition on general and specific perceptions of the importance and usefulness of organizational efforts to prevent heart disease in women.

Tables

Table 1: Pretest Means for Final Editorials

	Societal		Individual	
Editorials	Mean	SD	Mean	SD
Societal A	5.62	0.75	2.23	0.72
Societal B	4.79	0.86	2.74	0.53
Societal C	4.52	1.10	2.04	0.48
Individual A	3.74	0.62	3.96	1.16
Individual B	3.24	0.74	4.42	1.25
Individual C	3.28	0.79	3.78	1.31

Note: Means were calculated as the average of the additive scale for each measure (based on a 7 point scale).

Table 2: Exploratory Factor Analysis Results for perceptions of an organization

	Pretest		**Posttest**	
Item	**Factor Loadings**		**Factor Loadings**	
The American Heart Association…	General	Specific	General	Specific
Helps the residents in a community.	**.77**	.31	**.78**	.32
Helps women who suffer from heart disease.	**.74**	**.47**	**.74**	**.48**
Helps men who suffer from heart disease.	**.77**	.32	**.80**	.27
Helps change public policy related to research about heart disease in women.	.33	**.78**	.34	**.82**
Collects statistics on heart disease in women.	.23	**.82**	.32	**.78**
Helps change public policy related to treatments available for heart disease.	.33	**.73**	.31	**.81**
Lobbies for legislation to help prevent heart disease in women.	.15	**.85**	.22	**.88**
Promotes healthy lifestyle choices to decrease heart disease risk in women.	.28	**.78**	.31	**.76**
Is important to a community.	**.68**	.39	**.81**	.24
Plays an important role in the public's health.	**.57**	**.58**	**.64**	**.53**
Helps lobby for reporting gender-specific research on heart disease.	.18	**.80**	**.42**	**.71**
Raises awareness of heart disease in women.	.32	**.77**	**.46**	**.73**
Ensures research about heart disease includes female participants.	.32	**.77**	.39	**.71**
Eigenvalues	1.22	7.91	1.14	8.29
% of variance	8.74	56.50	8.78	63.79

Note: Factor loadings over .40 appear in bold.
Note: When items loaded in both factors, the higher value was chosen.

Table 3: Descriptive Table

	Pretest		Posttest	
Items	Mean	SD	Mean	SD
Societal				
Research on women and heart disease is important.	6.55	.80	6.45	.82
Heart disease in women negatively impacts work productivity.	5.52	1.61	5.82	1.36
Families are an important support system for women with heart disease.	6.14	1.17	6.06	1.06
More research is needed on women and heart disease.	5.97	1.18	6.11	1.05
Heart disease in women impacts the work productivity of everyone.	4.58	1.87	5.05	1.67
The families of women with heart disease undergo stress.	6.21	1.209	6.16	1.07
Heart disease in women affects the entire community.	4.80	1.62	5.02	1.57
Heart disease in women is a national problem.	5.65	1.36	5.86	1.25
Many individuals are affected when a woman is diagnosed with heart disease.	5.85	1.29	5.86	1.18
General Perceptions of Organizations				
Helps the residents in a community.	4.25	1.43	4.62	1.33
Helps women who suffer from heart disease.	4.86	1.37	5.12	1.26
Helps men who suffer from heart disease.	5.08	1.33	5.47	1.17
Is important to a community.	4.87	1.58	5.12	1.45
Plays an important role in the public's health.	4.86	1.38	5.17	1.30
Specific Perceptions of Organizations				
Helps change public policy related to research about heart disease in women.	4.90	1.27	5.24	1.20
Collects statistics on heart disease in women.	5.32	1.25	5.51	1.20
Helps change public policy related to treatments available for heart disease.	4.95	1.25	5.31	1.21
Lobbies for legislation to help prevent heart disease in women.	4.73	1.34	5.15	1.33

Promotes healthy lifestyle choices to decrease heart disease risk in women.	5.49	1.28	5.61	1.21
Helps lobby for reporting gender-specific research on heart disease.	4.44	1.29	4.91	1.36
Raises awareness of heart disease in women.	5.26	1.31	5.38	1.25
Ensures research about heart disease includes female participants.	4.83	1.35	4.96	1.37
Behavior				
Visit external resources (such as a web site) related to heart disease in women.	3.64	2.00	4.00	1.82
Get friends and family involved on the topic of heart disease and women.	2.74	1.69	3.26	1.79
Donate time to an organization committed to heart disease in women.	2.36	1.57	2.71	1.64
Donate money to an organization committed to heart disease in women	3.09	1.83	3.22	1.84
Tell your friends about issues regarding heart disease in women.	3.62	1.85	3.91	1.87
Participate in community efforts to prevent heart disease in women.	2.76	1.69	2.96	1.79
Volunteer at a local health organization that tries to prevent heart disease in women.	2.32	1.52	2.52	1.63

Table 4: Descriptive Statistics for Outcome Measures

	Societal		**Individual**		**Control**	
Outcomes	EMM	SE	EMM	SE	EMM	SE
Societal	6.00	.06	5.86	.06	5.61	.07
General perceptions of an organization	5.29	.08	4.97	.08	5.03	.08
Specific perceptions of an organization	5.58	.08	5.06	.08	5.14	.08
Behavioral intentions	3.39	.08	3.31	.08	2.96	.09

Note: Estimated marginal means were calculated with covariates.

Table 5: General Linear Model on Dependent Variables

Dependent Variable: Societal Issue

Source of variation	*df*	*F*	*p*-value (two-tailed)
Condition	2	10.27	<.001
Error	342		
Total	346		
R Squared=.456 (Adjusted R Squared=.452)			

Dependent Variable: General Perceptions of the AHA

Source of variation	*df*	*F*	*p*-value (two-tailed)
Condition	2	4.95	<.01
Error	377		
Total	381		
R Squared=.345 (Adjusted R Squared=.340)			

Dependent Variable: Specific Perceptions of the AHA

Source of variation	*df*	*F*	*p*-value (two-tailed)
Condition	2	13.41	<.001
Error	356		
Total	360		
R Squared=.384 (Adjusted R Squared=.379)			

Dependent Variable: Low Commitment Behavioral Intentions

Source of variation	*df*	*F*	*p*-value (two-tailed)
Condition	2	6.99	<.01
Error	357		
Total	361		
R Squared=.595 (Adjusted R Squared=.591)			

APPENDICES

Societal Editorial A

The Journal OPINION

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EDITORIAL

Women's hearts need care too

January 21, 2010 4:40 p.m. PST

Editor's note: *Maureen R. Flender is a cardiologist and director of Nuclear Cardiology at the University of Washington School of Medicine.*

Seattle, Wash.—Heart disease isn't just a man's disease. Heart attack, stroke and other cardiovascular diseases are devastating to women, too. In fact, coronary heart disease, which causes heart attacks, is the single leading cause of death for American women.

Yet, only 8 percent of primary care physicians know that heart disease kills more women each year than men, according to a recent American Heart Association survey.

STORY HIGHLIGHTS

- Only 8 percent of primary care physicians know that heart disease kills more women each year than men.
- Women are underrepresented in cardiovascular research, so less is known about how to treat them.
- She says we need a national approach to deal with the prevalence of cardiovascular disease in women.

RELATED TOPICS
Cardiovascular disease
Women's health

This medical information gap means women receive less aggressive and less advanced diagnostic screening and treatments. This also means fewer women receive treatments like stents and angioplasties that can prevent a deadly heart attack or stroke.

But even when doctors recognize the need for medical intervention for cardiovascular disease, they often don't know if the treatments and medications available are equally effective or even safe for women.

That's because previous scientific studies frequently were conducted with inadequate numbers of women in the study population. Women represent just 38 percent of subjects in National Institutes of Health-sponsored cardiovascular studies. This means the findings don't always apply to women.

Taking action

Federal officials need to take action to help reduce disability and death from cardiovascular diseases in women. There are several ways they can achieve this goal.

First, Congress needs to authorize grants for researchers to educate health care providers about prevention programs. The nation's best researchers also should identify the most effective diagnostic and treatment strategies for cardiovascular disease in women.

Second, lawmakers must tighten the U.S. Food and Drug Administration rules that require drug companies and manufacturers of treatment devices to report data specifically for women.

Third, the Centers for Disease Control and Prevention's free screening program for low-income, uninsured women should be adopted by all 50 states. This program currently covers 14 states.

The prevalence of cardiovascular disease in women is a national problem, and we need a national approach. The American Heart Association recognizes this need and is determined to serve as an advocate on the issue of heart disease in women. Everyone, not just women with heart disease, should visit its Web site at www.americanheart.org and find out how you can help.

Individual Editorial A

The Journal OPINION

EDITORIAL

Women need to care for their hearts too

January 21, 2010 4:40 p.m. EST

Editor's note: *Maureen R. Flender is a cardiologist and director of Nuclear Cardiology at the Cleveland Clinic.*

Cleveland, Ohio—Heart disease isn't just a man's disease. Heart attack, stroke and other cardiovascular diseases are devastating to women, too. In fact, coronary heart disease, which causes heart attacks, is the single leading cause of death for American women.

Among women, only 55 percent recognize that cardiovascular disease is the leading cause of death for their sex, according to a recent American Heart Association survey.

STORY HIGHLIGHTS

- Only 55 percent of women know that cardiovascular disease is the leading cause of death among females.
- She says female patients must understand how much at risk they are for the disease.
- She says women need to take action to reduce their risk of disability and death from cardiovascular disease.

RELATED TOPICS
Cardiovascular disease
Women's health

Many more are uninformed about the symptoms of cardiovascular disease, which can be more subtle than those exhibited by men. And many don't realize that such controllable conditions like smoking, physical inactivity or high blood pressure can put them at increased risk for heart attack or stroke.

But even when doctors recognize the need for medical intervention for cardiovascular disease, they often don't know if the treatments and medications available are equally effective or even safe for women.

That's because previous scientific studies frequently were conducted with inadequate numbers of women in the study population, meaning the findings don't always apply to women.

This places a greater responsibility on female patients who must understand how much at risk they are for the disease.

As much as 80 percent of women between ages 40 to 60 have at least one risk factor for heart disease. According to studies, women with at least one risk factor double the likelihood they will develop the disease. Regardless of a woman's age, she must take action to prevent developing heart disease.

Taking action

Women need to take action to help reduce their risk of disability and death from cardiovascular diseases. There are several ways they can achieve this goal.

First, women need to educate themselves on the most effective diagnostic and treatment strategies for cardiovascular disease in women.

Second, women need to be aware of that cardiovascular disease presents itself differently for men and women. The symptoms women experience may be considered very atypical from traditional symptoms.

Third, women must get screened in order to recognize their risk factors and make lifestyle changes to prevent cardiovascular disease.

As evidenced, the prevalence of cardiovascular disease in women is a problem across the nation. Therefore, it is every woman's responsibility to give attention to her personal health and take the necessary action.

Control Editorial A

EDITORIAL

Tax them both

January 21, 2010 4:40 p.m. EST

STORY HIGHLIGHTS

- Another round of defaults is expected.
- She says the changes do not appear to be promising.
- An estimated 2.4 million borrowers are expected to lose their homes this year.
- She says the Treasury Department needs to restore some equity to drowning borrowers.

RELATED TOPICS
Economy
Home loans

Editor's note: *Maureen R. Flender is an economist and author of several bestsellers.*

New York—President Obama promised this week to reconnect to the concerns and needs of Americans who are suffering from the recession. One important way to do that is to help hard-pressed families hang on to their homes.

It's not just the moral thing to do. It also would help avoid the spillover effects of the next expected round of defaults. Coupled with high unemployment, a coming surge in foreclosures is likely to further depress house prices. That would hurt an already fragile recovery and, in a worst case, could provoke a double-dip recession.

Unfortunately, advance word of coming changes to the antiforeclosure effort are not encouraging.

When the effort was announced nearly a year ago, the administration said it would help as many as nine million at-risk families keep their homes by the end of 2012 — by lower payments through loan modifications, mainly lower interest rates, or by refinancing loans for borrowers who have little or no equity.

Yet recent tallies show that through 2009, only 66,465 loans had been successfully modified, and through last November, 155,700 loans had been refinanced. That's abysmal. An estimated 2.4 million borrowers are expected to lose their homes this year alone.

As early as next week, the administration is expected to ease up on the paperwork requirements for a loan modification and to announce temporary assistance — probably low-cost loans or grants — to help unemployed people pay their mortgages. Those changes, however, would not correct the program's biggest flaw: the current preferred way to modify a loan — reducing the interest rate — is of limited use to millions of so-called underwater borrowers, those who owe more than their homes are worth. Reducing the loan's principal balance is more valuable because it lowers monthly payments and restores equity.

Administration officials, however, have been unwilling or unable to persuade lenders to reduce the principal on underwater loans. One obstacle is that many troubled borrowers have two loans on their home, and conflicts exist between the first and second mortgage holders over who gets how much out of a loan whose principal has been cut. Several months ago, the Treasury Department detailed a plan aimed at resolving the conflicts, but lenders have yet to cooperate.

Treasury officials say that they continually review the antiforeclosure effort and consider changes. It's hard to see what they need to convince them that it's time to restore some equity to drowning borrowers.

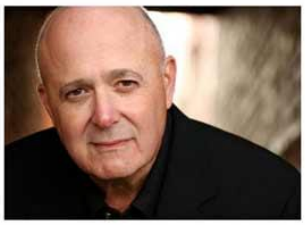
Societal Editorial B

The Journal OPINION

EDITORIAL

Heart disease costs United States more than $430 billion

January 25, 2010 1:49 p.m. EST



By: William M. Matherston

Seattle—Heart disease and strokes cost the United States $431.8 billion in 2007 for health expenditures and lost productivity, according to the latest statistics from the American Heart Association.

In fact, heart disease remains the nation's leading killer among women. It claimed more than 454,000 lives, or 37 percent of all female deaths in the nation, in 2005, which is the latest year for which figures are available.

STORY HIGHLIGHTS

- In 2007, heart disease and strokes cost the U.S. a total of $431.8 billion.
- Heart disease remains the nation's leading cause of death among women.
- He says society can help reduce the costs of this deadly disease.

RELATED TOPICS
Heart disease
Women's health

Moreover, an estimated 8 million American women have some form of heart disease, including high blood pressure and strokes. The AHA noted that heart disease is not just a threat to the elderly. Heart disease in women younger than 55 years old accounts for approximately 16,000 deaths per year. This makes it among the leading causes of death for this age group.

Considering its prevalence, heart disease has a significant impact on society. The AHA estimated that heart disease costs the nation $178 billion in 2007 in hospital and nursing home services alone. Fees for doctors and nurses totaled more than $43 billion, and drugs led to $6.7 billion in expenditures.

"Because of these high costs, it's time society takes what responsibility it can to lower women's risk of cardiovascular disease," AHA president Dr. Edward S. Cooper said.

"This means raising awareness of the major modifiable risk factors for heart disease and stroke - high blood pressure, high blood cholesterol, cigarette smoke and physical inactivity," Cooper said, "and advocating for research to learn more about how heart disease presents itself in women."

The value of workers' productivity lost because of heart disease was $148 billion, according to AHA estimates.

To prevent the financial burden of heart disease on society, Cooper stressed the need to emphasize preventative care for women.

"The cost of heart disease and stroke impacts not only the person or persons who are disabled by or die from these conditions but all Americans. Heart disease and stroke costs every American in terms of soaring health care costs and the high price of health and life insurance," Cooper said.

Contact the American Heart Association at www.americanheart.org to see what you can do to help raise awareness of this important issue. If all Americans work together, we can help reduce the costs of this deadly disease. Otherwise, our pocketbooks will continue to feel the financial strain of heart disease in women.

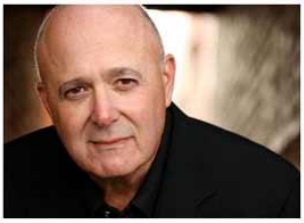
Individual Editorial B

The Journal OPINION

EDITORIAL

Heart disease patients suffer financial burden

January 25, 2010 1:49 p.m. EST



By: William M. Matherston

New York—Heart disease remains the nation's leading killer among women. It claimed more than 454,000 lives, or 37 percent of all female deaths in the nation, in 2005, which is the latest year for which figures are available.

Moreover, an estimated 8 million American women have some form of heart disease, including high blood pressure and strokes. Research has noted that heart disease is not just a threat to the elderly. Heart disease in women younger than 55 years old accounts for approximately 16,000 deaths per year. This makes it among the leading causes of death for this age group.

STORY HIGHLIGHTS

- Female heart disease patients face a considerable financial burden.
- One person could pay $121,200 over 20 years, according to the CDC.
- He says women should take action to lower their risk of heart disease.

RELATED TOPICS
Heart disease
Women's health

For the women diagnosed with heart disease, there is a significant impact on their lives, including physically, emotionally and financially. Female heart disease patients face a considerable financial burden that continues the rest of their lives. The CDC conservatively estimated that heart disease cost one person $121,200 over 20 years. Individuals who require surgery or ongoing care may pay more than $4.8 million over a lifetime.

"Because of these high costs, it's time all American women take what responsibility they can to lower their risk of cardiovascular disease," said Dr. Edward S. Cooper, a heart specialist.

"This means learning about the major modifiable risk factors for heart disease and stroke. These include high blood pressure, high blood cholesterol, cigarette smoke and physical inactivity," Cooper said.

The significant costs associated with heart disease are further intensified because many individuals become too sick to earn a steady income, according to study findings.

To prevent the financial burden of heart disease, Cooper stressed the importance of getting treatment immediately not only for heart attacks but for strokes.

Health officials have said women are often too casual about the symptoms of strokes that include sudden weakness on one side of the body or sudden loss of vision. Other symptoms include loss of speech or unexplained headaches or dizziness.

"Responding promptly to any of these early warning signs by calling your local emergency medical service means faster treatment and a potentially healthier outcome," Cooper said.

Fortunately, women can help themselves financially by taking action to either prevent heart disease or avoid serious damage if it does happen. In both situations, women are responsible for knowing not only knowing their bodies but also listening for problems and seeking medical help if needed.

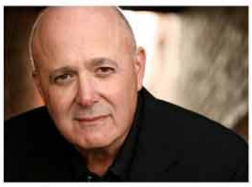
Control Editorial B

The Journal OPINION

EDITORIAL

Economic initiatives are opposite of bold

January 25, 2010 1:49 p.m. EST



STORY HIGHLIGHTS

- Obama administration announced two economic initiatives.
- He says Americans need more.
- It would take at least 10 million new jobs to fill the hole in the job market.
- He says there are more needs to be taken care of.

RELATED TOPICS
Economy
Unemployment

By: William M. Matherston

Seattle—In and of themselves, the economic initiatives announced this week by the Obama administration are not objectionable.

One is a modest package of tax credits and other subsidies intended to help middle-class Americans with some big expenses, such as day care, student-loan payments and retirement savings. The other, intended to signal President Obama's willingness to cut the budget deficit, calls for a three-year spending freeze in many discretionary domestic programs and for increases no greater than inflation after that. The freeze would apply to lower priority programs in a sliver of the overall budget, while spending on administration priorities, including education and environment, would continue to grow.

The freeze would have a relatively small effect on spending — about $10 billion less in 2011 out of about $500 billion in programs. It would be foolish to cut any more deeply when the economy is still so troubled. The real value of the freeze would lie in Mr. Obama's ability to use it politically, if he could trade this deficit reduction for lawmakers' votes on a jobs bill this year.

The problem with the initiatives is that even if they work as planned, Americans need much more. They need leadership that is more inspired and an agenda that is bigger and more detailed than these ideas. The country desperately needs bold moves.

The Obama administration has done some important things. Without last year's stimulus package, the economy would be in a far weaker state. Health care reform would be good for the economy and the budget, if it can be saved.

But there's a crater in the economy where the job market used to be. It's a hole so deep that it would take at least 10 million new jobs to fill it. There are more than six jobless workers for every job opening, which means prolonged spells of unemployment for many of the nation's 15.3 million jobless workers.

A lack of jobs also means delays in getting hired or lower entry-level wages for millions of high school and college graduates. It portends little to no wage gains well into the future for millions of underemployed Americans, and even for the majority who have held on to their jobs as the economy has tanked. It means intractable budget deficits. Because without new jobs, economic performance and tax revenues will remain inadequate.

Mr. Obama owes the country an unflinching assessment of the dire job situation and a plan for fixing it that starts with a commitment to lead the effort himself. If he leaves it up to Congress, lawmakers are unlikely to deliver. Even the $154 billion jobs bill passed by the House in December is only a starting point for the repair and recovery work that needs to be done.

To create jobs, Mr. Obama must make it clear that he will not abandon the states at this time of budget crises. Bolstered aid to states is unpopular. But it is among the surest ways to preserve and create jobs because the money is pushed through quickly to employees, contractors and beneficiaries. The alternative is recovery-killing spending cuts and tax increases on the state level.

Mr. Obama also must champion increased small business lending and direct creation of both skilled and low-skilled jobs. He must embrace ways to pay for initiatives, such as redeploying money from the bank bailout or endorsing a financial-transactions tax on Wall Street.

The danger is that the initiatives announced so far this week will move to center stage, eclipsing more difficult and more important needs. It is Mr. Obama's job to make sure that does not happen.

Societal Editorial C

The Journal OPINION

EDITORIAL

Women's heart issues remain under the radar

January 25, 2010 4:48 p.m. PST

By: Mary L. Sanderson

Seattle—The loss of NBC journalist Tim Russert to a sudden fatal heart attack in 2008 focused much needed media attention on heart disease, the nation's leading cause of death for Americans.

But despite the increased media coverage, one important public health issue continues to be missed – the persistent and unacceptable disparities in the care of female and male heart patients.

The reasons for the disparities are varied. Most importantly, doctors and other key medical personnel are not aware of the heart disease risk that women face. According to a recent survey, fewer than one in five physicians knew that more women than men die of cardiovascular diseases each year.

In an effort to tackle this issue, the HEART for Women Act was reintroduced to Congress this year. This legislation will authorize grants to help educate medical professionals about the unique aspects of care for women in the prevention and treatment of cardiovascular diseases.

This HEART for Women Act is crucial because heart disease is perceived as an affliction of older men, not women in their 40s and 50s. Yet, 36 million women are at risk of heart disease. Eight million women, 10 percent of women ages 45 to 65 and 24 percent of women over 65, live with the disease. If their heart disease leads to a heart attack, women are more likely than men to die as a result. If women survive, they are more likely to have a second attack within six months.

Medical professionals often have difficulty in diagnosing heart disease in women. Its symptoms can be subtle, even invisible. Nearly two-thirds of women who die suddenly of a heart attack had no prior symptoms.

But even when heart disease is suspected and cardiac tests are conducted, they can be inaccurate. For example, women are twice as likely as men to have "normal" or "mild" results on an exam of their heart's blood vessels, even when other tests confirmed that the women were having a heart attack.

The HEART for Women Act also would tighten Food and Drug Administration requirements for reporting data about new and experimental medicines and devices by gender. This would help pinpoint how to better identify the symptoms of women's heart disease and prevent it.

Today, women are less likely to receive the preventive care they need, even when their heart disease is obvious. A May 2008 study showed that women were significantly less likely than men to receive medications to prevent further heart problems. They were also less likely to receive treatments to open their blood vessels. Other research has shown that women receive only 28 percent of implantable defibrillators and 36 percent of open-heart surgeries. Even aspirin is less likely to be prescribed to women heart patients.

The proposed legislation also will expand cost-effective screening programs for low-income, uninsured women at risk for heart disease and stroke.

Given such disparities in heart health care, it is no wonder that public health concern of heart disease is increasing in women and decreasing in men.

Solutions urgently are needed, and they must be varied. All physicians need to fully acknowledge the risks of heart disease in women and work together with their patients to prevent it, detect it early, accurately diagnosis it, and properly treat it.

Heart disease in women is a matter of concern for everyone. We as a nation must urge Congress to pass the HEART for Women Act to improve the prevention and treatment of heart disease, stroke and other cardiovascular diseases in women through improved education of doctors. Visit the American Heart Association Web site at www.americanheart.org to find out how you can be an advocate.

We know society can work together to reduce heart disease in men. We should do no less for women. With millions of women at risk, it's just too big a story to be ignored any longer.

STORY HIGHLIGHTS

- She says people need to pay attention to the disparities in the care of female and male heart patients.
- One in five physicians knew that more women than men die of cardiovascular diseases each year.
- The HEART for Women Act would enact several policies to increase awareness and help prevent and treat heart disease in women.
- She says heart disease in women is a matter of concern for everyone.

RELATED TOPICS
Heart disease
Women's health

Individual Editorial C

The Journal OPINION

EDITORIAL

Women's heart issues remain under the radar

January 25, 2010 4:48 p.m. EST

STORY HIGHLIGHTS

- She says people need to pay attention to the disparities in the care of female and male heart patients.
- Women often do not consider heart disease as a serious personal health risk.
- Heart disease is mistakenly perceived to be an affliction only of older men.
- She says women should take responsibility for their health.

RELATED TOPICS
Heart disease
Women's health

By: Mary L. Sanderson

New York—The loss of NBC journalist Tim Russert to a sudden fatal heart attack in 2008 focused much needed media attention on heart disease, the nation's leading cause of death for Americans.

But despite the increased media coverage, one important health issue continues to be missed – the dangers of heart disease among women.

The reasons are varied. First and foremost, women are not aware of the risk of heart disease that they face. According to a recent survey, women often do not consider heart disease as a serious personal health risk but report breast cancer as the greatest health problem facing them. Yet, the statistics show that 41,116 women died of breast cancer in 2005 compared to 454,613 women who died of heart disease.

Additionally, women in the survey admitted they are not well informed about heart disease and its risk factors, which are unhealthy diet, physical inactivity and tobacco use. High blood pressure and high cholesterol are also important determinants in developing the disease. Although younger women are at risk, women older than 65 have a one in four chance of being diagnosed with heart disease.

Heart disease is stereotypically perceived as an affliction of older men, not women in their 40s and 50s. However, 36 million women are at risk of heart disease. Eight million women, 10 percent of women ages 45 to 65 and 24 percent of women over 65, live with the disease. If their heart disease leads to heart attack, women are more likely than men to die as a result, or if they survive, to have a second attack within six months.

In addition, medical professionals have difficulty in diagnosing heart disease in women. Its symptoms can be subtle, even invisible. Nearly two-thirds of women who die suddenly of a heart attack had no prior symptoms.

Arteriosclerosis, a progressive buildup of plaque in the arteries, is often the undetected culprit. But even when heart disease is suspected and cardiac tests are conducted, they can be inaccurate. For example, women are twice as likely as men to have "normal" or "mild" results on an exam of their heart's blood vessels, even when other tests confirmed that the women were having a heart attack.

When women take responsibility for their health, not only can they recognize the symptoms of heart disease as they appear, but they can also learn how to prevent the disease. Women should do their research on the latest medicines and treatments, so they arrive at the doctor's office prepared to ask the right questions. Instead of waiting for physician to bring up heart disease, women should be assertive and express their concerns regarding their risks.

Today, women are less likely to receive the therapeutic or preventive care they need, even when their heart disease is obvious. A May 2008 study showed that women were significantly less likely than men to receive medications to prevent further heart problems as well as treatments to open their blood vessels. Other research has shown that women receive only 28 percent of implantable defibrillators and 36 percent of open-heart surgeries. Even aspirin is less likely to be prescribed to women heart patients.

Solutions urgently are needed, and they must be varied. First and foremost, women need to learn about their risks of heart disease, pursue regular heart health check-ups and be committed to making lifestyle changes. These changes include improving their diets, quitting smoking, and controlling blood pressure and cholesterol, which are all necessary for their heart health.

We know we can reduce heart disease in men. Now it is time for women to step up. With millions at risk, it's just too big a story to be ignored any longer.

Control Editorial C

The Journal OPINION

EDITORIAL

Banks need tough love

STORY HIGHLIGHTS

- She says more needs to be done to prevent another financial collapse.
- Obama's approach is to mend the current system.
- Questions remain if the plan will fix Wall Street.
- Congress needs to assess the role of the Federal Reserve.

RELATED TOPICS
Banking
Finance industry

By: Mary L. Sanderson

New York—President Obama is on the right track with his proposal for greater regulation of Wall Street, but a more muscular plan may be needed to prevent another financial collapse.

The need for more effective oversight of the financial industry is clear. The titans of investment banking risked too much on shaky mortgage-backed securities. They didn't make sure they could cover potential losses. But neither the Securities and Exchange Commission, nor the Federal Reserve, nor a host of other government regulators did much to prevent the calamity.

The result was an emergency $800 billion taxpayer bailout of the banking industry last fall, coupled with shareholders' losses of at least $8 trillion in the stock market. Quick action by the federal government prevented a total meltdown, but taxpayers will be burdened with the fallout for decades.

Faced with cleaning up the mess, Obama has proposed a wide-ranging overhaul of the financial regulatory system. He would address nearly every aspect of the industry, from those diabolical credit-default swaps to what to do about institutions deemed "too big to fail."

The president's plan would give the Federal Reserve new regulatory powers, create a new agency to protect consumers, and give the federal government authority to take over failing investment banks.

Obama's approach is to mend the current system, rather than to bring in a wrecking ball and start over. It's a relatively cautious strategy, perhaps cognizant of the concern that the federal government has already become too involved in private industry.

But questions remain about whether this plan will change Wall Street's bad habits.

Obama and Treasury Secretary Timothy Geithner, a former Fed official, want the central bank to take on the new responsibility of regulating large financial institutions whose failure would threaten the overall economy. Yet it was the Fed that failed to detect quickly or respond effectively to the risks posed by the housing bubble.

Also, the Fed traditionally has been a secretive agency with its decisions hidden from public view. Lawmakers in both parties are pushing for audits of the Fed and more openness that could come with expanded authority.

Obama's overhaul also would create a Financial Services Oversight Council to target emerging risks to the economy. Geithner would lead the panel, which would include the Fed chairman and other regulators.

Geither told lawmakers Thursday that the Fed would be the best single agency to react quickly in a crisis. But Congress also needs to assess whether this plan would have the Federal Reserve give up its independence and compromise its role as the establisher of monetary policy.

Survey

Thank you for your interest in the study. This survey will ask for your opinions about the media and heart disease in women. Participation in the survey is entirely voluntary. You may skip questions you do not wish to answer, and you can stop participation without penalty at any time.

This study includes two sessions. The following survey is the first session. In one to two weeks, you will be contacted by email to complete the second session, which will involve reading a set of newspaper articles and responding to another survey.

Individuals who complete both sessions of the study will be entered into a drawing for a $200 gift card, $100 gift card, or one of eight movie gift sets worth $40. Each movie gift set includes four $10 gift cards that you can use at the local movie theater.

Information provided in the study is confidential and will not be used to identify any individuals in any way. Only the researcher of the study has access to the data. If you have questions regarding the survey questions, feel free to contact Cassie Norman at cmnorman@wsu.edu or her faculty advisor Dr. Stacey Hust at sjhust@wsu.edu.

*Are you 18 years old or older?
- Yes
- No

*Are you a female WSU staff member?
- Yes
- No

*Do you agree to take this survey?
- Yes
- No

The following questions ask you to provide specific digits of you WSU ID number and the first two letters of your first name. This creates a unique identification number that will only be used to match your responses on this survey to your responses in the second part of the study.

*Please enter the first number of your WSU ID Number.

*Please enter the third number of your WSU ID Number.

*Please enter the fifth number of your WSU ID Number.

*Please enter the seventh number of your WSU ID Number.

*Please enter the first two letters of your first name.

The following questions ask you about your media use. Please answer each question to the best of your ability.

On a scale of 1 to 7, with 1 being "None" and 7 being "A lot", please indicate how much attention you pay to the following media.

	None						A lot
Music	1	2	3	4	5	6	7
Radio	1	2	3	4	5	6	7
National newspapers (i.e. New York Times, USA Today)	1	2	3	4	5	6	7
The Internet (excluding emails and social network sites)	1	2	3	4	5	6	7
Local newspapers (i.e. Spokesman Review, Seattle Times but NOT the Daily Evergreen)	1	2	3	4	5	6	7
Television	1	2	3	4	5	6	7
Magazines	1	2	3	4	5	6	7

Please check which of the following is your PRIMARY source for information about current events (please check only one)

- Radio
- Internet
- Television
- Newspaper
- Parents
- Friends
- Other (please specify)
  [ ]

Typically, how many days per week do you read The Daily Evergreen?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- I don't read The Daily Evergreen

Do you have a subscription to a newspaper?

- Yes
- No

On a scale of 1 to 7, with 1 being "None" and 7 being "A lot", please indicate how much attention you pay to the following sections of a newspaper.

	None lot						A
Editorial/Opinions	1	2	3	4	5	6	7
National News	1	2	3	4	5	6	7
Sports	1	2	3	4	5	6	7
Arts/Entertainment	1	2	3	4	5	6	7
Local News	1	2	3	4	5	6	7

The following questions ask for your opinions about newspapers. Please indicate your opinion on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree." Some of the questions are reversed, please read each question carefully.

Most newspaper articles I read…	Strongly Disagree						Strongly Agree
are accurate.	1	2	3	4	5	6	7
are unbiased.	1	2	3	4	5	6	7
are not credible.	1	2	3	4	5	6	7
are interesting.	1	2	3	4	5	6	7
are of high quality.	1	2	3	4	5	6	7
are not informative.	1	2	3	4	5	6	7
are not timely.	1	2	3	4	5	6	7
are trustworthy.	1	2	3	4	5	6	7

Please indicate how important or unimportant each of the following is as a source of health information.

	Not important at all						Very important
Family	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
Internet (excluding emails and social network sites)	1	2	3	4	5	6	7
Magazines	1	2	3	4	5	6	7
Medical Staff	1	2	3	4	5	6	7
Newspaper	1	2	3	4	5	6	7
Radio	1	2	3	4	5	6	7
Television	1	2	3	4	5	6	7
Other	1	2	3	4	5	6	7

The following questions ask you to think about the American Heart Association. Please indicate to what extent you agree or disagree with the following statements, on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

The American Heart Association…	Strongly Disagree						Strongly Agree
Helps the residents in a community.	1	2	3	4	5	6	7
Helps women who suffer from heart disease.	1	2	3	4	5	6	7
Helps men who suffer from heart disease.	1	2	3	4	5	6	7
Helps change public policy related to research about heart disease in women.	1	2	3	4	5	6	7
Collects statistics on heart disease in women.	1	2	3	4	5	6	7
Helps change public policy related to treatments available for heart disease.	1	2	3	4	5	6	7
Lobbies for legislation to help prevent heart disease in women.	1	2	3	4	5	6	7
Promotes healthy lifestyle choices to decrease heart disease risk in women.	1	2	3	4	5	6	7
Should redirect their attention to more pressing health concerns.	1	2	3	4	5	6	7
Is important to a community.	1	2	3	4	5	6	7
Plays an important role in the public's health.	1	2	3	4	5	6	7
Should coordinate more with other health organizations.	1	2	3	4	5	6	7
Helps lobby for reporting gender-specific research on heart disease.	1	2	3	4	5	6	7
Raises awareness of heart disease in women.	1	2	3	4	5	6	7
Ensures research about heart disease includes female participants.	1	2	3	4	5	6	7
Primarily helps only individuals who suffer from heart disease.	1	2	3	4	5	6	7
Should focus more on heart disease among women.	1	2	3	4	5	6	7

The following questions ask for your beliefs about heart disease. Please indicate how much you agree or disagree with the following statements, on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

	Strongly Disagree						Strongly Agree
Only women with heart disease suffer the health problems associated with the disease.	1	2	3	4	5	6	7
Heart disease in women is not associated with an economic burden to society.	1	2	3	4	5	6	7
Most women with heart disease are overweight.	1	2	3	4	5	6	7
Cancer poses more of a problem for women than heart disease does.	1	2	3	4	5	6	7
Chronic lower respiratory diseases pose more of a problem for women than heart disease does.	1	2	3	4	5	6	7
Heart disease primarily affects women with the disease.	1	2	3	4	5	6	7
Heart disease in women affects the entire community.	1	2	3	4	5	6	7
Heart disease in women is a national problem.	1	2	3	4	5	6	7
Heart disease is problematic for women who have the disease.	1	2	3	4	5	6	7
Many individuals are effected when a woman is diagnosed with heart disease.	1	2	3	4	5	6	7

The following questions ask for your beliefs about heart disease. Please indicate how much you agree or disagree with the following statements, on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

	Strongly Disagree						Strongly Agree
Research on women and heart disease is important.	1	2	3	4	5	6	7
Heart disease in women negatively impacts work productivity.	1	2	3	4	5	6	7
Women with heart disease seek hospital treatment far more often than individuals with other health problems.	1	2	3	4	5	6	7
Other diseases, like cancer and diabetes, cause more problems for our society than heart disease in women.	1	2	3	4	5	6	7
Heart disease in women is a problem in Washington state.	1	2	3	4	5	6	7
Families are an important support system for women with heart disease.							

I'm concerned that women with heart disease will use health services (e.g. the hospital) more than others.	1	2	3	4	5	6	7
More research is needed on women and heart disease.	1	2	3	4	5	6	7
Heart disease can affect a woman's productivity at work.	1	2	3	4	5	6	7
Heart disease in women impacts the work productivity of everyone.	1	2	3	4	5	6	7
Heart disease is only harmful to the women who have the disease.	1	2	3	4	5	6	7
The families of women with heart disease undergo stress.							

The following questions ask how much you agree that each item contributes to heart disease. Please indicate how much you agree or disagree on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

	Strongly Disagree						Strongly Agree
Increasing age	1	2	3	4	5	6	7
Physical inactivity	1	2	3	4	5	6	7
Stress	1	2	3	4	5	6	7
Smoking	1	2	3	4	5	6	7
Poor dental hygiene	1	2	3	4	5	6	7
Obesity	1	2	3	4	5	6	7
High blood pressure	1	2	3	4	5	6	7
High blood cholesterol	1	2	3	4	5	6	7
Geographic location	1	2	3	4	5	6	7
Family history of heart disease	1	2	3	4	5	6	7
Diabetes	1	2	3	4	5	6	7
Occupation	1	2	3	4	5	6	7

Please indicate how concerned you are about experiencing each of the following health issues, with 1 being "Not Concerned" and 7 being "Very Concerned."

	Not Very Concerned						Concerned
Cancer	1	2	3	4	5	6	7
Alzheimer's disease	1	2	3	4	5	6	7
Influenza and pneumonia	1	2	3	4	5	6	7
Heart disease	1	2	3	4	5	6	7

Diabetes	1	2	3	4	5	6	7
Chronic lower respiratory diseases (emphysema and chronic bronchitis)	1	2	3	4	5	6	7
Stroke	1	2	3	4	5	6	7
Kidney disease	1	2	3	4	5	6	7
Autoimmune disease	1	2	3	4	5	6	7

The following questions ask to what extent you are concerned with the potential effects of being diagnosed with heart disease, with 1 being "Not Concerned At All" and 7 being "Very Concerned."

	Not Concerned At All Concerned						Very
Physical inactivity	1	2	3	4	5	6	7
Constant fatigue	1	2	3	4	5	6	7
Organ failure	1	2	3	4	5	6	7
Fluctuating blood pressure	1	2	3	4	5	6	7
Death related to heart disease	1	2	3	4	5	6	7
Physical disability	1	2	3	4	5	6	7
Depression	1	2	3	4	5	6	7
Mental stress	1	2	3	4	5	6	7
Fetal or maternal death	1	2	3	4	5	6	7

The following questions ask for your opinions about heart disease in your family. Please indicate your opinions on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

Heart disease among my family…	Strongly Disagree Agree						Strongly
Has negative impacts on society.	1	2	3	4	5	6	7
Would worry me.	1	2	3	4	5	6	7
Is beyond my control.	1	2	3	4	5	6	7
Is acceptable.	1	2	3	4	5	6	7
Poses risks to my community.	1	2	3	4	5	6	7
Is their choice.	1	2	3	4	5	6	7
Does not affect me.	1	2	3	4	5	6	7

The following questions ask for your opinions about heart disease in others. Please indicate your opinions on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

Heart disease in others…	Strongly Disagree						Strongly Agree
Has negative impacts on society.	1	2	3	4	5	6	7
Would worry me.	1	2	3	4	5	6	7
Is beyond my control.	1	2	3	4	5	6	7
Is acceptable.	1	2	3	4	5	6	7
Poses risks to my community.	1	2	3	4	5	6	7
Is their choice.	1	2	3	4	5	6	7
Does not affect me.	1	2	3	4	5	6	7

Please indicate how much you agree or disagree with each of the following statements, on a scale of 1 to 7, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

	Strongly Disagree						Strongly Agree
Citizens would benefit if journalists discussed public policies related to heart disease in women.	1	2	3	4	5	6	7
When publishing an article about heart disease in women, it is important for journalists to provide readers with the contact numbers for heart disease organizations.	1	2	3	4	5	6	7
Newspaper stories about heart disease in women primarily focus on its risk factors.	1	2	3	4	5	6	7
Journalists should interview health practitioners when they write stories about heart disease in women.	1	2	3	4	5	6	7
Newspaper articles about heart disease in women often provide readers with information about how to prevent the disease.	1	2	3	4	5	6	7
When they write articles about heart disease in women, journalists should mention the health risks.	1	2	3	4	5	6	7
Editorials about heart disease primarily focus on the disease's effects on the person with heart disease.	1	2	3	4	5	6	7
Newspaper articles about heart disease in women rarely discuss public policies related to the disease.	1	2	3	4	5	6	7

Please indicate how often each of the following portray heart disease in women, with 1 being "Not Very Often" and 7 being "Very Often."

	Not Very Often						Very Often
Newspapers	1	2	3	4	5	6	7
Television	1	2	3	4	5	6	7
Women's magazines	1	2	3	4	5	6	7
Women's health magazines	1	2	3	4	5	6	7

Please indicate how likely you will do the following activities in the next year, with 1 being "Very Unlikely" and 7 being "Very Likely."

	Very Very Unlikely						Likely
Visit external resources (such as a web site) related to heart disease in women.	1	2	3	4	5	6	7
Send an email or make a phone call to your lawmakers asking for their support of a bill related to heart disease in women.	1	2	3	4	5	6	7
Stop by your lawmaker's local office to deliver information about heart disease issues related to women.	1	2	3	4	5	6	7
Attend a town hall meeting in your area discussing heart disease in women.	1	2	3	4	5	6	7
Write a letter to the editor of your local paper about heart disease in women.	1	2	3	4	5	6	7
Get friends and family involved on the topic of heart disease and women.	1	2	3	4	5	6	7
Donate time to an organization committed to heart disease in women.	1	2	3	4	5	6	7
Donate money to an organization committed to heart disease in women.	1	2	3	4	5	6	7

Please indicate how likely you will do the following activities in the next year, with 1 being "Very Unlikely" and 7 being "Very Likely."

	Very Very Unlikely						Likely
Tell your friends about issues regarding heart disease in women.	1	2	3	4	5	6	7
Write a letter to the editor about heart disease in women.	1	2	3	4	5	6	7
Contact a policy maker who makes decisions about heart disease.	1	2	3	4	5	6	7
Participate in community efforts to prevent heart disease in women.	1	2	3	4	5	6	7
Volunteer at a local health organization that tries to prevent heart disease in women.	1	2	3	4	5	6	7

Please indicate your opinion about the articles you just read on a 1 to 7 scale, with 1 being "Strongly Disagree" and 7 being "Strongly Agree."

	Strongly Disagree						Strongly Agree
The articles focused on how heart disease in women primarily affects those who have the disease.	1	2	3	4	5	6	7
The articles focused on how heart disease in women can affect the lives of individuals who do not have the disease.	1	2	3	4	5	6	7
The articles emphasized that heart disease in women is problematic for those who do drugs.	1	2	3	4	5	6	7
The articles emphasized that heart disease in women is problematic for everyone in a community.	1	2	3	4	5	6	7
The article emphasized the impacts of heart disease in women in relation to other health problems.	1	2	3	4	5	6	7
The article discussed the impacts of heart disease in women on other public resources, such as work productivity and hospital use.	1	2	3	4	5	6	7
The article emphasized the consequences of heart disease in relation to personal health.	1	2	3	4	5	6	7
The article made it seem that even people without heart disease should be interested in laws related to the disease.	1	2	3	4	5	6	7
The article made it seem that only those women with heart disease suffer problems associated with the disease.	1	2	3	4	5	6	7

What is your age?

What is your ethnicity or race?

- African-American/Black
- Latina/Hispanic
- Asian/Pacific Islander
- Native American/Alaskan Native
- Caucasian/White
- Other

What is the highest grade or year of school you completed?

- Grades 9-11 (Some high school)
- Grade 12 or GED (High school graduate)
- College 1 year to 3 years (Some college or technical school)
- College 4 years or more (College graduate)
- Post graduate (Some post graduate school)
- Post graduate (Post graduate degree)

What is your annual household income from all sources?

- Less than $10,000
- $10,000 to less than $15,000
- $15,000 to less than $20,000
- $20,000 to less than $25,000
- $25,000 to less than $35,000
- $35,000 to less than $50,000
- $50,000 to less than $75,000
- $75,000 or more

About how tall are you without shoes?

About how much do you weigh without shoes?

During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?

- Yes
- No
- Don't know

When you are at work, which of the following best describes what you do?

- Mostly sitting or standing
- Mostly walking
- Mostly heavy labor or physically demanding work
- Don't know

Do you now smoke cigarettes every day, some days, or not at all?

- Every day
- Some days
- Not at all
- Don't know

Have you EVER been told by a doctor that you have diabetes?

- Yes
- Yes, but only during pregnancy
- No
- No, pre-diabetes or borderline diabetes
- Don't know

Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?

- Yes
- Yes, but only during pregnancy
- No
- No, borderline high or pre-hypertensive
- Don't know

Has a doctor, nurse, or other health professional EVER told you that your blood cholesterol is high?

- Yes
- No
- Don't know

Has a doctor, nurse, or other health professional EVER told you that you had a heart attack, also called a myocardial infarction?

- Yes
- No
- Don't know

Has a doctor, nurse, or other health professional EVER told you that you had angina or coronary heart disease?

- Yes
- No
- Don't know

Has a doctor, nurse, or other health professional EVER told you that you had a stroke?

- Yes
- No
- Don't know

Have you ever had an IMMEDIATE FAMILY MEMBER told by a doctor, nurse, or other health professional that he or she had a heart attack, also called a myocardial infarction?

- Yes
- No
- Don't know

Have you ever had an IMMEDIATE FAMILY MEMBER told by a doctor, nurse, or other health professional that he or she had angina or coronary heart disease?

- Yes
- No
- Don't know

Have you ever had an IMMEDIATE FAMILY MEMBER told by a doctor, nurse, or other health professional that he or she had a stroke?

- Yes
- No
- Don't know

Have you ever had a CLOSE FRIEND told by a doctor, nurse, or other health professional that he or she had a heart attack, also called a myocardial infarction?

- Yes
- No
- Don't know

Have you ever had a CLOSE FRIEND told by a doctor, nurse, or other health professional that he or she had angina or coronary heart disease?

- Yes
- No
- Don't know

Have you ever had a CLOSE FRIEND told by a doctor, nurse, or other health professional that he or she had a stroke?

- Yes
- No
- Don't know

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