## FROM THE INSTRUCTOR

In "When Awareness Is Not Enough" Meghan Robbins explores a weighty problem: Why are women still dying of heart attacks at a higher rate than men, despite the success of recent awareness campaigns educating women about symptoms? The explanation Meghan offers for this persistent gender gap is a fascinating example of the ways biology and culture interact. She wrote the essay as part of a semester-long independent inquiry in WR 150: "Representing Illness," which is part of the Genre and Audience cluster.

Though Meghan's essay is driven by passion, even outrage, her argument is precise and carefully supported. It was hard for Meghan to achieve this balance as she drafted, but a series of opportunities for peer review, including a cross-section exchange with Gwen Kordonowy's students, helped her refine her rhetoric in a way that satisfied the expectations of the kind of academic reader WR 150 students are learning to become. Meghan's essay offers an inspiring example of how the best academic writing marshals passion to serve logic and marshals logic to serve passion. It also shows that Meghan's high school English teacher is right: Aspiring doctors should keep writing!

Sarah Madsen Hardy WR 150: Representing Illness

## FROM THE WRITER

The inspiration for this essay came from my own experiences as a patient as well as my observations made while volunteering in the emergency department of a hospital. I noticed that physicians seemed to be more skeptical of the symptoms female patients reported than those that male patients reported. I wondered how this apparent gender bias affected the tests and treatments physicians administered. Cardiovascular disease proved to be the best illness with which to expound upon my ideas because it is so closely associated with men despite being the leading cause of death in women. Through careful, balanced analysis of statistics surrounding cardiovascular disease as well as the personal stories of female patients with the disease, I was able to explore what it means to be a woman navigating the healthcare system.

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## WHEN AWARENESS IS NOT ENOUGH: TRIVIALIZATION OF WOMEN'S SYMPTOMS AND THE GENDER GAP IN THE OUTCOMES OF CARDIOVASCULAR DISEASE PATIENTS

Abstract: To date, attempts to close the gender gap in the treatment of cardiovascular disease have included women as subjects in medical research studies and education about female cardiovascular disease symptoms. However, despite the decrease in mortality for both genders since the early 2000s when The Heart Truth and Go Red For Women started, statistical data shows a persistent gender gap in both the treatment and mortality of cardiovascular disease. Women's accounts of the dismissal of their self-reported symptoms in medical settings as well as academic studies on the same topic will be used to show that gender bias against women influences physicians to administer far fewer diagnostic tests and treatments for cardiovascular disease in women than in men, resulting in higher mortality for female patients with the disease. This suggests that it is the physicians, not the patients, who are responsible for the gender gap in cardiovascular disease patient outcomes.

For decades, physicians and scholars have been confounded by the mortality rate of women with cardiovascular disease (CVD), which was much higher than the mortality rate of men. Since historically scholars thought of CVD as a male problem, they commonly assumed that females' lack of knowledge about the symptoms of CVD in women caused the gender gap in the treatment and mortality of CVD. It seemed plausible that without access to gender-specific knowledge about CVD, women would be hesitant to seek medical attention or would not report that they had experienced key heart-related symptoms. In response, public health campaigns like The Heart Truth, well known for its related Red Dress Campaign, and Go Red For Women succeeded in systematically educating women about the symptoms and risk factors of the disease beginning in early 2002 and 2004, respectively. However, at the same time the gender gap in mortality for myocardial infarction, commonly known as a heart attack, stagnated, and the gender gap in implementation of several treatments for CVD increased (Cohen et al. E1165). Raising awareness of CVD in women has not reduced the gender gap in treatment and mortality of the disease.

The fact that the gender gap in treatment and mortality of CVD has not improved suggests that a factor other than lack of awareness is perpetuating the gap. In assessing the results of CVD awareness campaigns, their sponsoring institutions like the National Heart, Lung, and Blood Institute and the American Heart Association fail to address the relationship between patient outcomes and increased awareness, and the problem of gender inequality in the treatment of women with CVD has persisted. In establishing these campaigns, these two organizations assumed that the female patients themselves played the largest role in determining the outcome of their cardiac event so that by giving them the tools to recognize and take action in response to CVD, and in particular a myocardial infarction, patient outcomes of women should have drastically improved. However, this assumption ignores the role of the physicians who failed to efficiently diagnose and treat women's cardiac events despite the higher numbers of women accurately reporting heart-related symptoms.

This would seem to indicate that the gender gap in the treatment and mortality rate of CVD is not caused by a lack of awareness in female patients, but another factor, which more thorough analysis suggests to be the unwillingness of physicians to give credence to women's self-reports of symptoms due to gender bias.

It is evident that awareness of CVD in women became widespread because the results of The Heart Truth campaign and Go Red for Women were studied extensively through surveys of women from a variety of backgrounds from the time the programs were created until 2007 and 2012, respectively. Between 1997 and 2012, the percentage of women aware that cardiovascular disease was the number one killer of women rose from 30 percent to 56 percent (Mosca et al. 1257), and women's answers to survey questions began to reflect that they understood that risk of cardiovascular disease was a continuum and that they were not completely protected just because they lacked certain risk factors, such as a family history of the disease (Brown S61). Women also became more knowledgeable about the prevention and common symptoms of cardiovascular disease in women by 2012 (Mosca et al. 1257). The increased availability of educational programs about CVD, as well as informational material online, helped increase awareness of CVD in women across the whole country, so that women would be empowered to seek medical treatment for a suspected cardiac event (Wayman et al. 40). Because of awareness campaigns, the majority of women would know when medical intervention was necessary and be prepared to explain crucial heart-related symptoms to healthcare professionals. There is no question that the goal of awareness was achieved, but the larger goal of closing the gender gap in the treatment and mortality of CVD has remained elusive. The gender gap has not seen the improvement that was expected as the result of CVD awareness campaigns.

A primary example of these campaigns' ineffectiveness is that throughout the 1990s and 2000s the mortality of CVD in young women saw no significant improvement, though this was masked by the larger decrease in mortality of CVD when all demographics are combined (Wilmot et al. 997-998). Additionally, a study published in order to illustrate the degree of effectiveness of The Heart Truth's Red Dress Campaign shows that from the time it was first implemented in 2002 until 2007, mortality of women who had an acute myocardial infarction was higher than the mortality of men under the same conditions, whether at the time of the incident or up to one year later (Cohen et al. E1165). Cohen's study of the Red Dress Campaign, as well as a later study, dispelled the possibility that a reduction in the mortality gender gap could have been lagging despite improvements in the gender gap of treatment and prevention. The study of the Red Dress Campaign's effectiveness showed that, of people who had acute myocardial infarctions, the percentage of men who received either left heart catheterization (LHC) or percutaneous coronary intervention (PCI) was greater than the percentage of women who received each of these treatments, and this difference between genders increased over the course of this period (Cohen, et al E1165). Another study published in 2015 and sponsored by the National Heart, Lung, and Blood Institute, which created The Heart Truth, stated that "women are 11% less likely to have been told they are at risk [of developing CVD] and are counseled regarding risk modification 16% less often than men," which contributes to the disparate mortality of women with CVD (Merz et al. 1958). Because women received increasingly less treatment than men for a myocardial infarction as well as less counseling to reduce their risk of CVD, women consistently died from cardiac events more frequently than men did during the period after The Heart Truth's Red Dress Campaign and Go Red For Women were started. Therefore, increased awareness did not help close the gender gap in CVD patient outcomes.

With lack of awareness discounted as a cause of the gender gap in the treatment and mortality for CVD, there must be an alternative factor resulting in its persistence. The correlation between increased awareness and an increase in the gender gap of treatment using LHC or PCI may

be a key in understanding this phenomenon. Increased awareness of CVD in women could have exaggerated some factor in the physician-patient relationship that was already present before awareness campaigns were implemented because women who were substantially better able to describe and interpret their symptoms than their predecessors were more likely to fail to receive treatment in their encounters with the healthcare system. The most effective mode of investigation, therefore, is to examine cases of women who had awareness of CVD symptoms but still experienced gender bias. Some such cases were publicized by the American Heart Association in order to show the benefits of CVD awareness. The women who shared these stories later became advocates for awareness of CVD. Ironically, their stories reveal that physicians' gender bias played a more influential role in their encounters with the healthcare system than their own awareness ("Stories of Women").

The stories of these women who experienced a cardiac event show that despite their ability to clearly articulate their symptoms, their physicians were dismissive towards them. Because they had an unusually extensive knowledge of CVD, when they each experienced a cardiac event, each woman went to the hospital soon after they experienced symptoms and told their doctors about their suspicions that they were having a cardiac event, which turned out to be true in each case ("Stories of Women"). For example, one story states that when Judith Leitner informed her physician about her family history of CVD, her high cholesterol, and her jaw pain, which is a symptom of myocardial infarction, she was still not taken seriously ("Stories of Women"). The physician told her, "Take another Pepcid, honey!" ("Stories of Women"). Leitner, who was well informed about CVD because of her family history, was immediately and insensitively contradicted by her physician, as if what she was saying could not possibly hold water ("Stories of Women"). This is all too common when women report pain, and her physician's words indicated that what she said had no influence on the decisions about her treatment. Men's reports of pain are more likely to be believed because men are seen as being stoic in the face of most painful symptoms due to being socialized to be less emotionally expressive (Hoffman and Tarzian 17). This being the case, it is assumed that if they report pain it must be "real" and worthy of immediate medical attention (18-19). Women's reports of pain, on the other hand, although more accurate because they are free of the particular social expectations placed on men, are often dismissed as emotional or psychosomatic responses (17). Although Leitner later learned she needed a quadruple bypass surgery as a result of the first physician's dismissal of her symptoms and medical history, she suffered a stroke following the procedure because her condition had worsened so much during that time ("Stories of Women").

The primary reason for the physician's dismissive reaction is that, armed with knowledge, Leitner assertively explained her symptoms in the context of a heart problem, so perhaps the physician was taken aback by this and responded by ignoring her symptoms in an attempt to restore the balance of power in the situation. Physicians generally hold a substantial amount of authority, and "women in Western societies are socialized to take turns in conversation, to downplay their own status . . ." (Hoffman and Tarzian 21). Women who are assertive because they fully believe themselves to have a heart problem are therefore rejecting their traditional social role when they interact with a physician, a figure of authority, the gender of whom makes no meaningful difference (Hoffman and Tarzian 21). In fact, the physicians who most strongly believe they are not biased are shown to be the most biased by an implicit bias test, and this group is not exclusive to men or women (Merz et al. 1958). That is to say, even female authority figures still hold other females to the societal expectation of weakness. This bias is seen when the physician calls Leitner "honey," a term which is also inherently belittling and may be an attempt to regain control of the conversation ("Stories of Women"). Women like Leitner who display confidence in their convictions are not adhering to the submissive role, and for those seeking treatment for CVD this has resulted in

physicians reacting by attempting to mute this confidence by trivializing their symptoms and refusing to provide treatment.

The false assumption that women's reports of symptoms tend to arise from emotional instability may be giving many physicians a false sense of confidence in their initial assessment of female patients, so they do not feel it necessary to run basic diagnostic tests. Susan Bradbury-Sneddon, who was knowledgeable about CVD because she volunteered for the American Heart Association, was misdiagnosed for years, told by doctors that she was being "overdramatic" and was "too young for any heart problems," even though she later had a myocardial infarction due to an untreated mitral valve prolapse ("Stories of Women"). Her experience reflects the fact that among people who are not hospitalized for a suspected cardiac event, women are less likely than men to receive a stress test, which is a routine diagnostic test that measures cardiovascular health (Hoffman and Tarzian 17). When Bradbury-Sneddon went to the hospital on another occasion suspecting a heart attack, she had to fight to be admitted, with the attending physician condescendingly telling her, "Come by the ER in the morning to tell me good-bye when you're dismissed" ("Stories of Women"). She had to have open-heart surgery the next day to repair a LAD fistula that would have caused her death within a few weeks ("Stories of Women"). This is another unfortunate example of the "Yentyl Syndrome" Hoffman and Tarzian describe in which women have to first prove beyond a doubt that they are as ill as male patients prior to eliciting an appropriate response from the physician (17). While physicians may think they are just assessing a patient to the best of their abilities, they may be allowing their judgment to be clouded by gender bias. Physicians' emotional responses to having their authority questioned by a woman appear to influence the course of treatment as opposed to doing what is medically best for the patient.

Allowing gender bias to influence a patient's diagnosis and course of treatment puts the patient's health at risk, especially if that patient happens to be less assertive when interacting with a physician. For some like the mother of Christine Faccio, who died of a myocardial infarction after repeatedly being told she had heartburn despite no diagnostic tests being performed, the realization that a woman has a severe heart problem comes too late to make a difference in the outcome because she lacks the confidence to question her physician's decisions ("Stories of Women"). Faccio's mother was not as assertive as Leitner and Bradbury-Sneddon because she did not have much knowledge of the symptoms of CVD in women since the incident took place before CVD awareness campaigns made any headway. Without the confidence of being well informed, Faccio's mother could not pose much of a challenge to her physician's authority ("Stories of Women"). Still, she experienced "Yentyl Syndrome," and because she was unable to prove her illness beyond a doubt, she died without treatment (Hoffman and Tarzian 17; "Stories of Women"). Faccio's mother's death shows that whether the woman is more assertive due to knowledge of CVD's symptoms like Leitner and Bradbury-Sneddon or not, she can still be negatively impacted by the gender bias of physicians. Gender bias inhibits medical decision-making regardless of whether the patient is passive or assertive when dealing with the physician as an authoritative figure.

It could be possible that if Faccio's mother had the knowledge she needed in order to be more assertive, she might have eventually received a diagnostic test that showed how precarious her situation was, but this is not the way medicine should be. It is unrealistic to expect all women to be willing to contradict an expert in the field of medicine like Bradbury-Sneddon did when she demanded to be admitted to the hospital ("Stories of Women"). Leitner said following her stroke, "I have learned the hard way that women need to be more assertive in taking care of their health care decisions" ("Stories of Women"). Beyond the statistical evidence of the gender gap in the treatment and mortality of CVD, women themselves can attest to the fact that female patients must press harder to have their symptoms taken seriously.

Because outcomes like that of Faccio's mother are not uncommon for women with CVD, Bradbury-Sneddon goes so far as to express gratitude for the outcome of her case. She says, "After living 49 years with an undiagnosed heart defect and 20 of those years in mild to severe pain, I am now living with a good prognosis because of the American Heart Association's education and programs. I am so very fortunate" ("Stories of Women"). While it is true her awareness due to the American Heart Association's work did motivate her to stay in the hospital against the advice of the emergency room physician, people must be careful when describing the positive impact of awareness of CVD in women. While it can help some women like Bradbury-Sneddon, its effects are limited. While Bradbury-Sneddon is fortunate to have "a good prognosis," instead of being grateful to be one of the lucky women who survived despite the negligence of her physician, her story should serve as a motivation not just to raise awareness of CVD in women, but also to demand equality in the treatment of this and all medical conditions. True gender equality in medicine cannot exist until receiving proper diagnosis and treatment of CVD is the rule, not the exception, for women.

Unequal access to healthcare is usually discussed in concrete terms, such as legal and financial barriers to health, but the gender gap in the treatment and mortality of CVD shows that inequality runs much deeper than that. It is present in every interaction a woman has with a healthcare provider, and women have to start to demand better. Receiving a simple diagnostic test or being admitted to a hospital for serious health concerns should not be a battle. The battle women should fight instead is to be treated with the same dignity and respect that men can expect, both within the healthcare system and in every aspect of life. Possibly even more important than demonstrating the negative health impacts that physicians' gender bias has on women with CVD, the stories of those three women reveal that society still views women as inherently less competent than men, regardless of how well informed they are about the subject at hand.

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