Cardiovascular disease (CVD) has historically been the leading cause of death in the United States since 1918, with men carrying the bulk of this burden for decades. In the 1970s, CVD deaths began to decline for the total population. However, for women, the number of annual CVD deaths began to slowly increase. From the mid-1980s to the current decade, more women than men died each year from CVD.1 By 2005, breast cancer caused 1 in 30 female deaths, whereas 1 in 2.7 died from CVD.2 In the same year, ≈45,000 more women died from CVD than men.2

Although research indicated that women could reduce their risk for heart disease and stroke, the population awareness of prevention strategies, signs and symptoms, and even the overall threat represented by these diseases was poor. In 1997, a sobering study from the American Heart Association (AHA) showed that only 8% of women understood that heart disease was their greatest health threat.3 The study was commissioned on the basis of statistics that CVD was their number one killer and concerns that the perception about heart disease risk was not aligned with established risk among women. Telephone interviews were conducted with 1000 women aged 25 years, and it was found that 33% of white women surveyed, 15% of black women surveyed, and 20% of Hispanic women surveyed were aware of the dangers of heart disease.

Recognizing that awareness has been shown to be a catalyst for improving knowledge, behaviors, risk, and ultimately health,4 the AHA started trying to raise awareness in earnest with Take Wellness to Heart, the first-ever campaign devoted exclusively to women’s heart health. This online campaign examined women’s perception and knowledge of warning signs for and risk factors of heart disease and provided information related to women’s heart health. Despite these preliminary efforts, the dangers of heart disease and stroke still did not resonate with consumers or healthcare providers.

A notable barrier lays in the enigmatic nature of these diseases: ≈64% of women who died suddenly from coronary heart disease experienced no previous symptoms,5 versus 50% of men.6 Furthermore, women having heart attacks often did not present with the classic heart disease symptoms.7 This emboldened the AHA’s desire to change the public perception, reduce the emerging sex disparities, and improve women’s health, especially for those aged between 25 and 49 for whom prevention could have a major lifetime effect—to show women that heart disease was their biggest threat.

In 2002, the AHA began to seriously consider a more comprehensive and strategic approach to the challenge of heart disease in women. In February 2004, the AHA launched Go Red For Women®—a strategic, integrated approach that paired science with awareness building. An important part of the program was to increase awareness efforts about the effect of heart disease in women. Recent studies report that improved general CVD awareness translates to a greater prevalence of individual CVD risk awareness for major CVD risk factors.7

Go Red For Women® became an integral part of the AHA’s overall focus to reduce coronary heart disease, stroke, and risk factors by 25% by 2010.8 Through increased visibility with National Wear Red Day activities and celebrity spokespeople, through paid advertising that included women-focused messages, and through events intended to inspire women to take action, such as Go Red luncheons and Cities Go Red initiatives, the rate of awareness of CVD as the leading cause of death among women nearly doubled by 2012.3 Furthermore, women who considered themselves well-informed about heart disease were 35% more likely to be physically active and 47% more likely to report weight loss compared with those with less awareness.5

In 2006, the AHA expanded Go Red to include online risk assessment tools designed specifically for women and initiated efforts to improve women’s health with the federal government. In partnership with the Society for Women’s Health Research and WomenHeart: The National Coalition for Women with Heart Disease, the Heart disease Education, Analysis, Research, and Treatment for Women Act (HEART Act) was introduced by a bipartisan group of women lawmakers in February 2006 and passed in 2008. More than 59,000 individuals supported this legislation to improve research and analysis of how new medications and devices work in women and to expand heart disease screening and treatment in underserved populations.

More recently, as a result of the AHA’s work on health reform (in conjunction with many other organizations), the Affordable Care Act includes provisions prohibiting insurance companies from charging women higher premiums than their male counterparts and also requires Medicare and most private health plans to cover preventive services for women. Approximately 4.3 million women gained coverage through the law in 2014 alone, and 48.5 million women are estimated to benefit from free preventive services.

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In tandem with the consumer-facing and advocacy elements of the Go Red program, the AHA also released evidence-based guidelines for healthcare providers, with primary and secondary prevention strategies and treatments specifically for women. The concept of CVD as a categorical, have-or-have-not condition was replaced with a growing appreciation for the existence of a continuum of risk, classifying levels of high, intermediate, low, and optimal risks specific to women. The inaugural 2005 guidelines were featured in the first-ever women-focused issue of Circulation, and they have remained a cornerstone of the AHA’s efforts to educate healthcare providers. The association updated the CVD prevention in women guidelines in 2007\textsuperscript{10} and again in 2011\textsuperscript{11}. Stroke prevention in women guidelines were also issued in 2014.\textsuperscript{12}

Two more recent pillars that have been added to the Go Red program encompass quality improvement efforts through Get With The Guidelines, which are using evidence-based treatment guidelines to improve patient outcomes in >2000 hospitals, and through outreach to underserved populations.\textsuperscript{13} Helping African American and Latina women understand their greater risks of heart disease remains a focus of this program.\textsuperscript{13} Since 2004, fewer women have been died from CVD—from 459,000 a year to 399,500.\textsuperscript{14} Awareness of heart disease as the number 1 killer of women has increased to 54%.\textsuperscript{7} This leap has been a result of the concerted efforts by Go Red For Women®, The Heart Truth, WomenHeart, and many other partners.

Despite these wins, we know women are still dying prematurely of heart disease and stroke. Creating equitable care that addresses sex, ethnicity, race, and socioeconomic is critical. So is significantly increasing women’s representation in clinical trials and studies, so that they receive the right cardiovascular diagnosis and the improved treatment.

To this end, the AHA is in discussion with the National Institute of Neurological Disorders and Stroke and the University of Michigan to study stroke transitions of care, stratifying patients based on sex to find women-focused nuances. We are also working with the MaRISS (Mild and Rapidly Improving Stroke Study) team to examine trends in female patients with mild and rapidly improving stroke.

The AHA and our strategic partners remain committed to these issues. We need an army of women who care about being a part of research, so we can glean the elusive answers to these issues. We need an army of women who care about being a part of research, so we can glean the elusive answers to these issues.

**Disclosures**

American Heart Association is the owner of Go Red For Women®.

**References**


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