FACTS

Cardiovascular Disease: Women's No. 1 Health Threat

OVERVIEW

The facts are both startling and alarming. Heart disease, stroke, and other cardiovascular diseases (CVD) are the No. 1 cause of death in American women, claiming over 400,000 lives each year, or nearly one death each minute.[1] CVD kills approximately the same number of women as the next three causes of death combined, including all forms of cancer.[1] In 2010, one in 30 female deaths was from breast cancer, but one in three was from cardiovascular disease.[1] Unfortunately, we may be losing ground in the fight against heart disease in younger women. Recent research suggests that the coronary heart disease death rate for women ages 35 to 44 actually increased annually between 1997 and 2002.[2] Women age 45 and older are less likely than men of that age group − 74% vs. 81% − to survive a year after their first heart attack.[1] In women, heart disease is too often a silent killer – nearly two-thirds of women who died suddenly had no previous symptoms.[1]

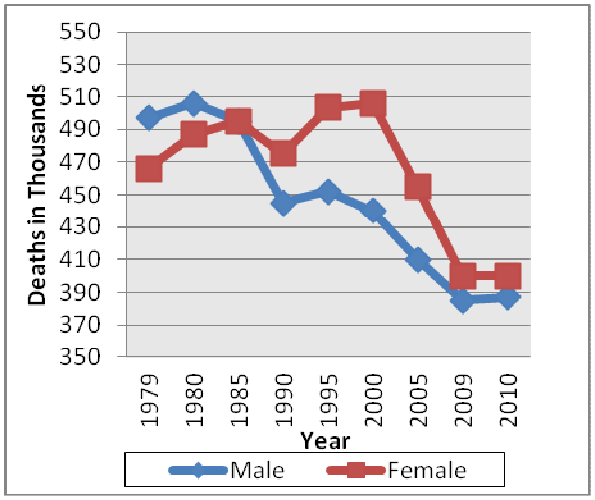
CVD is largely preventable. One study found that if women adhere to five lifestyle choices involving diet, exercise, and non-smoking, 83% of coronary events may be prevented.[3] In an analysis of more than 161,000 women participating in the Women's Health Initiative, 83% of the women were either classified as "high risk" or "at risk" for CVD and an additional 13% of the women lacked risk factors for CVD but did not adhere to a healthy lifestyle.[4] But prevention is hindered by the fact that many women and their health care providers don't realize that CVD is a woman's No. 1 health threat. The American Heart Association (AHA) is working to close this knowledge gap through education and advocacy.

RAISING AWARENESS

A 2012 survey conducted by the AHA found that 4% of women were unaware that heart disease is the leading cause of death among women, although awareness has increased by 30% since 1997.[5] In addition, women of color and of low socioeconomic status are disproportionately affected by coronary heart disease; the death rate was 25% higher for black women than for white women in 2010.[1] However, only 36% of black women and 34% of Hispanic women know that heart disease is their leading cause of death, compared to 65% of white women.[5]

Many women also do not recognize the warning signs or symptoms of heart disease, which may be subtler than those exhibited by men. In addition, only 65% of women said the first thing they would do if they thought they were having a heart attack was to call 9-1-1.[5] Unfortunately, this lack of awareness extends to women's health care providers, often resulting in less aggressive and sophisticated diagnosis and treatment, with worse outcomes.[6]

Cardiovascular disease mortality trends for males and females (United States: 1979–2010).[1]
Source: National Center for Health Statistics and National Heart, Lung, and Blood Institute



GENDER DIFFERENCES IN CVD

Researchers have learned that gender differences play an important role in the prevention, diagnosis, and treatment of CVD. Heart attack symptoms may be different in women than in men[7] and women may also respond differently to cardiac medications.

- Although chest pain is the most common heart attack warning sign in both men and women, women may be less likely to report chest pain during a heart attack and more likely to report other symptoms, often resulting in misdiagnosis and delays in treatment.[8]
- Women tend to develop CVD later in life than

men, and their outcomes are often worse.[1]

- Women smokers die of a heart attack caused by smoking earlier than men. Women who smoke are more than twice as likely to die of sudden cardiac death, compared to women who have never smoked.[9,10]
- Women with acute coronary syndrome are more likely than men to have adverse outcomes, including death, heart attack, stroke, or re-hospitalization, even after adjusting for age differences.[11]
- Previous studies and clinical trials have often *not been done* with adequate numbers of women in the study population, and thus, their conclusions are not always generalizable to women. Only 34% of clinical trial subjects in cardiovascular research are women, and just 31% of those studies report outcomes by sex, making it difficult for researchers and clinicians to draw conclusions about their effects on women.[12]
- Likewise, in an analysis of more than 120 studies of 78 FDA-approved medical devices between 2000 and 2007, women made up only one-third of the participants in the studies that reported sex distribution; 28% of the studies didn't provide the gender of the patients enrolled in the trials.[13]
- Researchers have identified gender differences in response to cardiac medications. Drugs that are beneficial for men may even be harmful to women. For example, the drug digoxin used to treat patients with heart failure was associated with an increased risk of death among women, but not men.[14]

DIAGNOSIS AND TREATMENT DISPARITIES

Women are less likely than men to receive aggressive diagnosis and treatment for CVD.

- Among Medicare patients, men are two to three times more likely than women to receive an implantable cardioverter-defibrillator for the prevention of sudden cardiac death.[15]
- Only about 33% of all percutaneous coronary interventions were performed on women in 2010.[1]
- One in 5 women (about 19 million women) between the ages of 18 and 64 are uninsured.[16] Uninsured women are more likely to have inadequate access to care, get a lower standard of care when they are in the health system, and have poorer health outcomes.
- Women are more likely than men to have forgone needed health care due to cost.[17]

THE ASSOCIATION ADVOCATES

The nation has made remarkable progress in reducing the overall rates of death and disability from CVD in men. Realizing a comparable level of improvement for women requires the concerted efforts of everyone.

- The AHA applauds enactment of a provision in the Food and Drug Administration Safety and Innovation Act that requires the FDA to develop an Action Plan to address the findings of a recent FDA report documenting continuing gaps in the participation of women in clinical trials, the analysis of sex differences, and the availability of sex-specific data to clinicians, researchers, and patients. AHA is now working with FDA to implement this provision.
- The AHA supports expanding to all 50 states the WISEWOMAN program, which provides free CVD screening and lifestyle counseling to low-income uninsured or under-insured women.
- AHA supports improved reporting of health care data by sex, race, and ethnicity.
- AHA is working to implement provisions of the Affordable Care Act that will make health insurance more accessible and affordable for women as well as men.

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