Heart Disease and Women: Is the Right Message Getting Through?

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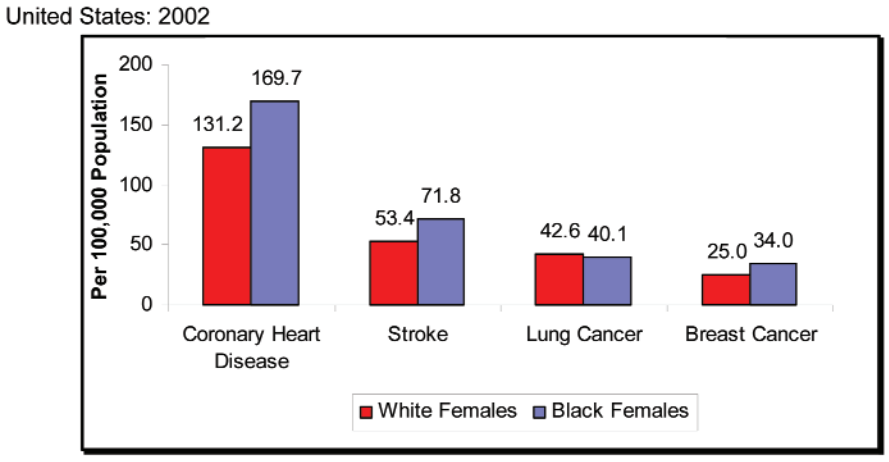
Many patients and health care providers are unaware that cardiovascular disease (CVD) is the leading cause of death in American women. Because diabetes is a well-established CVD risk equivalent, health care providers in practices that include a significant number of patients with diabetes should be particularly knowledgeable about this and should be able to discuss risks in real terms with their patients. Female patients, especially those with diabetes, should appreciate the magnitude of their own cardiovascular risk and understand what can be done to reduce that risk.

Ask a group of women to name a condition they fear and a majority will say breast cancer. Breast cancer awareness has been increasing steadily in the United States in recent years and rightly deserves respect as a killer of women. And, after all, it is the "C" word. But how does it compare with CVD as a cause of mortality in American women? Let's look at some of the facts.

- In the United States, one in four women has some form of CVD.[1]
- Nearly 40% of the deaths of all females in the United States in 2002 were the result of CVD.[2]



Source: CDC/NCHS.

Figure 1. Age-adjusted death rates for coronary heart disease, stroke, and lung and breast cancer for white and black females.

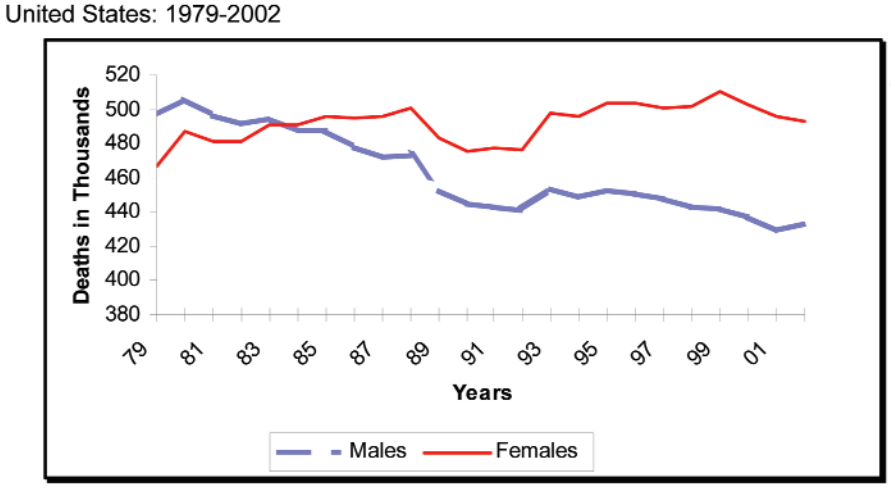
- In 2002, all CVDs combined killed 493,623 women, while all forms of cancer combined claimed the lives of 268,503.[1,2]
- Coronary heart disease (CHD) killed 241,622 women compared with breast cancer, which took 41,514 lives.[1,2]
- One in 2.5 women will die of heart disease, stroke, and other CVD compared with 1 in 30 who will die of breast cancer.[2]
- Stroke mortality in 2002 in women accounted for 61.5% of the total stroke deaths.[1]
- Sixty-four percent of women who die suddenly from an acute cardiovascular event had no previous symptoms.[1]
- CVD is a particularly significant problem in African-American women (Figure 1).
- In 2002, the prevalence of CVD in white females was 32.4%, compared to 44.7% in African-American females.[1]
- The prevalence of stroke in white women was 2.6%, compared to 3.9% in African-American women.[1]
- High blood pressure was present in 45.4% of African-American females, compared to 31% of white females.[1]
- Over the past 20 years, mortality from CVD in men has decreased, while it has increased in women (Figure 2).
- Thirty-eight percent of women die within 1 year after a myocardial infarction, compared to 25% of men.[1,2]
- CVDs were responsible for the deaths of 493,623 women in 2002, compared to 433,825 men.[1]

Yet misperceptions persist that CVD is not a real problem for women.

That diabetes significantly increases the risk for CVD—both heart disease and stroke—in women and men is well established. Diabetes is a particularly widespread problem in female populations. The prevalence of diagnosed diabetes in 2002 in white women was 4.7%, compared to 12.6% in African-American and 11.3% in Mexican-American women.[1] Further, it was estimated that the prevalence of undiagnosed diabetes in these populations was 2.7, 6.1, and 1.8%, respectively.[1] And obesity, a risk factor for both CVD and diabetes, is epidemic; in 2002, 61.6% of all women in the United States were overweight or obese, including 57.2% of white, 71.7% of Mexican-American, and 77.2% of African-American women.[1]

Modification or prevention of the risk factors for CVD that often coexist with diabetes, such as obesity, hypertension, and high cholesterol, is an important goal for diabetic women. Other lifestyle risk factors that need to be discussed with patients and modified when present include physical inactivity and cigarette smoking.

Today, when health care providers should be more aware than ever of the increased risk for CVD in women with diabetes, it is clear that differences in treatment between the sexes still exist. A study recently published in *Diabetes Care*[3] reported on a cross-sectional analysis that included 3,849 patients with diabetes treated in five academic internal medicine practices between 2000 and 2003. Researchers reviewed



Source: CDC/NCHS.

Figure 2. CVD mortality trends for males and females. Note: death rates are age-adjusted per 100,000 population, based on the 2000 U.S. standard. Some data are reported according to ICD-9 codes, and some use ICD-10 codes.

medical records and compared the treatment for conditions such as hypertension, dyslipidemia, and CHD in women with the treatment of the same conditions in a group of men with similar risk. They found that women were less likely to be treated for high blood pressure, high cholesterol, and diabetes or glucose intolerance and, if treated, were less likely to reach treatment goals. They were also less likely to be taking aspirin or cholesterol-lowering drugs.

So, although clear evidence exists that women with diabetes are at increased risk for CHD and that this risk has been increasing during the past two decades, men and women still receive different treatment. Modifiable risk factors for CHD in women are simply treated less aggressively (read: not taken seriously enough, despite the preponderance of evidence to the contrary). It is time for health care providers to be more proactive in educating female patients about and treating them for their heart disease risk in order to start reversing this alarming CVD trend.

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