



The Current Awareness and Knowledge of the Impact of Gender on Cardiovascular Health

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Introduction

Cardiovascular disease remains the leading cause of death in the U.S for women, accounting for nearly 400,000 deaths [1]. Recent studies have shown declining mortality rates from cardiovascular disease within those over 65 years of age; however, mortality rates have remained nearly stagnant within younger women [2]. As sex and gender-based differences in presentation, pathophysiology and outcomes of CVD are becoming more understood, the lack of awareness of such differences must be addressed.

In 1997, the American Heart Association conducted a national survey to assess the knowledge of American women on the topic of CVD. Only 7% of women perceived CVD to be their greatest health threat and less than one third correctly identified CVD as the leading cause of mortality [3]. Alarmed by these results, the National Heart Lung and Blood Institute (NHLBI), WomenHeart, the Association of Black Cardiologists, the American College of Cardiology, the Society for Women's Health Research and the AHA initiated national initiatives and campaigns to raise awareness of CVD within community women and physicians [4]. Subsequent surveys have shown an increasing percentage of community women recognize CVD as the leading cause of death, from 30% in 1997 up to 54% in 2009. However, high-risk groups, specifically African-Americans, Hispanics and younger women below 45 years old are less likely to identify CVD as the leading cause of death than are white, older women [5].

In addition to the community, healthcare providers often appear unaware that heart disease is a major health threat for women. A national survey assessing awareness of CVD found only 54% of women reported their healthcare professionals as having discussed their risk of heart disease in the past six months [5]. In 2004, the AHA released "Evidence-Based Guidelines for CVD prevention in Women" to assist healthcare providers in providing preventative care for women at risk for CVD. A prior study assessing physician-adherence to these guidelines found that women were more likely to be assigned a lower-risk category than men with similar risk profiles and only 1 in 5 physicians knew CVD to be the leading cause of death in women [6].

Altogether, previous research indicates a persistent gap in knowledge and awareness of the prevalence of CVD in women among both the community and physicians. In 2014, the Women's Heart Alliance conducted a nationwide survey to further assess the barriers and opportunities to improve awareness, action and advocacy for CVD in women. A total of 1,011 U.S. women aged 25-60 years old and 200 primary care physicians including internists, family physicians, obstetrician/gynecologists as well as cardiologists were surveyed. Of

the 1,011 women interviewed, 45% did not know CVD to be the leading cause of death. Only 39% of primary-care physicians listed CVD as the top health concern, rated after breast and weight health. The study confirmed the lack of progress in CVD risk awareness and the lack of use of evidence-based guidelines regarding CVD in women. Social stigmas and stereotypes appeared to be central barriers to proper care. Women reported weight loss as the most frequent advice for preventative care, despite having risk factors warranting further guideline therapy. Lack of training in the area of women's health as related to CVD was reported as another central barrier to adequate physician care [7].

The results of the WHA attitudes, knowledge and belief surveys highlight the need to overcome various stereotypes regarding CVD in women. Opportunities such as de-stigmatization may contribute to increasing national awareness of the role of CVD, particularly in younger and ethnic minority women and encouraging the use of evidence-based preventative guidelines when treating female patients.

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