

# Women's Cardiovascular Health

An official position statement of the Association of Women's Health, Obstetric and Neonatal Nurses

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## Position

The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) recommends that nurses should provide women with routine cardiovascular health screening and education to promote awareness of their risk for cardiovascular disease (CVD) at health care visits across the life span. Promotion of preventive measures should begin early, and adolescents and young women should be encouraged to adopt heart healthy habits. For adult women, nurses should work to increase awareness about risk factors, symptoms, and treatment options associated with CVD and CVD risk. Efforts should extend to women of all ages and health statuses.

## Background

In the United States, CVD is the leading cause of death for women; once every 80 seconds, one woman dies from CVD (Benjamin et al., 2018). Currently, approximately one woman in three will die of CVD (Murphy, Xu, Kochanek, Curtin, & Arias, 2017), and nearly two-thirds (64%) of women who die suddenly of coronary heart disease have no previous symptoms (Roger et al., 2012).

Cardiovascular disease is largely preventable, and most risk factors associated with heart disease and stroke, such as sedentary lifestyle, smoking, excessive alcohol intake, high blood pressure, high cholesterol, stress, obesity, and diabetes, can be modified, treated, or controlled (DeVon, 2011; McSweeney et al., 2016). In the United States, trends in risk factors for CVD in women are worrisome. More women than men have metabolic syndrome (34.4% vs. 29%), and in adults older than age 65, more women than men have hypertension, a leading CVD risk factor (Benjamin et al., 2018). Two out of three women older than age 20 are overweight or obese (Ng et al., 2014). This factor contributes to an epidemic of type 2 diabetes, which confers a fourfold to fivefold elevated risk of coronary heart disease compared to the risk for women without diabetes. For those older than age 44, median survival after a first myocardial infarction is 5.6 years for White women and 5.5 years for Black women compared to 8.4 and 7.0 years for their White and Black male counterparts (Benjamin et al., 2018). While mortality rates attributed to CVD have decreased significantly in the past 40 years for men and women, these rates have not improved for women ages 25 to 34 (Wilmot, O'Flaherty, Capewell, Ford, & Vaccarino, 2015).

Cardiovascular disease in women has received increased attention in the last few years. In a recent review of the current state of the science, Garcia et al. (2016) addressed the specific, traditional and nontraditional, sex-based differences of women's cardiovascular health and provided current approaches for the evaluation and treatment of acute coronary syndromes that are more prevalent in women (Garcia, Mulvagh, Merz, Buring, & Manson, 2016). Non-traditional risk factors for CVD related to preterm delivery, birth, hypertensive disorders of pregnancy, gestational diabetes, post-pregnancy weight gain, autoimmune diseases, breast cancer treatments, depression, and menopause are also discussed. Given the "underappreciation of sex differences from an etiologic, diagnostic, and therapeutic perspective" Garcia et al. (2016, Conclusion, para. 3) stressed the importance of cardiovascular studies that are "designed with adequate power for sex-specific analysis to understand mechanisms and develop optimal treatments for cardiovascular diseases in both sexes."

## Role of the Nurse

The nurse is often a woman's first and most consistent point of contact within the health care system. Nurses who work in primary care settings can identify women at risk for CVD, counsel women about their individual risk, and encourage/initiate primary and secondary prevention strategies. Nurses are ideally positioned to counsel women on CVD risk factors such as hypertension, smoking, hyperlipidemia, and diabetes. In addition, nurse case management provided clinically meaningful reduction of cardiovascular-related morbidity and mortality (Berra, 2011), and the nurse practitioner/community health worker model was a cost-effective approach to improve the care of patients with existing CVD or at high risk to develop CVD (Allen, Dennison Himmelfarb, Szanton, & Frick, 2014). Lifestyle changes, such as increased physical activity, weight loss, improved nutrition, and pharmacologic therapies to lower blood pressure and lipids, and smoking cessation using non-pharmacologic or pharmacologic methods are critical. Strategies that have been shown to support behavior change include motivational interviewing, identification of readiness for change, computer-assisted reminders, frequent follow-up, and involvement of the family in setting short-term, achievable goals (Mosca et al., 2011).



## Policy Considerations

Ongoing federal funding is vital to address inequities for women with heart disease. AWHONN supports the following priorities set forth by the [American Heart Association \(2018, para. 2\)](#):

- “Apply a key provision of the HEART for Women Act that requires the FDA to report on how new prescription drugs and medical devices work in women and minorities.
- Maintain funding for WISEWOMAN, a CDC prevention program that provides cardiovascular screening and lifestyle intervention services to low-income uninsured and underinsured women.
- Protect funding for National Institutes of Health research to better understand how heart disease and other forms of CVD affect women differently.
- Increase the percentage of women who participate in clinical research.
- Preserve Medicare and Medicaid, both of which disproportionately serve women.
- Strengthen the percentage of women with access to affordable health insurance coverage, through support of the Affordable Care Act provision that bans the discriminatory practice of charging women higher insurance premiums than men.
- Increase access to cardiac rehabilitation.
- Report health care quality measures by gender, race, ethnicity, primary language and disability status.
- Support the Health Equity and Accountability Act, which helps eliminate health inequities among minorities, women and other groups.”

Additionally, nurses should advocate for

- Continued participation and/or new enrollment of women in clinical trials, genome projects, and long-term longitudinal studies such as the Women’s Health Initiative, Nurses’ Health Study 3, Women’s Health Genome Study, All of Us Research Program, and the Department of Defense Millennium Cohort study.
- Inclusion of women in clinical device trials and acknowledgement of sex-based differences in response to implanted cardiovascular devices.
- Increased numbers of female principal investigators to manage large clinical trials.
- Incentives for women to participate in coronary disease and heart failure trials to address historical enrollment difficulties.

The categorization of women as a subpopulation in studies of CVD should be discouraged; rather, data analysis in large trials should be conducted on women using subgroup analyses. Research studies must be adequately powered to draw scientific conclusions and recommendations for women, and women must be adequately represented in trials based on disease prevalence by sex. Recognizing that the life span of women in the United States is now 81 years ([Murphy et al., 2017](#)), upper age exclusions in clinical trials for women should be

discouraged. Nurses must continue to advocate for programs to raise awareness that CVD is the leading cause of death in women.



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