# National Institute on Aging (NIA)/National Institutes on Health (NIH): Improving the Quality of Health Care for Older Adults: Doctors May Not Diagnose and Manage Coronary Heart Disease As Actively for Women As for Men 

Researchers used video vignettes to assess how primary care doctors' diagnostic questions differed significantly by patient gender. Results suggest that doctors' actions may contribute to gender disparities in health and health care. Investigators observed no influence of social class or race.

## Lead Agency:

National Institute on Aging (NIA)
National Institutes of Health (NIH)

## Agency Mission:

- Support and conduct genetic, biological, clinical, behavioral, social, and economic research related to the aging process, diseases and conditions associated with aging, and other special problems and needs of older Americans.
- Foster the development of research and clinician scientists in aging.
- Communicate information about aging and advances in research on aging to the scientific community, health care providers, and the public.


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## General Description:

Previous studies have established that women are less likely than men to receive thorough diagnostic investigations and surgical treatments for coronary heart disease (CHD). Few studies have focused on the exact points in the process at which disparities arise (initial access, interactions with physicians, hospitalizations) and few have examined the possibility of age-by-gender interactions in the process.
The authors examined the influence of gender, age, race and social class, singly and in combination, on diagnostic and management decisions for patients presenting with symptoms of CHD. They trained professional actors to portray patients on videos in realistic first consultations with a doctor, presenting with symptoms either of CHD or of depression. Participating primary care physicians (256, selected randomly in

Massachusetts and two regions in England) watched the 7-8-minute tapes and answered questions about how they would diagnose and manage the patient. In the two countries combined, physicians reported fewer follow-up questions for women (mean 5.7) than for men (7.0); proposed fewer examinations for women (4.3 compared with 5.1); proposed fewer diagnostic tests for the CHD diagnosis (80 percent for women; 90 percent for men), and were less likely to prescribe medications appropriate for treating heart disease for women than for men (52\% of women; $64 \%$ for men). In both countries, the female patient reported to be age 55 was less likely to have a medication prescribed, and doctors were less sure of the CHD diagnosis, than for men the same age. But even with lower certainty, in England (though not in the US) doctors reported that they would ask fewer questions of the woman aged 55 than of a man, and fewer than for a woman aged 75 . The black patients and those portraying working-class men and women were not treated differently than white and middle-class patients in these simulations.

This analysis was based on "video vignettes," and the correspondence of self-reports to actual behavior is unknown. The clinical significance of differences in diagnosis and management after a first consultation is also not clear. But the finding of significant differences between the diagnostic and management activities that physicians think appropriate for women and for men warrants further research.

Excellence: What makes this project exceptional?
Previous studies have established that women are less likely than men to receive thorough diagnostic investigations and surgical treatments for coronary heart disease. This research represents an important step in clarifying the nature of these disparities, as well as the circumstances under which the disparities arise.

Significance: How is this research relevant to older persons, populations and/or an aging society?
Coronary heart disease is the leading cause of death among both women and men in the United States and is particularly common in individuals over age 65. One in four American women die of heart disease.

Effectiveness: What is the impact and/or application of this research to older persons?
This research was based on "video vignettes," and the extent to which physicians' reactions to the vignettes correlate with their actual behavior in the clinic remains unknown. However, this finding does underscore the need for women and their physicians to become aware of the risk factors and symptoms of heart disease and for physicians to ensure thorough diagnostic and treatment efforts for both men and women.

Innovativeness: Why is this exciting or newsworthy?
Few studies have focused on the exact points in the diagnostic process for CHD where disparities arise (initial access, interactions with physicians, hospitalizations) and few have examined the possibility of age-by-gender interactions in the process.

