

Ischemic Heart Disease in Women: Under-recognized and Under-treated!

Fatima Samad

Aurora Cardiovascular Services, Aurora Sinai/Aurora St. Luke's Medical Centers, University of Wisconsin School of Medicine and Public Health, Milwaukee, Wisconsin, USA.

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Dear Editor,

Cardiovascular disease burden is an overwhelming health care issue and accounts for 17.3 million deaths globally according to the Global Burden disease statistics from 2013. This translates into 31.5% of all deaths and 45% of all non-communicable disease deaths.^{1,2} Cardiovascular disease accounts for 1 in every 3 deaths in the United States of America, making it the lead-

ing cause of death in both men and women.³ Recent work suggests that women with ischemic heart disease (IHD) have worse outcomes, prognosis and morbidity compared with men.⁴ Important differences exist in presentation, management and outcomes of IHD amongst men and women. The National Registry of Myocardial infarction study evaluating 481,581 women hospitalized with myocardial infarction over a 12 year span found that women were more likely than men to present without chest pain and had a higher mortality than men within the same age group.⁵ Multiple studies have shown that women with acute coronary syndromes are more likely to have delayed presentation; they are also less likely to receive rapid diagnostic testing and suffer delays in treatment initiation as compared with men.^{6,7,9} Several reasons could account for these disparities including:

- Less awareness amongst women about heart disease; only 53% of women in a survey pointed out that they would call 911 for help if they have symptoms of myocardial infarction.⁸
- Atypical presentation amongst women and subsequent inaccurate symptoms assessment can lead to misdiagnosis and hence delay in treatment⁹

Efforts are needed to increase awareness of heart disease in women amongst patients, lay public and physicians. System level quality im-

provement projects that specifically target sex disparity in care of IHD should be implemented and replicated. Clinical trials evaluating territories for IHD must have adequate representation of women. Future research should evaluate biologic differences in IHD between men and women to allow sex specific risk stratification and treatment strategies.

REFERENCES

1. Murray CJL, AD Lopez (Eds.) The global burden of disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Harvard School of Public Health, Boston; 1996.
2. Naghavi M, *et al*/GBD 2013 Mortality and Causes of Death Collaborators. Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2015;10;385(9963):117-71. doi: 10.1016/S0140-6736(14)61682-2.
3. Benjamin EJ. Heart Disease and Stroke Statistics Update: A Report from the American Heart Association. *Circulation*. 2017;25. doi: 10.1161
4. Mosca. Effectiveness-Based Guidelines for the Prevention of Cardiovascular Disease in Women-2011 Update: A Guideline From the American Heart Association. *Circulation*. 2011;123(22):E624.
5. Canto JG, Rogers WJ, Goldberg RJ, *et al*. NRI Investigators. Association of age and sex with myocardial infarction symptom presentation and in-hospital mortality. *JAMA*. 2012;307(8):813–22. <https://doi.org/10.1001/jama.2012.199> ; PMID:22357832 PMID:PMC4494682.
6. Graham G. Acute Coronary Syndromes in Women: Recent Treatment Trends and Outcomes. *Clin Med Insights Cardiol*. 2016;10:1–10. <https://doi.org/10.4137/CMC.S37145> ; PMID:26884685 PMID:PMC4747299.
7. Pope JH, Aufderheide TP, Ruthazer R, *et al*. Missed diagnosis of acute cardiac ischemia in the emergency department. *N Engl J Med*. 2000;342(16):1163–70. <https://doi.org/10.1056/NEJM200004203421603> ; PMID:10770981.
8. Mosca L, Mochari-Greenberger H, Dolor RJ, Newby LK, Robb KJ. Twelve-year follow-up of American women's awareness of cardiovascular disease risk and barriers to heart health. *Circ Cardiovasc Qual Outcomes*. 2010;3(2):120–7. <https://doi.org/10.1161/CIRCOUTCOMES.109.915538> ; PMID:20147489 PMID:PMC2956447.
9. Mehta LS, Beckie TM, DeVon HA, Grines CL, Krumholz HM, Johnson MN, *et al*. Acute Myocardial Infarction in Women A Scientific Statement from the American Heart Association *Circulation*. 2017;135(9).

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