The Gender Metric

University study finds differences in women veterans’ heart health

As the population of women veterans grows larger, so, too, does the body of specialized knowledge concerning their health and risk factors.

A new study published by the University of Michigan, “Characteristics and Outcomes of Women Veterans Undergoing Cardiac Catheterization in the Veterans Affairs Healthcare System,” has zeroed in on specific gender discrepancies within the veteran population concerning cardiac health.

Using data from the VA’s Clinical Assessment Reporting and Tracking Program, researchers concluded women veterans undergoing cardiac catheterization are more likely than their male counterparts to suffer from obesity, depression and post-traumatic stress disorder. The data also show that the women studied were younger at the time of their initial catheterization (57, as opposed to 63 for men) and had fewer traditional risk factors for heart disease.

Perhaps most interestingly, though presenting with the physical symptoms of a cardiac event, 46 percent of women and just 17 percent of men were found to have normal functioning coronaries or no arterial obstructions. In short, more women were experiencing symptoms like chest pains without actually suffering a cardiac condition, leading researchers to believe the symptoms were linked instead to mental health conditions like PTSD, depression or anxiety.

Based on the findings, the study shows a clear need for further study into these gender differences. It also points to a need for enhanced cooperation between mental health and other specialty providers who treat veterans.
Gender Gaps in Research

The study included research on 86,000 veterans, including 3,181 women. Noting a lack of information on the cardiac health of women veterans, physicians at the University of Michigan looked to the wealth of knowledge within the VA’s database.

Dr. Claire Duvernoy is chief of cardiology for the VA Ann Arbor Healthcare System and director of the University of Michigan Cardiovascular Center’s Women’s Heart Program, as well as the lead researcher for this study.

Researchers looked at the number of veterans being referred for cardiac catheterizations following red-flag symptoms like chest pain. They tracked the percentages that came back with normal results versus those who, in fact, suffered coronary artery disease (CAD).
Cardiovascular Center’s Women’s Heart Program

The report indicates the women veterans studied also had higher rates of depression and PTSD than male veterans, thereby "highlighting mental health as a potential risk factor for CAD and adverse outcomes."

“I think we were all surprised,” Duvernoy said. “We knew the veteran women were going to be younger… [W]hat we didn’t know was that we would find these higher rates of depression and post-traumatic stress disorder in the women veterans, and that would really be quite significant.”

PTSD, anxiety and other mental health conditions are known to cause chest pains in patients. But further research is needed to better understand why higher numbers of women experience these physical symptoms without actually suffering heart disease.

This conclusion backs the VA’s integrated approach to treating the “whole veteran” and gives insight into the learning curve physicians face when treating women veterans in a system that has been largely male-dominated.

“Findings like these echo the importance of veteranspecific research, especially broken down by gender and minority status,” said Joy Ilem, Deputy National Legislative Director.

DAV’s 2014 report, “Women Veterans: The Long Journey Home,” also points to the need for this kind of gender- and minority-specific data. And the American Heart Association (AHA), which published this study in their March issue of Circulation: Cardiovascular Quality and Outcomes, highlights how women are typically underrepresented in heart disease research.

“In the future, if we really want to answer all the questions we have about gender differences, then we need studies that
are large enough, focused enough and with the intent from the start to illuminate the issues around sex differences,” said AHA’s Harlan Krumholz.

Further Conclusions

The findings of the study also make a clear point that integrated health care is of critical importance, particularly among veterans.

“Veterans, due to the nature of their military background and exposures, have unique health needs that may go unaddressed by private-care physicians,” said Ilem. “We want to ensure our veterans are getting the best care, but that they are also not being overtreated, undertreated or improperly diagnosed because a doctor outside the VA may not have the full scope of medical information at their disposal.”

Duvernoy said she believes the study results highlight the need for integrated care for veterans, as well as better communications between mental health care and specialty providers.

“What I see when care is fragmented is that veterans go to outside facilities, and they may get catheterized and stress-tested over and over and over again. And nobody is really delving deeper into what is really going on,” said Duvernoy. “To me, this is a call to improve VA care, to make it more seamless and keep it in the VA system so that veterans can get the best care.”