Women may be more likely to experience EMS delays for heart care

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Women who called 9-1-1 complaining of cardiac symptoms were 52 percent more likely than men to experience delays during emergency medical services' (EMS) care, according to a report in Circulation: Cardiovascular Quality and Outcomes.

The data did not reveal why women were more likely to be delayed. However, other research suggests that heart conditions in women may not be recognized as readily and response may be slower as a result.

"We need to find out why women are delayed and reduce or eliminate the disparity," said Thomas W. Concannon, Ph.D., the study's lead author and assistant professor of medicine at the Institute for Clinical Research and Health Policy Studies at Tufts Medical Center in Boston, Mass.

In the study of nearly 6,000 men and women, researchers found that 11 percent, or 647, of the total study population were delayed (15 minutes longer than median) while in the care of EMS. They found no serious delays in the time from the 9-1-1 call to paramedics' arrival at the scene. Delays began after EMS crews arrived on scene and continued during transport to the hospital.

When researchers looked at the odds for delay, they found:

• Women had 52 percent higher odds of being among the delay group.
• Each additional mile traveled increased the odds of delay by 9 percent

to 46 percent.
• Traveling during evening rush hour nearly doubled the odds of delay, and bypassing a nearer hospital increased the odds 81 percent.

"We looked at the influence of several patient- and neighborhood-level factors on delays in EMS and the patient's gender stood out," Concannon said.

Concannon and colleagues looked at EMS data for Dallas County, Texas, from Jan. 1 to Dec. 31, 2004. The data came from 5,887 calls made to 9-1-1 by patients with suspected cardiac symptoms, covered by 98 EMS stations and 29 hospitals. Half the patients were women, and half were white. Average time that EMS spent at the scene was 19.9 minutes, and average transport time from the scene to the hospital was 10.3 minutes. Median time in EMS care was 34 minutes, thus patients in EMS care for 49 minutes or longer were considered to be delayed.

"Treatment of acute heart disease is time-sensitive — earlier treatment leads to better survival and improved long-term outcomes," Concannon said. "Delays of 15 minutes or more could lead to harm for a patient with serious heart disease."

"We know that diagnosis of coronary heart disease in women is often delayed, especially when compared with their male counterparts," said Jennifer H. Mieres, M.D., spokesperson for the American Heart Association's Go Red For Women campaign and director of Nuclear Cardiology at New York University. "In an emergency situation, symptoms such as shortness of breath and chest tightness are often viewed as psychogenic, rather than of cardiac origin. Women must be actively engaged in their health, listen to their bodies and insist on a thorough evaluation of critical heart health factors."

In an editorial accompanying the study, Joseph P. Ornato, M.D.,

professor and chairman in the Department of Emergency Medicine at Virginia Commonwealth University in Richmond, Va., said there could be other factors leading to the delay in women's transport times, such as longer time to perform an on-site electrocardiogram (EKG), and gender differences in accepting EMS care and transport, or in choice of destination hospital.

Ornato agrees that this is an issue that deserves follow-up study for a definitive answer.

Source: American Heart Association