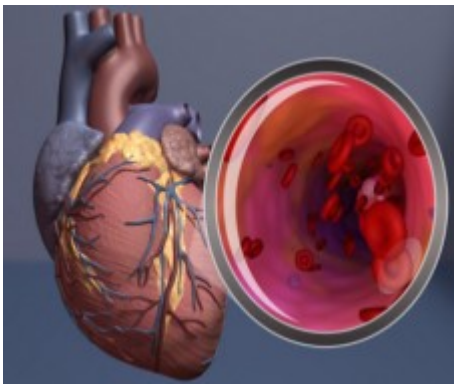
Published on *American Council on Science and Health* (https://www.acsh.org)

Woman's Heart Attack Differs from a Man's

By Gil Ross — January 26, 2016



courtesy American Heart Assctn.

A comprehensive report [1]on women and heart disease was released by the American Heart Association and no surprise womens' hearts, and the ailments that afflict them, are significantly different from the male pumpers. The focus of the studies reviewed was heart attack, or acute myocardial infarction.

Entitled "Acute Myocardial Infarction in Women," the report is a compendium of hundreds of studies, and was issued by the AHA and several sub-committees thereof. The lead author was writing group chair Laxmi Mehta, M.D., a noninvasive cardiologist and Director of the Women s Cardiovascular Health Program at Ohio State University.

The key message is that womens' heart attacks may have different underlying causes, symptoms and outcomes compared to those of men, and differences in risk factors and outcomes are even further pronounced in black and Hispanic women, according to the scientific statement published in the AHA's journal *Circulation.*

This is the first scientific statement from the Association on heart attacks in women. They note that there have been dramatic declines in cardiovascular deaths among women. The evidence shows that this is due to improved treatment and prevention of heart disease, as well as to increased public awareness that early warning symptoms of acute myocardial infarction, or MI, often differ from the classic presentation doctors learned about, which were primarily men's MI symptoms.

For instance, in both sexes the most common heart attack symptom is chest pain or discomfort. However, women are more likely to have atypical symptoms such as shortness of breath, nausea or vomiting and back or jaw pain.

Risk factors for MI also differ in degree in women compared to men. For example, high blood pressure is more strongly associated with MI in women, and if a young woman has diabetes her risk for heart disease is 4 to 5 times higher compared to young male diabetics.

Despite stunning improvements in cardiovascular deaths over the last decade," said Dr. Mehta in an AHA press release, "women still fare worse than men and heart disease in women remains underdiagnosed, and undertreated, especially among African-American women.

Among both men and women, MIs are caused by blockages in one (or sometimes more than one) of the main arteries which convey blood from the heart's main outflow artery, the aorta, to the coronary arteries which feed the heart muscle itself. While blockages may form differently in women, the result is the same in an MI: decreased blood flow to the heart muscle.

If doctors don t correctly diagnose the underlying cause of a woman s heart attack, they may not be prescribing the right type of post-MI treatments. While in general, medical therapies are similar regardless of the cause of the heart attack or the severity of the blockages, the report highlighted that women are undertreated compared to men despite proven benefits of these medications.

Women face greater complications from attempts to restore blood flow because their blood vessels tend to be smaller, they are older and have increased rates of risk factors, such as diabetes and high blood pressure. Guideline-recommended medications are consistently underutilized in women leading to worse outcomes. Also, cardiac rehabilitation is prescribed less frequently for women and even when it is prescribed, women are less likely to participate in it or complete it.

Significant racial disparities for MI diagnosis and treatment were found in women. Compared to white women, black women have a higher incidence of MI in all age categories and young black women have higher in-hospital death rates. Black and Hispanic women tend to have more heart-related risk factors such as diabetes, obesity and high blood pressure at the time of their heart attack compared to non-Hispanic white women. Compared to white women, black women are also less likely to be referred for important treatments such as cardiac catheterization.

Understanding gender differences can help improve prevention and treatment among women. Dr. Mehta's conclusion should be a wake-up call for both doctors and patients.

Women should not be afraid to ask questions we advise all women to have more open and candid discussions with their doctor about both medication and interventional treatments to prevent and treat a heart attack, Dr. Mehta said. Coronary heart disease afflicts 6.6 million American women annually and remains the leading threat to the lives of women. Helping women prevent and survive heart attacks through increased research and improving ethnic and racial disparities in prevention and treatment is a public health priority."

---

[1] http://newsroom.heart.org/news/a-womans-heart-attack-causes-symptoms-may-differ-from-a-mans?preview=351f