Social isolation and loneliness linked to increased risk of CVD in post-menopausal women

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Social isolation and loneliness were each associated with a higher risk for cardiovascular disease in post-menopausal women, according to preliminary research to be presented at the American Heart Association's Epidemiology, Prevention, Lifestyle & Cardiometabolic Health Conference 2021. The meeting is virtual, May 20-21 and offers the latest science on population-based health and wellness and implications for lifestyle.

Social isolation is the quantifiable measure of social interactions in relationships. Loneliness is the perceived level or feelings of being socially isolated and reflects a feeling of isolation, lack of companionship and feeling left out.

"Cardiovascular disease is the leading cause of death in women in the U.S. We are learning that factors currently not identified in standard care, such as social isolation and loneliness, can impact women's risk of cardiovascular disease," said lead study author Natalie Golaszewski, Ph.D., postdoctoral fellow at the Herbert Wertheim School of Public Health and Human Longevity Science at University of California San Diego.

"We are social beings. In this time of COVID-19, so many people are experiencing social isolation and loneliness, which may spiral into chronic states of social isolation and loneliness. It is important to further understand the acute and long-term effects these experiences have on cardiovascular health and overall well-being."

The researchers examined data from the Women's Health Initiative Observational Study, a large, multi-center study of women across the U.S. Nearly 60,000 women with no prior history of cardiovascular events (age 73 to 85) self-reported social activities, living alone, marital status, loneliness and social support from 2011-2015 and were followed for up to 4 years for heart attack, stroke and cardiovascular death. The study evaluated the possible links between social isolation and loneliness and the women's risk of cardiovascular disease events.

To measure loneliness, researchers used a validated scale (the 3-Item UCLA Loneliness Scale). Social Isolation was measured by an index score derived from these questions: whether you are married or in an intimate relationship, whether you live alone and the frequency of social activities—being with friends or family, communicating with friends or family, attending church, going to cultural events, eating out or shopping.

Over the four-year follow-up period, 1,599 heart attacks, strokes or cardiovascular deaths occurred. Researchers found the risk of cardiovascular disease events in the women were:
• 16% higher in those who experienced high levels of socially isolation;
• 11% higher in those who experienced high levels of loneliness; and
• 29% higher in those with both high levels of social isolation and loneliness.

After researchers factored in smoking, physical activity, diet, history of diabetes, high blood pressure, medication use and physical functioning, the links to loneliness and social isolation were decreased. "People who experience social isolation or loneliness tend to withdraw and don't engage often in healthy behaviors, which may become a cyclical pattern. Over time, the unhealthy behaviors coupled with social isolation and feeling lonely put them at an increased risk for cardiovascular disease," Golaszewski said.

The researchers recommend future studies should explore ways to address women's needs for social connection. Some women experience loneliness after being diagnosed with a serious illness and others after the loss of a child, spouse or family member/loved one.

"Our results suggest measures of social isolation and loneliness, even with brief questions, should be incorporated into standard care," Golaszewski said. "We monitor our patients' blood pressure, weight and temperature, and it might also be beneficial to capture the social needs that women may be lacking—to better understand cardiovascular risk and develop solutions."

Provided by American Heart Association

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