Social isolation, loneliness increase risk for heart failure

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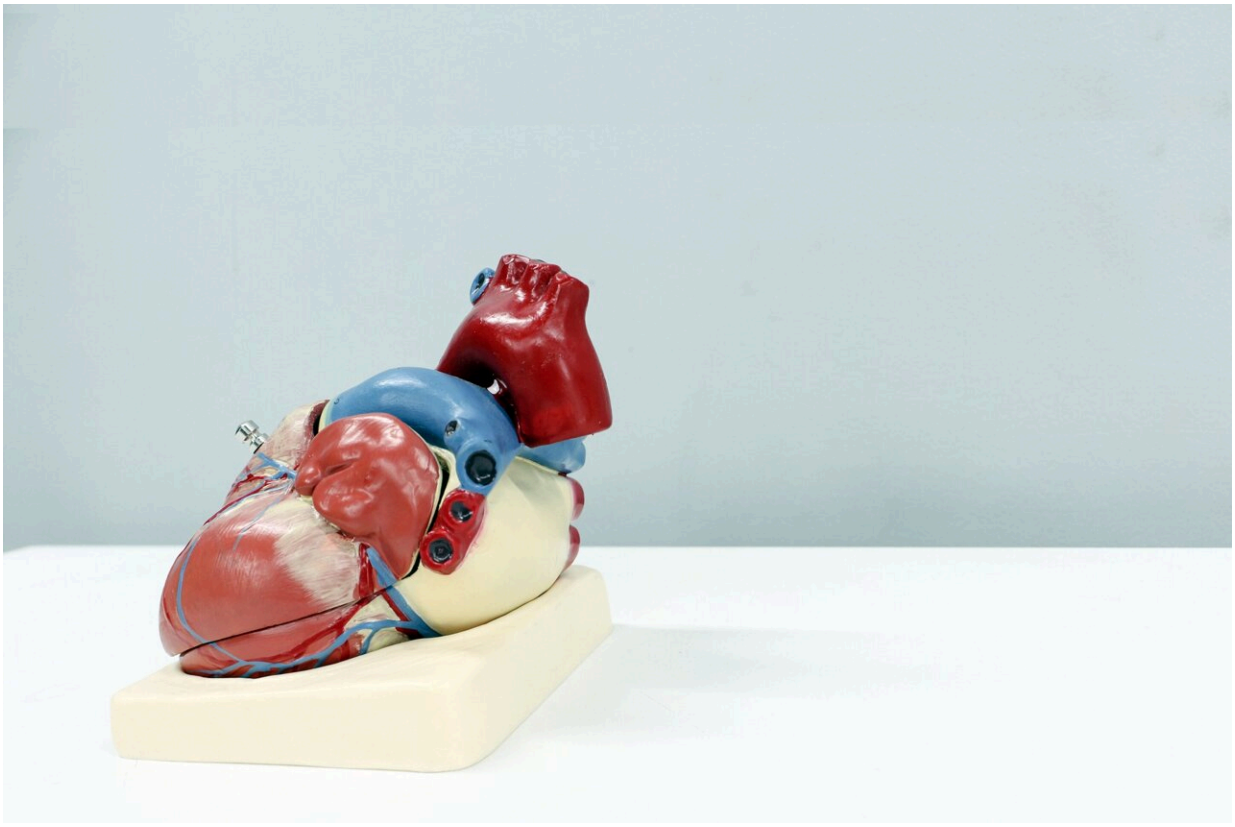

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Studies have shown that social isolation and loneliness are important risk factors for cardiovascular disease, but less has been known about their specific connection with heart failure. A new study published in *JACC:*

Heart Failure shows that both social isolation and loneliness are associated with higher rates of heart failure but whether or not a person feels lonely is more important in determining risk than if they are actually alone.

Social disconnection can be classified into two different, but connected, components. "Social isolation" refers to being objectively alone or having infrequent social connections, while "loneliness" is defined as a painful feeling caused when someone's actual level of social interaction is less than they would like it to be.

For the study, researchers looked at data from the UK Biobank study, which followed population health outcomes over 12 years and assessed psychosocial factors like social isolation and loneliness through self-reported questionnaires. Researchers looked at health outcomes for a population of more than 400,000 middle-aged and older adults. Previous studies have been inconclusive, with inconsistent results and have used different measurements for assessing social isolation and loneliness, said Jihui Zhang, MD, Ph.D., a researcher at Guangzhou Medical University in Guangzhou, China, and senior author of the study.

The researchers found that both social isolation and loneliness increased the risk of hospitalization or death from heart failure by 15% to 20%. However, they also found that social isolation was only a risk factor when loneliness was not also present. In other words, if a person was both socially isolated and felt lonely, loneliness was more important. Loneliness also increased risk even if the person was not socially isolated. Loneliness and social isolation were more common in men and were also associated with adverse health behaviors and status, such as tobacco use and obesity.

One reason for these findings might be because people can feel lonely even when they are in relationships or interact with others, Zhang said.

"These findings indicate that the impact of subjective loneliness was more important than that of objective social isolation," he said. "These results suggest that when loneliness is present, social isolation is no more important in linking with heart failure. Loneliness is likely a stronger psychological stressor than social isolation because loneliness is common in individuals who are hostile or have stressful social relationships."

Zhang said the study pointed to the need for effective tools to screen for social isolation and loneliness in routine clinical care and a broader push to provide more social support. It also indicates the importance of distinguishing between these two factors.

"We shall pay more attention to those individuals feeling lonely for intervention," he said. "For individuals who do not feel lonely, we shall screen for social isolation."

The findings are especially relevant as the COVID-19 pandemic has highlighted the impacts of social isolation and loneliness across a broad range of health outcomes, he said.

In a related editorial comment, Sarah J. Goodlin, MD, researcher at Patient-Centered Education and Research, and Sheldon Gottlieb, MD, associate professor of medicine at Johns Hopkins University School of Medicine, said social isolation and loneliness are often impacted by an individual's socioeconomic status.

"The relationship with social isolation and loneliness is probably strongest in persons at extremes of social isolation and loneliness and compounded by low socioeconomic status," Goodlin and Gottlieb said. "Because social determinants of health are increasingly recognized as important components of patient-centered health care, it may be appropriate to incorporate specific interventions, such as 'social prescribing' into care."

For future studies, researchers plan to investigate the impacts of social isolation and loneliness on major health outcomes in vulnerable populations, including patients with Type 2 diabetes, and are also working on experimental studies to better understand the mechanisms through which social isolation and loneliness affect cardiovascular health.

More information: Association of Social Isolation and Loneliness With Incident Heart Failure in a Population-Based Cohort Study, *JACC Heart Failure* (2023). DOI: 10.1016/j.jchf.2022.11.028

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