

MEDIA RELEASE

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Daily step count study- a giant leap towards assessing common, deadly heart condition, Hypertrophic Cardiomyopathy (HCM)

Scientists at Centenary Institute have discovered that a person's daily step count could indicate disease severity for patients with Hypertrophic Cardiomyopathy (HCM), a life-threatening condition in which the heart muscle thickens, making it harder for the heart to pump blood through the body.

Disease severity is important to establish for HCM patients, to enable doctors to recommend the correct treatment. Professor Chris Semsarian, the head of Centenary Institute's Molecular Cardiology Program and Cardiologist at the Royal Prince Alfred Hospital says, this information is vital because "treatment can range from lifestyle modification and medications, to more invasive options such as open-heart surgery to cut out the thickened heart muscle."

HCM can pose minor risks and symptoms for some patients and it can be deadly for others. This condition can cause sudden cardiac death and scientists are now a step closer to determining which patients are most at risk if this, as a result of a study published in Heart, Lung and Circulation.

Scientists, led by Professor Semsarian, monitored the daily step count of HCM patients for seven days, with minutes of light, moderate and vigorous activity calculated. Scientists discovered, those who were most at risk, took fewer daily steps than those living with less severe cases of HCM, "The step counts indicate how much physical activity a person is doing and whether their heart condition is leading to reduced physical activity," says Professor Semsarian.

It is estimated that up to one in 200 Australians are living with this condition and many aren't even aware of it. A method of more accurately assessing patients to determine how severe their condition is and administering the appropriate treatment, will save lives.

"Most people now wear devices which measure how many steps we do each day, for example, Fitbit, Garmin, Apple watch. We hope our findings show that the additional information gathered about step counts from our patients may help in the clinical assessment of disease severity, therefore facilitating more targeted and effective care of our patients with Hypertrophic Cardiomyopathy."

It's hoped the results of this study will be used to inform future treatment of HCM patients, helping doctors to more thoroughly and accurately diagnose and treat patients who are living with a disease which scientists are still working to fully understand.

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