

THE HEART OF THE MATTER

New Straits Times · 24 May 2021 · 16

ALTHOUGH Covid-19 primarily manifests as a respiratory syndrome, it is also associated with significant multiple organ dysfunction, including severe cardiac impairment. The most common new complication after being hospitalised with Covid-19 is an irregular heartbeat, followed by blood clots in the legs or lungs, heart failure, heart attack and stroke. A growing number of studies suggests many Covid-19 survivors experience heart damage, even if they did not have underlying heart disease and were not sick enough to be hospitalised.

So how does Covid-19 affect the heart?

Covid-19 can affect the heart by invading the heart muscle, causing inflammation in it, as well as inducing permanent damage by muscle scarring or muscle cell death in severe cases. Illnesses such as hypertension, diabetes and cardiovascular disease are associated with a greater severity and higher fatality rate of Covid-19.

Inflammation can also build up in the heart as a result of a person's immune system overreacting to the infection, flooding the body with a cytokine storm.

This mechanism of damage is said to be much more common.

This inflammation in the heart muscle is commonly known as myocarditis and is one of the causes of heart failure.

Covid-19 can also cause inflammation in the lining of the blood vessels that transport blood and nutrients throughout the body.

This can lead to an increase in blood clot formation and a higher possibility of these clots sticking to blood vessel walls, increasing the risk of heart attack or stroke and perhaps causing low blood oxygen levels.

Further damage to the heart happens if blood oxygen levels are compromised and fall so low that the heart muscle no longer receives enough oxygen from the lungs.

For people with pre-existing heart conditions, it weakens the body's ability to survive the stress of Covid-19.

Generally, people with vulnerable hearts are more likely to succumb to the effects of fever, low oxygen levels, unstable blood pressures and blood clotting disorders — all possible consequences of Covid-19 — than someone previously healthy.

Here are strategies to look after your heart:

EAT heart-healthy food. Choose more fruits, vegetables, whole grains, lean meats, fish and low-fat dairy products. Eat less salt (less than 5gm per day), saturated fat and sugar;

GET active. Your heart is a muscle and, as with any muscle, exercise is what strengthens it. Accumulate 30 minutes of exercise at least five days a week;

WATCH your weight. If you are overweight, even just a small amount of weight loss can improve your blood pressure;

MANAGE stress. Stress can increase inflammation in your body, which in turn is linked to factors that can harm your heart, such as high blood pressure and lower good HDL cholesterol. Getting enough sleep and doing things you enjoy can help relieve stress;

GIVE up smoking. Smoking damages blood vessels leading to your heart, brain and other parts of your body. Smokers may also have reduced lung capacity, which will put them more at risk of Covid-19; and,

CONTINUE to take prescribed medications. If you take medicine to treat high cholesterol, high blood pressure or diabetes, follow your doctor's instructions carefully.

Healthy behaviours strengthen people's defence against Covid-19 while also reducing the long-term risk from cardiovascular disease.

DR NUR NABILA ABD RAHIM DR ALIA DANIELLA ABDUL HALIM PROF DR MOY FOONG MING

PROF DR NORAN NAQIAH MOHD HAIRI

Public Health Department

University of Malaya Medical Centre