

EMBARGOED UNTIL 12.01AM MONDAY, 16 AUGUST, 2021

How hidden ageing could lead our heart to malfunction

Small heart valves critical to blood flow through the heart are becoming a big problem

- “If you’re over 65 years of age, ask your doctor to listen to your heart.”
- Health experts are issuing this plea to help curb our nation’s rising rates of undiagnosed heart valve disease.
- The plea coincides with the release of a Baker Institute whitepaper today (16 August) revealing heart valve disease as an emerging public health issue.
- The whitepaper, *Our hidden ageing: time to listen to the heart*, explains that timely diagnosis is crucial to avoid a person presenting to a doctor in crisis.

Monday, 16 August, 2021, MELBOURNE: Australian cardiovascular experts have revealed the number of people with heart valve problems that could lead the heart to malfunction is rising rapidly, particularly as the population ages.

A new whitepaper, titled *Our hidden ageing: time to listen to the heart*, developed by experts at the Baker Heart and Diabetes Institute, shows more than half a million Australians have heart valve disease. This involves a malfunctioning of one or more heart valves that disrupts blood flow through the heart.

Perhaps more concerning, is that more than a quarter of a million Australians have faulty heart valves and are at risk of serious complications and don’t know it. These complications include heart failure, stroke, blood clots, heart rhythm abnormalities, and even death.

The number of undiagnosed cases of heart valve disease is projected to spiral in the ensuing three decades to 336,000 cases in 2031, and 435,000 in 2051ⁱ, placing a heavy burden on our nation’s healthcare system, ageing population, and economy.

Many people are familiar with heart attack, stroke and heart failure. But far fewer people are familiar with heart valve disease in which the heart valves — critical components which help the heart to pump thousands of litres of blood around the body via our blood vessels — malfunction.

Their repetitive opening and closing occurs with each heartbeat, with the valves opening and closing more than two billion times in a lifetime.

Cardiologist, researcher and lead author of the whitepaper, Professor Tom Marwick, Melbourne says: “Much like a machine that can break down, the heart can malfunction if all the parts are not working well.

“This includes small but incredibly important components, such as the valves between the atria and ventricles that make sure blood flows in one direction through the heart.

“When the large blood vessels are functioning well, they optimise the efficiency of pumping blood around the body. However, ageing causes the blood vessels to progressively lose elasticity and become stiff, impacting the vascular structure and function,” says Professor Marwick.

“This arterial damage increases mechanical stress on the valves, which are also susceptible to the same threats.

“If you’re over 65 years of age, ask your doctor to listen to your heart,” Professor Marwick says. “The doctor may detect a heart murmur — often the first symptom of heart valve disease.

“It is important to keep in mind that the common symptoms of heart valve disease — especially exercise intolerance — are often misattributed to ‘old age’.”

Although serious, Professor Marwick says heart valve disease is increasingly treatable.

“With early detection and intervention, those affected can return to their everyday lives, and continue to contribute to their families, communities and the economy.”

That’s why the Baker Institute is issuing a plea to the Federal Government to help curb our nation’s rising rates of undiagnosed heart valve disease.

“We need increased awareness through marketing campaigns; strategies to upskill and support primary care; financial support for the use of emerging technologies; health service design, including improved access to echocardiography; funding to improve access and equity to interventions; and development of national heart valve disease guidelines,” says Professor Marwick.

- ENDS -

Key report findings

- There were 50–170% increases in the numbers of people, deaths and loss of disability adjusted life years from non-rheumatic valve disease between 1990 and 2017 in Australia.
- There are 500,000 - 600,000 Australians living with heart valve disease in 2021.
- An estimated 254,000 Australians are living with undiagnosed heart valve disease. This number will grow substantially to 336,000 in 2031, and to 435,000 in 2051.
- Aortic valve disease is the most frequent cause of severe heart valve disease.
- Early intervention in the form of non-surgical valve replacement (i.e. Transcatheter Aortic Valve Implantation or TAVI) for people aged 65 years and above could potentially prevent productivity losses of up to \$117 million in a single year.
- The common symptoms of heart valve disease — especially exercise intolerance — are often misattributed to ‘old age’. Timely diagnosis is based on awareness and clinical examination — especially a doctor listening to the heart sounds.
- Access to echocardiography is a vital component in managing heart valve disease in the community.

The full report and supporting material, including broadcast vision and audio grabs, is available at: baker.edu.au/valvedisease

Case study

Father, grandfather and Head of Insurance for a leading glass supplier, Phil Holmes, 71, Melbourne has a busy job that, prior to COVID-19, involved travel every week. He also works out six days a week at the gym.

However, when he started to feel a bit tired while doing push-ups for a work fundraiser in 2019, he didn't think for one minute it might be heart-related. "I thought it was just age and fatigue," Phil says. He did, however, promptly seek advice from his GP and a cardiologist.

Phil was diagnosed with aortic stenosis, requiring an aortic valve replacement. He was informed he had the option of open heart surgery (which would require several months of recovery), or a newer, minimally-invasive procedure known as Transcatheter Aortic Valve Replacement (TAVI). He elected to have the TAVI procedure, and he hasn't looked back.

Within a few days, Phil was back at work full-time, and three weeks later, had returned to the gym and cycling. "Heart valve disease is real. It must be treated with both the urgency and due attention it deserves," says Phil.

Unrestricted educational grant

Edwards Lifesciences provided an unrestricted educational grant to the Baker Institute to produce this whitepaper. The Baker Institute is grateful for important collaborations with specialists from the University of Melbourne, University of Tasmania and Deakin University to develop this whitepaper.

About Baker Heart and Diabetes Institute

Baker Heart and Diabetes Institute is an independent, internationally renowned medical research facility, with a history spanning 95 years. The Institute's work extends from the laboratory to wide-scale community studies with a focus on the diagnosis, prevention and treatment of cardiovascular disease, diabetes and their complications. www.baker.edu.au

For further information, or to organise interviews please contact:

Tracey Ellis

T: (03) 8532 1514

M: 0433 781 972

E: tracey.ellis@baker.edu.au

Kirsten Bruce | Julia Slater, VIVA! Communications, Sydney

M: 0401 717 566 | 0422 074 354

E: kirstenbruce@vivacommunications.com.au | julia@vivacommunications.com.au

Available for download

Digital media kit baker.edu.au/valvedisease

Broadcast vision vimeo.com/585150997/5eea0d575e

Audio grabs baker.edu.au/valvedisease

ⁱ Baker Heart and Diabetes Institute. *Our Hidden Ageing: Time to Listen to the Heart*. 2021