

**EXPERIENCED:** Associate Professor Carolyn Lam, principal investigator of the study and senior consultant with the Department of Cardiology at the National Heart Centre, assessing a patient.  
PHOTO: NATIONAL HEART CENTRE



Study shows average age of S'poreans with heart failure is 10 years below that of Westerners

# Heart failure hits S'poreans early

Reports by JUDITH TAN  
juditht@sph.com.sg

## Singaporeans with heart failure tend to be much younger than Americans and Europeans.

A multinational study has found that the average age of Singaporeans with heart failure is 61. They are about 10 years younger than Westerners.

The reasons: Affluence, stress, dietary habits, and a sedentary lifestyle. These factors lead to coronary artery disease, hypertension and diabetes – the three most common diseases linked to heart failure.

These findings from the Asian-HF (heart failure) study were presented by Associate Professor Carolyn Lam, the principal investigator of the study, at the European Society of Cardiology Heart Failure Congress in Italy in late May.

According to the study:

- 62 per cent of Singaporeans have coronary artery disease;
- 70 per cent suffer from high blood pressure;
- 58 per cent have diabetes.

That's higher than in other parts of Asia, the US and Europe.

Only 40 per cent of patients in the study in Asia and the US, and 33 per cent in Europe, had diabetes.

Slightly more than 1,000 Singaporeans were among the 5,000-plus Asians who took part in the study.

Professor Mark Richards, who chairs the executive committee of the study, said the report provides data for better understanding into Asian heart failure patients "as there is no single phenotype".

The study found that Malays from countries such as Singapore, Malaysia and Indonesia were at the highest risk of heart failure.

## Results of Asian-HF study

	S'pore	Asia	US	Europe
Average age of patients	61	60	70	70
BMI (kg/m <sup>2</sup> )	26	25	—	—
CAD* (%)	62	50	59	54
Hypertension (%)	70	52	69	63
Diabetes (%)	58	40	40	33

\*Coronary artery disease

Source: National Heart Centre Singapore

About 62 per cent of Malays had hypertension compared to 58 per cent of Chinese and 43 per cent of Indians.

Prof Lam, who is a senior consultant with the Department of Cardiology at the National Heart Centre Singapore, said: "In Singapore, we have transitioned from a developing country to a developed one rapidly.

## BABY BOOMERS

"It's now the baby boomers who have reached that age of 60, and they are manifesting heart failure from these risk factors."

One such boomer is a 70-year-old retiree who wanted to be known only as Mr Tay. He used to run a business manufacturing T-shirts, football jerseys and trophies.

"I had always been healthy and had never been sick a day in my life until 2010. I was having supper with a friend when I felt bloated and uneasy," he told *The New Paper* yesterday.

"I was looking pale so I decided to go to the hospital the next day. That was when they warded me for four



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— Prof Lam, a senior consultant with the Department of Cardiology at the National Heart Centre Singapore

days after I was diagnosed with heart failure."

It seemed the stress of rushing around and not having regular check-ups had taken a toll on Mr Tay.

An ultrasound scan in February this year showed his heart is functioning at only 19 per cent.

Prof Lam said: "The silver lining is that most cardiovascular risk factors are modifiable. In other words, there is a lot we can do to reduce or prevent the risk of hypertension, diabetes and coronary heart disease.

"The simple acts of walking more, taking the stairs, eating appropriate portions of food can cut the risk of getting these diseases."

Citing an example of unhealthy diet, she said she was at a playground with her one-year-old son when a group of primary school pupils had lunch.

"I was taken aback when their lunch was made up of donuts and fries," she said.

"Now, if we teach our children to eat healthily, then the future generation would not have to contend with heart failure."

## CAUSES OF HEART FAILURE

Heart failure occurs when the organ no longer functions as well as it should.

In a normal healthy heart, a set amount of blood enters the organ and is pumped out again with each heartbeat.

"But with heart failure, the heart becomes weaker and less able to pump the blood that the body needs," said National Heart Centre Singapore's senior consultant Carolyn Lam.

Associate Professor Lam said that heart failure, like kidney failure, is a chronic disease and is debilitating.

The causes of heart failure include:

- Coronary artery disease, where plaque build-up can reduce blood flow to the heart and damage the muscle;
- Hypertension, or high blood pressure, is when the force of blood pumping through is too strong. It can strain the heart and damage blood vessels;
- Diabetes, where an excess of glucose in the bloodstream can change the make-up of blood vessels, leading to heart failure.

In dealing with heart failure, doctors sometimes treat the underlying cause by repairing a heart valve or controlling a fast heart rhythm.

For most cases, treatment involves balancing medication and using devices that help the heart beat and contract properly.