

**M**ORE WOMEN THAN MEN get a type of heart failure that is less understood, less detected and has no cure yet.

Called heart failure with preserved ejection fraction (HFpEF) or diastolic heart failure, it happens when the heart pumps normally but fails to relax or fill properly because it gets stiff.

It often goes undetected because doctors have traditionally looked at the heart's pumping function rather than the way it relaxes, said Professor Carolyn Lam, Senior Consultant, National Heart Centre Singapore (NHCS), and Professor, Duke-NUS Cardiovascular Academic Clinical Programme.

She said the weakening of the pumping function – called heart failure with reduced ejection fraction or systolic heart failure – which more men than women get, has been better studied, more widely recognised, and has an array of effective drugs to treat it.

But there are no life-saving drugs for HFpEF – the type that many women get – even today. “There are no drugs to improve survival rates for it. That was my inspiration for studying it,” said Prof Lam, who set up Women's Heart Clinic at NHCS to offer women comprehensive services catering to their specific needs (see box).

Without an effective drug, doctors can only treat the symptoms and risk factors, and advise patients on preventive lifestyle changes in diet, stress and exercise – the latter being one of the best ways to reduce stiffening of the heart.

“We can manage their risk factors and the haemodynamics. If they have fluid overload, for instance, we give them diuretics. There are things we can do, but there is no magic pill to improve survival.”

She said that the problem has been there all along, but women were under-represented in cardiovascular clinical trials for a long time. However, there are now specific efforts aimed at enrolling representative numbers of women and minorities in clinical trials.

There is a glimmer of hope down the road.

A new therapy targeting HFpEF is being tested in ongoing global trials, said Prof Lam, who is on a global committee running these trials in the United States, Europe and Asia, including Singapore. “These trials are at the forefront of research into HFpEF, and there are new drugs on the horizon that may help.”

### Heart attacks worse in women

When it comes to heart attacks, women may fare worse than men.

A study carried out by NHCS on heart attacks across Singapore showed that women who suffered these were older, had more advanced disease, and experienced more complications than men, resulting in a greater than twofold increase in long-term risk of death compared to men.

Heart attacks in men usually involve

big coronary arteries. This can be treated using stents to open up the arteries for blood flow to the heart to resume.

While women's heart attacks can be due to big arteries, it can also involve small arteries (microvascular disease). These blockages cannot be seen on an angiogram, and no stent is small enough to be put inside them.

Another cause of heart attacks in women is stress-induced cardiomyopathy (broken heart syndrome or Takotsubo cardiomyopathy). Here, severe stress triggers a massive heart attack even when there are no blockages in the arteries. More prone to this are older, post-menopausal women receiving severe bad news.

“It's pure stress. The adrenalin and stress hormones can be so strong that

they cause the arteries to constrict. When there's no blood supply to the heart muscle, it results in a heart attack.”

Symptoms of this disease may also be different in women than in men.

“Women may get central chest pain like men, but more often than men, they experience atypical symptoms such as jaw or neck tightness, back pain and even gastric pain,” said Prof Lam.

### Diabetes poses a risk

Diabetes and smoking have a worse impact on women than men, despite both genders having the same risk factors.

“We did a study on heart attacks in Singapore, and were shocked that so many of the women were diabetic. And diabetic women with heart attacks

# Heart failure is different in women

**The illness affects both sexes differently, but may be worse in females because there is no cure for a common type many get (only prevention).**

By Suki Lor



**THERE ARE NO LIFE-SAVING DRUGS FOR HFPEF – THE TYPE THAT MANY WOMEN GET – EVEN TODAY. THERE ARE NO DRUGS TO IMPROVE SURVIVAL RATES FOR IT. THAT WAS MY INSPIRATION FOR STUDYING IT.**

PROFESSOR CAROLYN LAM, SENIOR CONSULTANT, NHCS, AND PROFESSOR, DUKE-NUS CARDIOVASCULAR ACADEMIC CLINICAL PROGRAMME

### Young women can get it too

“One of the big myths is that heart disease does not happen to younger women, or that it is not a big problem for women,” said Prof Lam.

She said cardiovascular disease – which includes heart disease and stroke – is also a women's disease and accounts for one third of all female deaths.

Women any age can get it, although fewer young women than young men suffer from it. But even those who are young, lean and look fit may have high blood pressure or high cholesterol, which are the beginnings of cardiovascular disease.

The incidence rises with age, and especially after menopause in women. In old age, the scales are tipped against them. “We not only catch up with men after menopause, we overtake them,” said Prof Lam.

She is concerned that women, while dutifully going for regular pap smears and mammograms, neglect to test their heart.

“Take care of your heart. That's the best thing you can do, not just for yourself but for your loved ones.”

> Continued from page 3

## Heart failure is different in women

did badly and were more likely than men to die. So diabetes is particularly bad in women and a strong risk factor," said Prof Lam, who was the co-first author of the study with Dr Gao Fei, Principal Biostatistician, National Heart Research Institute Singapore, NHCS.

She said diabetic women can prevent cardiovascular disease by taking their medicines as prescribed, controlling their diet and sugar intake, and exercising. "The saving grace is that exercise seems to protect women more than it does men."

US guidelines advise women to get at least 150 minutes of moderate exercise a week, but those with heart disease should talk to their doctors before starting an exercise regimen, or be supervised when they do so.

Prof Lam also advises women with a family history of heart disease and those who are at menopause – or reaching it – to go for check-ups to ensure their heart is in good order.

"These problems are best picked up and managed at an early stage. If you have high blood pressure, high cholesterol or diabetes in the early stage, you can't feel it. You have to test for it," said Prof Lam.

## Women's Heart Clinic

An encounter with an older female patient inspired Prof Carolyn Lam, Senior Consultant, NHCS, to set up Women's Heart Clinic there.

The patient said apologetically: "I'm sorry to disturb you. I have this strange feeling: It's sometimes here. It's not really a pain. I think it's because I'm stressed. My family members are also going through this stress. I think I need to manage my stress better."

Prof Lam saw that her patient was trying to rationalise away her symptoms. The woman had previously seen many other doctors, who told her it might be stress, or implied that she was neurotic.

"It turned out that she had severe heart artery blockages. Women often experience symptoms differently from that of men. Sometimes it's in the chest. They don't call it pain but discomfort, tiredness, a bit of tightness. Often, it's at the back and they think they need a massage."

By contrast, her next patient,

a man, went straight to the point, telling her he had chest pains and needed to have his heart checked.

"I realised right then that we really need to get the message out to empower women. It's as if they think they're not allowed to have chest pain or heart disease because it's a man's disease."

The incident drove home the need for women to get help as soon as possible. She also hopes female advocacy groups can form to support, inform and empower one another regarding women's heart health.

The clinic she set up is not a physical space, but a service focusing on women at risk of heart disease or with symptoms of it. Patients come directly or are referred there by other doctors.

Prof Lam, who has been running the clinic herself once a week, is currently on overseas sabbatical leave but due to return in January 2018.



PHOTO: ZAPHS ZHANG

Prof Carolyn Lam (left) said the saving grace for women is that exercise seems to protect them from cardiovascular disease more than it does men.

Parkway College

Develop your **Career**  
in **Healthcare**  
**Master of Health Administration**



### About the Programme

- 24 months on part-time basis
- Course commencement date: **2 March 2018**
- Application closing date: **31 January 2018**
- Mode of Delivery: Online learning, workshops by faculty staff and tutorials supported by the local faculty
- Accredited by the Australasian College of Health Service Management (ACHSM)

REGISTER NOW!



### Entry Requirements

- At least 23 years old with a degree from a recognized university OR a diploma in Nursing, Allied Health or Healthcare related field AND
- At least 4 years of working experience in the health or aged care sector

### Course Highlights for Master of Health Administration

- Flinders faculty has strong practical management experience and is supported by both industry-based lecturers and academic leaders
- Local faculty and guest speakers are invited to contribute to the learning experience and to ensure relevance to the Singapore Health System
- 100% coursework and assignment-based programme
- Convenience of online learning combined with face-to-face workshops

To register, call **6508 6908** or visit [www.parkwaycollege.edu.sg](http://www.parkwaycollege.edu.sg)

Parkway College of Nursing & Allied Health is a premier global private educational institution in the niche areas of Nursing, Allied Health and Healthcare Management. The College provides opportunities for life-long learning, and equips its students with the skills and knowledge to succeed in the work place.

Parkway College

Parkway College of Nursing and Allied Health Pte Ltd  
168 Jalan Bukit Merah, Tower 3 #02-05 Singapore 150168

Contact No: (+65) 6508 6914 • Website: <http://www.parkwaycollege.edu.sg>  
Registration Number: 200800722R • Validity Period: 20/05/2014 - 19/05/2018

SP PACE ACADEMY

Suitable for medical, nursing, allied health professionals, hospital administrators and executives, as well as those who wish to do a mid-career switch into the healthcare sector.

## Certificate of Performance in **NEW!** Healthcare Management (Part-time) / Healthcare Quality (Part-time)

### Course Schedule

**Date** : 26 February - 18 May 2018 (Mondays, Wednesdays and Fridays)

**Time** : 7.00pm to 10.00pm

**Course Fees** : \$2,568\* (with GST) per course

\*Eligible for SkillsFuture Credit



### Certificate of Performance in Healthcare Management

Course consists of 3 modules of 30 hours each:

- Healthcare Management
- Human Resource Management in Healthcare
- Financial Management in Healthcare

### Certificate of Performance in Healthcare Quality

Course consists of 3 modules of 30 hours each:

- Patient Safety
- Healthcare Quality
- Professionalism and Ethics in Healthcare

### Minimum Entry Requirements

At least a diploma from a recognised institution and have preferably 2 years of working experience in the healthcare sector. Applicants who do not meet the above requirements may also apply, and will be assessed on a case-by-case basis.

#### Who Should Attend?

- Healthcare professionals who do not have formal education in healthcare
- Professionals keen to do a mid-career switch into the health care sector

REGISTER NOW!  
[www.pace.sp.edu.sg](http://www.pace.sp.edu.sg)

For course information and application details, please visit:  
[www.pace.sp.edu.sg](http://www.pace.sp.edu.sg) or email to [pace@sp.edu.sg](mailto:pace@sp.edu.sg)

SINGAPORE POLYTECHNIC **SP**