



LunchWithSumiko

Always expect the unexpected

From Aids to Covid-19, Professor Leo Yee Sin has been at the forefront of every infectious disease crisis in Singapore. She tells Executive Editor Sumiko Tan why one can't be complacent about Covid-19.

Prof Leo Yee Sin made headlines in the 1990s for being one of the first doctors to care for patients with HIV. She headed Singapore's HIV programme at a time when there was a stigma against Aids. ST PHOTO: LIM YAOHUI



When Professor Leo Yee Sin's son came down with Covid-19 last month, he isolated himself in his room and monitored his oxygen levels with an oximeter. His throat was very sore but he recovered and no one else at home was infected.

He would have been in good hands if it had been worse, for his mother is an infectious diseases expert, and also executive director of the National Centre for Infectious Diseases (NCID).

Prof Leo was naturally relieved her son's brush with Covid-19 was relatively mild.

In the two-plus years since the Sars-CoV-2 virus emerged, she has encountered distressingly severe cases.

"We saw quite a number of patients with gangrenous extremities," she says. "Because of lack of blood circulation, the hands and the feet became gangrenous and turned black. Really very painful."

There were patients who spent harrowing months in intensive care fighting not just Covid-19 but complications.

"Once you are hooked up in the machines, you're very vulnerable to many things and that is what causes post-infections. Other bacteria will come in, other viruses will come in."

She has chosen to have lunch at the National University of Singapore Society's Mandalay Guild House, a stone's throw from NCID.

The club for NUS graduates is in a quiet, leafy part of the Novena cluster of hospitals. It is housed in a two-storey black-and-white bungalow set in a large garden.

The restaurant is on the ground floor but we have been given a room upstairs to have lunch in private. A large table has been meticulously set up with service plates and table flowers.

She has walked over from NCID, accompanied by two officers from her corporate communications department. They have had lunch and sit in to take notes.

Because the table is so wide, Prof Leo and I are spaced about 1m apart. "Very safe," she observes.

I report that I did my antigen rapid test (ART) before leaving for lunch.

"Sorry," she says, "I'm due tomorrow." She does her ART twice a week.

We have pre-ordered: a mushroom soup and Caesar salad for her, and Hainanese pork chop and fried banana fritters for me.

The dishes are plated with care and my pork chop is absolutely delicious. She looks pleased when I tell her this. Her children like the clubhouse for its food, especially its steak, she says.

She usually has rice and vegetables for lunch, or the hospital bento. "Convenient," she says.

With her hair held back by her trademark Alice band and a face barely adorned with make-up, she looks younger than her 62 years, and not much different from her photographs 10, 20 years ago.

Her manner is down to earth and unpretentious. "Not coming from an elite background or elite school really taught me to be humble, unassuming and earnest," she tells me later.

HALL OF FAME

We're meeting last Wednesday, a day after she and six other high-flying women were inducted into the Singapore Women's Hall of Fame.

This initiative by the Singapore Council of Women's Organisations started in 2014 to recognise women who have made an impact on Singapore.

Prof Leo's list of achievements is long and illustrious.

In the 1990s, she made headlines for being one of the first doctors to care for patients with human immunodeficiency virus (HIV), which can cause acquired immunodeficiency syndrome (Aids).

She headed Singapore's HIV programme at a time when there was a stigma against Aids.

In the years that followed, she and her colleagues at the then Communicable Disease Centre (CDC) were at the forefront every time Singapore faced an infectious disease crisis.

There was the Nipah virus in 1999, severe acute respiratory syndrome (Sars) in 2003, H1N1 in 2009, Zika in 2016, not to mention regular surges of dengue and other outbreaks. Nothing, of course, has been as draining as Covid-19.

Along the way, she has won numerous accolades for her dedication and leadership.

Her approach has always been to "be prepared to do and give our best no matter how hard it may take," she says.

She was born the youngest of five children and has two sisters and two brothers.

Her late parents were both from Hainan island in China. Her mother arrived in Singapore at the age of 13 to join her parents who were already here, and her father came later. Her parents had been

matchmade in China.

Her father worked as a bartender in a hotel and her mother was a housewife with an entrepreneurial streak, making Hainanese kueh for sale.

Prof Leo was born in a kampung near Toa Payoh and the family later moved to a one-room rental flat in Toa Payoh, then to a three-room flat in Kim Keat. It was a happy childhood, she says.

She was in the Chinese stream at Balestier Hill West Primary School, then went to Thomson Secondary School, a Chinese-language school, where she also did her pre-university.

Thomson Secondary was very strong in the Chinese language at the time and she laments how the standard has not been sustained. She was sporty, played volleyball and badminton, and was a monitor or prefect in her six years there.

"I was not really a top student, was easy-going with my work and not very studious. I didn't have much pressure from my parents," she recalls. "I guess I can grasp concepts fast enough and did not have to do much mugging to pass."

She had her first real taste of having to study hard when she entered university.

She reminds me that this was during the period the Government decided to merge the Chinese-language Nanyang University with the University of Singapore to form NUS.

Many of her Thomson Secondary classmates were trapped and couldn't enter NUS, she says with regret.

Her first choice was to do business as it was a shorter course and would be less of a burden on family finances. But she finally opted for medicine, and struggled to learn English, including medical terms.

"I didn't quite conform to most of the medical students who were from RGS, ACS," she says of the elite Raffles Girls' School and Anglo-Chinese Secondary School.

"The first two years were really a struggle and I was possibly marked down as one of those hopeless students."

She remembers how the late Professor Ragunathar Kanagasuntheram, who was head of anatomy, tutored her and some other Chinese-educated students

during the school holidays. He was her favourite professor, she says.

She was interested in immunology and decided to specialise in infectious diseases, which was then being set up as a speciality at NUS.

She spent a year at Cedars-Sinai Medical Centre in Los Angeles, where HIV was a challenge. When she came back, she focused on HIV medicine. In 1995, she set up the HIV programme at the CDC, the predecessor of NCID.

She helped to raise funds for patients and worked with policymakers and volunteers to garner community support and care for HIV patients.

WHEN PATIENTS DIE

Do our best, feel sorry, but must move on because the living need us.



PROFESSOR LEO YEE SIN, on how she copes with encountering death in her work.

The fight against HIV was different from Covid-19, she says.

"For HIV, we struggled for a long period of time to make sure that our patients can access reasonably good care and get the medication to prolong their life, so it was progressive," she says.

"Covid-19 is very intense, and it is high impact. So one is a chronic condition that you need to have the perseverance to get things done. The other one, you want to do whatever you can to try to reduce it and prevent it."

She still sees patients. Most are HIV cases and she keeps track of their health, some for 20, 30 years now.

Medication has helped them survive for decades. With a smile, she says some tell her in Mandarin "wo zhuan dao de" - I've earned (extra time).

COVID-19: WHAT NEXT?

The most challenging part of fighting Covid-19 has been keeping

up with the virus as it mutates, Prof Leo says.

While Omicron is said to be milder than Delta, she cautions that certain groups have been severely hit, in particular the elderly and people with existing conditions, including those who have been fully vaccinated.

She notes that with the Delta variant, those who were badly affected required ICU care because of the virus.

Omicron has been different in that it can cause a patient's existing medical conditions to tip over. So while a patient's brush with Covid-19 might be mild, the virus could cause his other existing ailments to deteriorate.

"They come into the hospital because the blood pressure has dropped, they feel very giddy, they could have had a fall or milder form of pneumonia," she says.

These older patients will also need longer periods to recover and rehabilitate, putting different strains on the healthcare system.

Besides the elderly with pre-existing conditions, another group at higher risk when they get Omicron is kidney patients, those on dialysis and with chronic conditions.

The situation will remain dynamic in the next one year as the virus continues to mutate, she predicts.

If there are a lot more cases, the virus will mutate even faster, and it can come up with something unexpected. It is most important to slow down transmissions, which will also slow down mutations, she says.

Will Covid-19 ever disappear? "It will not disappear. The virus is here to stay, and not only is it here to stay, we have to watch out for a few things," she warns.

One is how the Sars-CoV-2 virus has adapted to human beings with an increasing ability to infect and re-infect them.

Two is how the virus is now known to infect many different animal species, which means there are many species out there susceptible to the virus.

The virus can replicate and mutate in these animals. The risk of zoonotic spillback - where humans spread the virus to animals which then spread it back to humans - is a very real one.

"We still don't have a good grasp of this dynamic situation with humans, the virus, animals and the environment," says Prof Leo. "So I think we have to keep a very open mind and to be very flexible. Expect the unexpected. That's the common phrase I have to use because of my two years of encountering Sars-CoV-2."

A PERMANENT PRESENCE

It will not disappear. The virus is here to stay.



PROF LEO, on whether Covid-19 will ever disappear.

As to whether Singapore's Omicron peak has passed, she is hopeful that it has, and that cases will gradually come down.

Her hope is that the pandemic has resulted in people internalising what they can do to reduce the risks of getting respiratory infections.

"It is human for us to want to get back to life before Covid-19. But at the same time, it's important for us to be able to examine what Covid-19 has taught us," she says.

One would be wearing masks in risky situations, or when showing symptoms so as not to infect other people.

Pre-Covid, Singaporeans might have viewed with trepidation a person wearing a mask. "What I hope is that in the future, we will have a change of perception and see a person wearing a mask as much safer than a person who doesn't."

In the same vein, people in the past aimed for 100 per cent attendance in the workplace or at school. A mindset shift and social acceptance are needed to come to a view that it is better for people who are unwell to stay home.

"Once I can internalise that, I actually do not need any more policy that is hardwired into a lot of all these restrictions because it becomes part of me."

Given her close encounters with infectious diseases, I ask if she views the world as an especially dangerous place.

"Knowing danger is not a bad thing. You try to find a balance where you are able to live safely in a way that you can cope with the presence of danger."

I wonder how she feels when she sees Covid-19 patients in a bad state.

"You ask yourself, was there any missed opportunity of intervention? Then you start to wonder why. Why is it that we know vaccines can help but this person did not use vaccines and ends up in such a very sorry physical state?"

How does she cope with encountering death in her job? Prof Leo, who does not have a religion, says: "Do our best, feel sorry, but must move on because the living need us."

Her work day stretches from eight in the morning into the night when she attends Zoom calls with global experts.

She relishes the research aspect of her job and speaks passionately about areas where more study is needed, not only in Covid-19 but also diseases like dengue fever.

Her husband is a biotechnologist who runs a biotech company in Thailand. He was based in Bangkok for several years but since Covid-19 has been based in Singapore.

They have two daughters and a son. Her elder daughter runs her own business, her son works in a biotech company and the younger girl works in an office. Two children live at home.

She doesn't have much time to exercise or relax, but lets on that she caught all the episodes of the Korean drama Squid Game and also a Chinese series on Emperor Qin Shi Huang.

Before we wrap up our pleasant, two-hour lunch, I ask if she sleeps well at night.

She laughs. "It really depends. Sometimes there are things just circulating in your brain that affect complete rest." Covid-19, no doubt, is one of them.

sumiko@sph.com.sg
Twitter @STsumikotan



WHAT WE ATE

NUSS Mandalay Guild House
2 Mandalay Road

1 mushroom soup: \$8
1 classic Caesar salad: \$11
1 Hainanese pork chop: \$11
Banana fritters: \$7

Total (with tax): \$43.55



SCAN TO WATCH
Lunch With Sumiko: Professor Leo Yee Sin.
<https://str.sg/pr/ofleo13>

