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Let's makan and lim kopi!

SGH, community partners seek ways to boost preventive health, overall well-being through strengthening seniors' social interactions.



PHOTOS: VERNON WONG

Apart from picking up barista skills, Mr Alex Chong (in apron, serving coffee to Assoc Prof Low Lian Leng) says that working in Goodlife Makan allows him to enjoy the camaraderie of other seniors.

Mr Alex Chong has picked up a new skill — and he loves it. At 68, Mr Chong has learnt to make lattes, long whites, americanos, cappuccinos — and serving them — in true barista style at Goodlife Makan. More than brewing and serving coffee, Mr Chong goes to the community kitchen run by social service agency, Montfort Care, daily to enjoy the camaraderie of other seniors.

Having Goodlife Makan is an important aspect of Montfort Care's aim for seniors to live healthily and age well at home. While able-

bodied seniors are able to walk from nearby Marine Terrace flats to the centre, those who are not able to move on their own are helped to the centre in wheelchairs by Montfort Care assistants for lunch.

"For our seniors to age well, social and health integration is very important. Our healthcare assistants will bring eight to 10 wheelchair-bound seniors for their community lunch Mondays to Fridays. It could be as short as 45 minutes, but the time is very meaningful and impactful for our seniors who are not able to walk down to meet their neighbours and friends by themselves," said Ms Ong Boon



The health impact of social isolation is as bad as for someone who is obese, who smokes, and can lead to higher blood pressure (and other long-term issues).

Associate Professor Low Lian Leng
Chairman, Division of Population Health and Integrated Care,
Singapore General Hospital

Cheng, Assistant Manager, Goodlife Makan, Montfort Care.

Indeed, an important lesson on social isolation was learnt during the early days of the COVID-19 pandemic, when circuit breaker measures were implemented and many seniors, particularly those who were single, became isolated and lonely at home, said Associate Professor Low Lian Leng, Chairman, Division of Population Health and Integrated Care, Singapore General Hospital (SGH). "The health impact of social isolation is as bad as for someone who is obese, who smokes, and can lead to higher blood pressure (and other long-term issues)," he said, adding that older people who engage socially with both friends and family, and not just family or friends, have a low mortality risk.

While material needs like housing and food of single elderly residents might be met



Bukit Merah, Chinatown and Katong. SGH's Healthy, Empowered and Active Living (HEAL) Fund — made possible by the Low Tuck Kwong Foundation for supporting these efforts — can be used to finance promising early community projects to support needy patients and residents. One involves SGH dietitians

conducting in-depth interviews and focus group discussions to understand senior residents' nutritional needs and knowledge at Goodlife Studio (Bukit Purmei) and Goodlife Studio (Marine Parade), active ageing centres run by Montfort Care. Underscoring the challenges of the project, Ms Joycelyn Er, Principal Dietitian (Clinical), SGH, found different levels of understanding of nutrition and other food-related knowledge among seniors at these centres. "Perhaps, it's due to the differences in socio-economic status and education level of the seniors between the two centres," she said. Such findings enable dietitians to better design a series of hands-on interactive nutrition activities to meet the needs of these seniors. There are also plans to pilot these activities with Montfort Care, which can potentially be extended to other active ageing centres in the southeast region of Singapore.

relatively easily, questions hang over their social and mental health needs. How can they continue to age and live well at home without the important support of family and friends? How can they overcome social isolation? How can they avoid hospitalisation and care homes that seem to be synonymous with ageing? How can they be integrated into the wider community and society?

Under Healthier SG, healthcare institutions and social welfare organisations have been stepping up to meet this need in boosting preventive health among residents.

As the Population Health Manager for Singapore's southeast precincts, SGH works with community partners like Montfort Care, as well as general practitioners (GPs), to support the more than 300,000 residents living in its Healthier SG neighbourhoods like

Montfort Care has transformed five other studios under different themes — carpentry in Bukit Purmei, digital media in Tiong Bahru, community theatre in Telok Blangah,

Having students from nearby CHIJ Katong Convent (above, right and next page) visit Goodlife Makan to interact with and energise the seniors can help replace the negative stereotype of the elderly with the idea that they are valuable assets to society, given their wealth of experience.



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Mdm Lin Yan Qing, 84, (flanked by Montfort's Ms Ong Boon Cheng and SGH's Ms Jocelyn Er) is a volunteer cook at Goodlife Makan kitchen.



We've had to think a little out of the box about what might inspire our younger seniors to visit these active ageing centres in the coming years.

◆◆◆
Ms Ong Boon Cheng
Assistant Manager,
Goodlife Makan,
Montfort Care



bike kitchen in Yishun, and tea bar in Bedok. "We've had to think a little out of the box about what might inspire our younger seniors to visit these active ageing centres in the coming years. What might inspire and motivate them? Bingo or Teresa Teng songs might no longer be a draw," said Ms Ong.

In addition to the nutrition programme, Montfort Care is working with SGH to evaluate the effectiveness of its Goodlife studios by answering questions like the effectiveness of thematic centres versus conventional ones in meeting the demands of ageing Singapore, the elements that have been successful, and the inclusion of intergenerational programmes. Having students from nearby CHIJ Katong Convent visit Goodlife Makan to interact with and energise the seniors can help replace the negative stereotype of the elderly with the idea that they are valuable assets to society, given their wealth of experience, added Ms Ong.

Frailty increases chance of falling and illness

More than half of 403 seniors who were recruited for a SingHealth baseline pilot physical assessment were found to be frail, including 10 per cent who were severely frail.

Physical frailty does not just increase the chances of falling, but also the risk of illness and poor recovery from diseases. Thus, if the assessment that more than half of seniors are frail holds true for the general population, this means that, to age and live well in the community without the need to go to a nursing or care home, changes would have to be made to support them.

"The physical environment is very important, while technology is also increasingly important to support initiatives such as telehealth to allow remote monitoring of residents at home," said Associate Professor Low Lian Leng, Chairman, Division of Population Health and Integrated Care, SGH.

To find out what the elderly need in their neighbourhoods, another project involved giving disposable cameras to 25 seniors to document places and activities in Marine Parade that they did over the course of a week. The Photovoice Identification project found that outdoor benches were important to the elderly, who might become breathless as they walk to the market, active ageing centres, or bus stops and MRT stations. Benches allowed them to rest and chat with their neighbours, or just to sit and watch people go by. Importantly, residents said the benches encouraged them to go out more often. Going out every day boosts not only their physical health, but social interactions benefit their social and mental health.

In these community projects, SGH partners social agencies, schools

and other organisations. For the First On Frailty screening and integrating health and social care, it partnered Thye Hua Kwan Moral Charities, Montfort Care, and Agency for Integrated Care, and with Singapore University of Technology and Design students for Photovoice. These projects were aided by SGH HEAL Fund, which is supported by Low Tuck Kwong Foundation, for advancing academic and population health in SGH and SingHealth, said Assoc Prof Low.

Since its launch in 2021, HEAL has helped finance needy SGH patients, startups with promising health and social impacts, and those awaiting national-level funding. Other projects that HEAL funded include outreaches to over 3,000 elderly residents for vaccination during the early days of the COVID-19 pandemic when community nurses and social workers could not visit homes.

Another was Project Wire Up to promote digital and health literacy among the elderly from June 2020 to August 2022. SGH worked together with telcos and community partners from Infocomm Media Development Authority's Seniors Go Digital programme to offer smartphones and data plans to needy seniors, who were also taught to use the devices and avoid falling prey to scams. More than 170 seniors benefited from Project Wire Up.

HealthStart was then established to support residents on their health journey through initiatives such as goal setting and social prescribing, where there was an increase in follow-up rates with primary care from 42.7 per cent to 84.5 per cent after a few runs of the programme.

Rehabilitation and recovery

As cancer survival rates improve, the focus on recovery has never been more crucial. The NCCS-SCS Rehabilitation Centre offers patients a lifeline through personalised care and multidisciplinary support, helping them regain strength, independence and hope for the future.

by Lyn Chan

For many cancer patients, recovery continues long after treatment ends. In fact, recovery often brings new challenges — both physical and emotional — that can be long-lasting. That is why the launch of the National Cancer Centre Singapore-Singapore Cancer Society (NCCS-SCS) Rehabilitation Centre in June 2024 is a significant milestone that will boost cancer care in Singapore.

Housed within NCCS, it is the country's first dedicated tertiary rehabilitation centre, offering tailored support for patients navigating the road to recovery.

A team that understands patient needs

Walking into the 370-square-metre rehabilitation centre feels more like stepping into a gym than a clinical facility. The space is designed to help cancer patients regain their strength and independence, with physiotherapists, occupational therapists, dietitians and speech therapists working alongside one another to ensure holistic patient care.

"For many of our patients, rehabilitation is the bridge between treatment and getting back to their normal lives," said Professor Lim Soon Thye, Chief Executive Officer (CEO), NCCS. "We want to make sure that their recovery is smooth and that they are supported during the process."

A seamless approach to cancer recovery

Unlike community rehabilitation centres, the NCCS-SCS facility specifically serves patients with more complex medical needs — such as those undergoing chemotherapy, radiation therapy, surgery, or severe side effects like nerve damage or treatment-related pain — who require specialised rehabilitation care. Together, doctors and therapists work to develop a rehabilitation plan that evolves with each patient's progress.

Mr Albert Ching, CEO, SCS, highlighted the importance of the collaboration between NCCS and SCS: "It allows us to

pool resources and expertise to provide the care needed for cancer patients."

Customised care for every step of recovery

Each patient's plan is tailored to their specific needs — whether it is building endurance before surgery, restoring mobility post-treatment, or managing symptoms like lymphoedema and chemotherapy-induced neuropathy.

Rehabilitation sessions, which typically last 30 to 60 minutes, are structured to target key areas of recovery. Some patients may need strength-building exercises, while others focus on balance, coordination or nutritional guidance. The patient's programme is adjusted according to their progress at each session, ensuring that care is appropriate and effective.

Rehabilitation is a lifeline for patients

After being diagnosed with Stage 1 colorectal cancer in 2020, Mr Tan Swan Tong, 65, found himself grappling with extreme fatigue and weakness in his legs, a side effect of his treatment. "I couldn't walk without a



... "For many of our patients, rehabilitation is the bridge between treatment and getting back to their normal lives," says Prof Lim Soon Thye (above).

stick," he recalled. After being referred for rehabilitation, his recovery improved greatly. He began rebuilding his strength with customised physiotherapy sessions. Today, he can walk unaided, a testament to the centre's commitment to restoring patients' quality of life.

For Mdm Wendy Tan, 64, rehabilitation has been a lifeline. Diagnosed with Stage 4 Leiomyosarcoma in 2015, she faced months of immobility following nerve damage from surgery. "I was in a wheelchair for eight months," she shared. With regular physiotherapy, Mdm Tan slowly regained control of her limbs, and is now able to move around with a walking stick. She continues her rehabilitation independently to manage her condition. "The occupational therapists and physiotherapists literally helped me get back on my feet," she said.

With the opening of the NCCS-SCS Rehabilitation Centre, patients like Mr Tan and Mdm Tan can benefit from its larger premises within the NCCS building, greater convenience, and improved access to medical and rehabilitative care under one roof.

Here for the long run

The launch of the NCCS-SCS Rehabilitation Centre marks a significant shift in the approach to cancer care in Singapore. By focusing not just on treatment but on long-term recovery, the centre aims to give patients the tools and support they need to live full, healthy lives after cancer.



PHOTOS: VERNON WONG

Using the correct antibiotic to treat a bad infection greatly increases the chances of survival, but traditional tests to identify the bacteria causing the infection can take as long as 24 hours, says Dr Yeo Jia Hao.



Arming doctors with the right 'ammo'

Determining the right antibiotics quickly to kill bacteria can be the difference between life and death.

by Sol E. Solomon

When someone with symptoms of a bad infection is warded, doctors are likely to administer a broad-based antibiotic first as they do not yet know what specific type of bacteria is causing trouble.

Using the correct antibiotic to treat a nasty infection greatly increases the chances of survival. However, the traditional way of antimicrobial susceptibility testing (AST) — taking a sample and testing it in the laboratory to find out the best antibiotics to use — usually takes 20 to 24 hours. Samples of sputum or saliva are taken for respiratory infections, while blood is taken for bloodstream sepsis and soft-tissue wounds.

As time is vital in treating severe bacterial infections, a team of Singapore General Hospital (SGH) pharmacists set out to develop a feasible lab method to reduce the testing time. The team, led by Dr Andrea Kwa, Deputy Director, Pharmacy (R&I), SGH, and Dr Yeo Jia Hao, a research fellow, used the rapid flow cytometry (FCM) methodology and managed to reduce the testing duration to under 12 hours, or by up to 50 per cent.

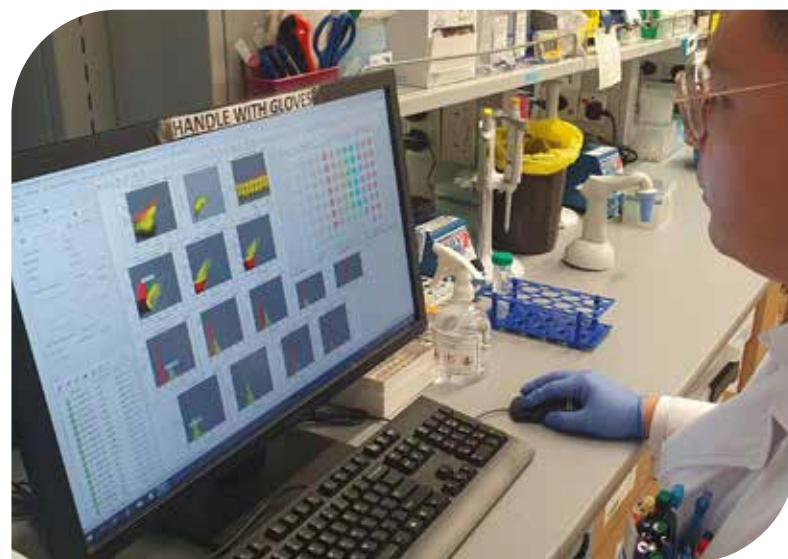
“Failing to provide appropriate and timely treatments, the mortality of patients is approximately halved every four to five hours. That is to say, if a patient’s survival rate is 85 per cent at the first hour, it can dip to under 45 per cent six hours later,” said Dr Yeo.

FCM has many uses in clinical settings, with huge applications in immunology and haematology for diagnosis purposes, said Dr Yeo. Their application involves staining the bacteria with fluorescent dyes, exposing it to different antibiotics for about an hour, before using FCM to detect and measure the fluorescence emitted by the bacteria. “The brighter the dye, the more stress or vulnerability to the antibiotic is indicated for the bacteria,” said Dr Yeo. Greater vulnerability means the antibiotic would be more effective against that bacteria.

Traditional microbiological AST requires overnight testing by incubating the bacteria with the antibiotic overnight. “In our test, we only exposed the bacteria to antibiotics for less than an hour and analysed them using FCM,” added Dr Yeo.

Another advantage of using FCM is its ability to pick up tiny populations of bacteria — which may be antibiotic-resistant and can cause clinical complications or re-infections. Usually, these smaller, more resistant sub-populations are missed by the traditional AST method.

This proof-of-concept study, which started in early 2021, found that FCM was more than 90 per cent accurate in determining antibiotic susceptibility for carbapenems in six carbapenem-resistant Enterobacterales, said Dr Yeo. Carbapenems are a class of antibiotics considered to be the last-resort antibiotics for treating infections.



The team also made similar observations in *Acinetobacter baumannii*, another clinically relevant bacteria associated with hospital-acquired infections. The results of the study by a National University of Singapore (NUS) pharmacy student, now an SGH pharmacist, was formally published in a scientific, peer-reviewed journal, *PlosOne*.

The SGH team’s tests are ahead of similar FCM studies performed by other laboratories. “Most other laboratories use dyes that measure how much antibiotic-treated bacteria are dead or alive. The biggest problem is that dead bacteria can burst upon antibiotic exposure and cannot be accurately labelled or measured,” said Dr Yeo. Furthermore, those laboratories still need to incubate the bacteria with antibiotics over a longer duration. Although the other laboratories have managed to shorten their test duration, they still take longer than those done by the SGH team.

The FCM trial was featured at the 2024 SGH Annual Scientific Meeting (ASM), which emphasises the importance of leveraging local innovations and expertise to drive broader improvements in health outcomes worldwide.

Using flow cytometry to identify infection-causing bacteria cuts testing time by up to 50 per cent, or to under 12 hours.

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Bigger, better and more accessible

The redeveloped Pasir Ris Polyclinic, the first to be co-located in a commercial mall, offers a wider range of healthcare services than its predecessor.

by Goh Bee Lian

The redeveloped Pasir Ris Polyclinic, short for SingHealth Polyclinics (SHP)-Pasir Ris, opened its doors on 7 October 2024. It is approximately four times larger than its previous site and offers residents in the east of Singapore a wider range of healthcare services.

Located within Pasir Ris Mall and next to the Pasir Ris MRT station and bus interchange, Pasir Ris Polyclinic is positioned at the heart of a vibrant and easily accessible area, offering convenience to patients.

Pasir Ris Polyclinic is one of 26 polyclinics in Singapore that, together with General Practitioner (GP) clinics islandwide, form the primary care component of the healthcare system. "It ensures efficiency because, through primary care, we can treat an illness before it becomes serious. In an ageing society like Singapore, primary care moves further upstream to deliver preventive care and build health in our community and the population," said Minister for Health Mr Ong Ye Kung, who officially opened the redeveloped polyclinic.

Also present at the opening ceremony was Senior Minister Mr Teo Chee Hean, who had opened the previous Pasir Ris Polyclinic in 2002. The then relatively new estate of Pasir Ris was home to many young families, and the polyclinic gave residents ready access to affordable healthcare, including specific initiatives, such as those that focused on paediatrics. Today, the healthcare needs have evolved with the changing needs of residents and population size.

"Beyond quality facilities and healthcare professionals, strong partnership between healthcare providers and the wider community is a critical aspect of patient care. The polyclinic will be partnering the Active Ageing Centres in the vicinity to ensure holistic treatment of elderly patients," said

Senior Minister Teo. "The redevelopment allows us to broaden our scope of care, which includes dental and physiotherapy services, allowing us to provide more comprehensive care and address a wider range of health needs," said Dr Koh Kim Hwee, Clinic Director, SHP-Pasir Ris.

Multidisciplinary care teams will offer a comprehensive suite of preventive care options aimed at supporting community well-being. They include breast, cervical and colorectal screenings, cardiovascular assessments, vaccinations,



"The redevelopment of Pasir Ris Polyclinic allows us to broaden our scope of care, which includes dental and physiotherapy services, allowing us to provide more comprehensive care and address a wider range of health needs," says Dr Koh Kim Hwee, Clinic Director, SHP-Pasir Ris.



Staff and SHP Helping Hands volunteers putting the finishing touches on the new Pasir Ris Polyclinic's wall painting, which contains scenes of the surrounding areas.

fall risk evaluations, and smoking cessation programmes. New services focusing on supporting patients with memory and mental health challenges will be launched by the second half of 2025 to provide a holistic approach to both physical and mental well-being. The polyclinic will also feature an Academic Family Medicine Centre, dedicated to training doctors under the Family Medicine residency programme.

Service delivery will include the use of technology such as electronic registration and appointment making, and telemonitoring to facilitate a more seamless patient experience. Teleconsultation services will not only cover traditional areas like preventive care and chronic disease management and therapies; there will also be services provided by dietitians and physiotherapists.

Drawing on lessons learned during the COVID-19 pandemic, the redeveloped polyclinic features a dedicated module that can be converted into a pandemic response space, which is designed with a separate entrance from the mall that can be used when necessary. During normal operations, this space will function as an area for My Care Team, SHP's multidisciplinary care team that provides personalised and comprehensive care for residents enrolled in the Healthier SG programme.

From pharmacy to retail

Meet the person who spearheaded the merging of independent retail pharmacies located in the various SingHealth institutions to become SingHealth Pharmacare.

by Candice Cai



PHOTOS: VERNON WONG

Previously, retail pharmacies at different SingHealth hospitals and institutions operated independently, with differing product ranges and prices.

Understandably, this created not only operational inefficiencies, but also inconvenience for patients.

To address this, SingHealth Pharmacare was set up in 2017 to consolidate all retail pharmacy operations. By creating a unified brand, operations and customer care can be standardised and standards, elevated. Internally, it also provides improved opportunities for career progression.

One of the key figures behind the transformation is Ms Irene Ang, Deputy Director, Retail Pharmacy, SingHealth.

One of the biggest difficulties of her role was getting buy-in from stakeholders, said Ms Ang. She remembers her first year at Pharmacare as a time filled with “many presentations” at meetings with hospital personnel to share about the benefits of consolidation. Within a year, the very first outlet at SingHealth Polyclinic – Bedok was launched in 2017.

“The initial plan was to consolidate everything by 2020 but the COVID-19 pandemic hit, so the entire plan was delayed for almost three years,” said Ms Ang. At present, there are 13 physical outlets and two online stores – one on Lazada and the other on the newly launched SingHealth Pharmacare website.

Ms Ang has always allowed both her passions and skills to guide her career path. As an undergraduate at the National University of Singapore, she pursued a degree in pharmacy, which was newly offered then, because of her interest in Chemistry.

Upon graduation, she was presented with various career options: to be a pharmacist in the healthcare industry, join a pharmaceutical company, or work in retail pharmacy. As she had already experienced working in hospitals during her internship at the Ministry of Health, she wanted to

try something different. Being someone who enjoys shopping and interacting with people, she took the plunge into retail pharmacy as she thought it would be aligned with her interests.

However, that choice had its challenges. As a retail pharmacist, Ms Ang had to manage the entire outlet, handling tasks such as marketing and merchandising, which were beyond a pharmacist’s typical responsibilities. “I was exposed to many new things as I was in charge of the entire shop. I had to decide how I wanted to display the products and how to market them, such as whether to put up posters or hand out leaflets,” she said.

She later moved up the career ladder and into business-related roles at NTUC HealthCare and Dairy Farm International, which owns Guardian Health & Beauty pharmacies. At NTUC HealthCare, where she worked for 18 years, her prior merchandising experience led to a role in its headquarters as one of the pioneers of Unity pharmacies, handling advertising and promotion. Over the course of her career, she unexpectedly discovered that she enjoyed the business aspect of her roles. “Someone once told me that I’d make a better businesswoman than I would a pharmacist,” she added with a laugh.

Since joining SingHealth in 2016, Ms Ang has seen her role expand significantly, blending her pharmaceutical knowledge with the business acumen she developed over the years. “As a retail pharmacist, you will face situations that you were never taught how to deal with in school,” she said.

Still, she recognised that there were gaps in her expertise. “I saw that I needed to broaden my knowledge even more for me to perform better in my job,” she shared. She thus pursued additional qualifications, including an MBA in Retailing in 2010.

Since completing the consolidation process for SingHealth Pharmacare in 2022, Ms Ang has been heartened by the positive response from recent surveys. Beyond the

My job is also to focus on what I can do to enable my staff to stretch their potential. I enjoy bouncing ideas off them, monitor sales, and perform data analyses so that we are able to plan better.

Ms Irene Ang

Deputy Director,
Retail Pharmacy,
SingHealth

challenges of improving sales and customer service, she takes pride in the achievements and resilience demonstrated by the frontline staff and middle management who uphold SingHealth Pharmacare’s mission; their positive attitude has contributed much to Pharmacare’s success.

“My job is also to focus on what I can do to enable my staff to stretch their potential,” Ms Ang added. “I enjoy bouncing ideas off them, monitor sales, and perform data analyses so that we are able to plan better.”

In her free time, Ms Ang relaxes by crocheting, a hobby she recently picked up again after decades of hiatus. The motivation? Becoming a grandmother for the first time. Besides being able to create adorable outfits for her newborn granddaughter, crocheting has helped her gain a new perspective on work. “Sometimes, after two hours of crocheting, I’ll have a fresher mind to tackle a problem at work.”



Ms Irene Ang crochets in her free time, creating adorable outfits and plush toys for her granddaughter.

Customised care for senior patients with cancer

NCCS programme assesses needs of elderly cancer patients and personalises treatment plans to improve their quality of life.

by Goh Bee Lian



PHOTO: VERNON WONG

Geriatric patients are diverse, with varying lifestyles, socioeconomic backgrounds, levels of social support, and multiple co-morbidities.

When treating this group for cancer, an accurate patient profile is needed to determine the best course of treatment.

Geriatric Oncology (GO) is the specialised field that focuses on the needs of older adults with cancer that takes into account the patient's health status as a whole.

Professor Ravindran Kanesvaran, Chairman, Division of Medical Oncology, National Cancer Centre Singapore (NCCS), was first introduced to GO in 2008 by a colleague, Dr Donald Poon, who started the first GO programme at the NCCS in 2007. "The idea that elderly patients with cancer should be treated based on factors such as their physical and social condition that are specific to their stage of life interested me," he said.

A young registrar at the time, Prof Ravindran had been considering specialising in gastroenterology, but made the switch to oncology after his mother was diagnosed with breast cancer and his family experienced the anxiety and impact of a cancer diagnosis first-hand. "I experienced how difficult it is for a patient and their family to navigate a cancer journey. That was what motivated me to pursue medical oncology," he said.

Prof Ravindran observed that family members may sometimes request treatment to prolong the patient's life though this may not align with what the patient wants: "Sometimes, the patient does not wish to live longer, but instead wishes to minimise pain or suffering

The aim of geriatric oncology is to personalise treatment for older adults and remove ageism. Treatment for an elderly patient should be evaluated based on who the patient is – their fitness level, mental state, and functional level – and not just their age.

Professor Ravindran Kanesvaran
Chairman, Division of Medical Oncology,
National Cancer Centre Singapore

and focus on quality of life." Conversely, there may be patients who are fit and keen to undergo more radical treatments but are not given such options because of assumptions about their fitness based only on their age. Elderly patients with cancer are often assumed to be too frail to tolerate radical treatments and to prefer comfort care. This bias denies fitter elderly patients from receiving the right treatment.

Prof Ravindran shared the case of a very fit 94-year-old patient who was on conservative cancer management but was, in fact, a good candidate for a more aggressive treatment plan that would be potentially curative and is typically offered to younger patients. "The aim of geriatric oncology is to personalise treatment for older adults and remove ageism. Treatment for an elderly patient should be

evaluated based on who the patient is – their fitness level, mental state, and functional level – and not just their age," he explained.

Prof Ravindran is supported by a team comprising medical oncologists, geriatricians, rehabilitation physicians, nurses, medical social workers, occupational therapists, pharmacists, and physiotherapists. "As part of the GO treatment process at NCCS, cancer patients over the age of 70 years undergo a comprehensive geriatric assessment," he shared.

This involves an assessment of their physical state for common elderly conditions such as prostate, bladder and kidney disease; and their mental state, dementia or memory issues. It also considers their social state, such as whether they are experiencing social isolation. It also looks at chemotherapy toxicity, fitness, and ability to tolerate medication. This holistic assessment helps clinicians decide whether to reduce the medication or chemotherapy dosage for the patient without adversely impacting their health. Upon completion of the assessment, patients are categorised into groups based on their level of fitness and vulnerability. Standard-of-care treatment is recommended for fit patients, while frail patients are recommended to avoid treatment that would worsen their quality of life.

A recent study showed that patients who had undergone these GO assessments experienced a better quality of life, fewer hospital admissions, and lower medication dosage than those who had not undergone the assessments.

The GO programme received a much-needed boost on 1 December 2023, when Prof Ravindran was conferred the Distinguished Professorship in Geriatric Oncology in the SingHealth Duke-NUS Oncology Academic Clinical Programme (ONCO ACP). Established with a gift of \$2.5 million from donor Mr Kuok Khoo Hong, Chairman and CEO, Wilmar International, the professorship aims to drive transformative GO research and educational programmes that will optimise treatment for older adults with cancer, as well as boost the ONCO ACP's efforts to support long-term research and advancements to address the challenges of cancer and ageing.



The GO team comprises medical oncologists, geriatricians, rehabilitation physicians, nurses, medical social workers, occupational therapists, pharmacists, and physiotherapists.

"I hope to utilise the funding to expand this programme, which we currently run at no cost to patients," said Prof Ravindran. "The assessments bring hope and encourage fitter, older patients to proceed with more radical treatments that can potentially help cure the cancer, and not recommend these therapies that often come with severe side effects to patients who have lower tolerance or fitness."



Health check on the go

A new community health initiative: you can now check your blood pressure and BMI at MRT stations.



By placing these kiosks in MRT stations, health monitoring is made accessible for commuters, encouraging them to prioritise their well-being even amidst their busy schedules.

In Singapore, where our population is steadily ageing, proactive healthcare initiatives are increasingly important. SingHealth is proud to be part of the Health@Station Pilot Project, a collaborative initiative involving SMRT, the Singapore Heart Foundation, and Terumo Asia Holdings. This project introduces convenient health monitoring kiosks at MRT stations, piloting at Tanjong Pagar and Promenade stations, allowing commuters to check their blood pressure and body mass index (BMI) while on the go. This initiative also aligns with the broader goal of fostering a healthier Singapore.

Hypertension is a silent but dangerous condition that can lead to severe health issues such as heart disease and stroke. With an increasing number of Singaporeans

affected by high blood pressure, early detection and management are crucial. The Health@Station kiosks aim to address this need by providing accessible blood pressure monitors in public spaces. These kiosks not only empower individuals to take control of their health but also facilitate early identification of hypertension, enabling timely medical intervention.

With the rise in lifestyle-related diseases in Singapore, having a quick and convenient way to track BMI will help individuals make informed decisions about their health. Commuters can register with SingHealth's HealthUP! programme via the Health Buddy App to track their BMI and receive regular healthcare vignettes and coaching by Well Being Coordinators to motivate them on their journey towards better health.

The strategic partnership behind

Health@Station exemplifies a collaborative approach to public health. The Singapore Heart Foundation's involvement ensures that the project is rooted in expert knowledge and advocacy for heart health, while Terumo Asia Holdings provides the essential technology behind the blood pressure monitors. This multifaceted collaboration underscores the importance of community engagement in promoting health awareness and preventive care.

As the largest public healthcare cluster in Singapore, SingHealth's participation aims to raise further awareness about hypertension and obesity.

By promoting preventive health measures and encouraging self-monitoring, Health@Station aligns with the national goal of creating a healthier Singapore.



The kiosks can help to monitor commuters' blood pressure and BMI.

Detect the Silent Threat Monitor Your Blood Pressure

For a more accurate measurement of your blood pressure (BP)

- 30 MINS:** Don't exercise, smoke, or drink coffee/alcohol within 30 minutes before measurement.
- Go to the bathroom:** A full bladder can temporarily increase blood pressure.
- Remove any thick jacket or sweater:** before measurement. Do not roll up your sleeves.
- 5 MINS:** Ideally, sit still for at least 5 minutes to rest before measurement. Do not use your phone.
- Do not speak or move:** during measurement. Keep your feet flat on the floor, uncrossed.
- 2x 2 MINS:** Take two readings at least two minutes apart. Average the readings and record the numbers.

Know your numbers

Your BP is recorded as two numbers

- Systolic BP:** Pressure in the arteries while the heart is beating
- Diastolic BP:** Pressure in the arteries while the heart rests between beats

mmHg	NORMAL	BORDERLINE	HIGH
Systolic BP	Less than 130	130 – 139	140 or higher
Diastolic BP	Less than 85	85 – 89	90 or higher

Share with your doctor

Your blood pressure may vary depending on body position, breathing, emotional state, physical activity and sleep. If your BP readings are consistently high (>130/85 mmHg), even at rest, consult your doctor.

Health@Station Kiosk is an initiative by **SMRT** and **SingHealth**. This Health@Station Kiosk is sponsored by **ENIM**, **FOZL**, **INCOOL**, and **MCS**. It is also supported by **TERUMO** and other partners.



Health@Station aligns with the national goal of reducing the incidence of chronic diseases, fostering a culture of health and wellness, and creating a healthier Singapore.

Singapore's first dedicated clinic for childhood familial hypercholesterolemia

If left undetected, the condition can lead to serious consequences later on in life.

by Sol E Solomon

Familial hypercholesterolemia (FH), a genetic disorder affecting cholesterol metabolism, is more common in Singapore than many realise. In Singapore, over 35,000 people are affected by FH, of which 4,000 are children and adolescents. Alarming, over 90 per cent of such cases remain undiagnosed or untreated. To address this issue, the KK Women's and Children's Hospital (KKH) has opened the KKH Children's Lipid Centre, Singapore's first dedicated clinic for the management of FH in children.

KKH is a forerunner in addressing childhood FH; it adopts a proactive approach to early screening and specialised treatment. Professor Fabian Yap, Deputy Director, SingHealth Duke-NUS Maternal and Child Health Research Institute (MCHRI), and Head and Senior Consultant, Endocrinology Service, KKH, emphasised the importance of early detection:

"As the risk of atherosclerosis (the accumulation of fats, cholesterol and other substances in and on the artery walls) is cumulative and starts early in life, early detection for children at risk of this genetic condition is crucial."

FH is an inherited disorder. Due to mutations in genes involved in the metabolism of cholesterol, an affected child can be born with dyslipidaemia, a condition characterised by very high levels of low-density lipoprotein (LDL) cholesterol, commonly known as 'bad cholesterol'. This leads to the development of atherosclerosis and, subsequently, cardiovascular diseases.

Unlike FH in adults, which can often be adequately managed by statins and lipid-lowering drugs, FH in childhood may present with greater severity and requires specialised diagnosis and aggressive treatment, explained Prof Yap. "An even greater concern is that FH in children can be



insidious and go unnoticed until cholesterol levels are specifically measured," he said.

Early screening is crucial

The Centre emphasises early screening for at-risk children, particularly those with immediate family members known to have FH, or have a family history of early vascular disease (heart attacks or strokes before 65 in women or 55 in men).

Children with untreated FH often have LDL cholesterol levels over 4.1 mmol/L, even though they may not show any symptoms. For children aged two to 18 years, an optimal LDL level is below 3.5 mmol/L.

The risks of ignoring this condition are significant. "Individuals with FH who are unaware of their condition can develop serious health issues," Prof Yap warned. Damage to blood vessels can quietly build up over time, increasing the risk of heart problems. "As the risk of atherosclerosis is cumulative and starts early in life, early detection for children at risk of this genetic condition is crucial. For instance, the first two years of life is key to the diagnosis of Homozygous FH, a more severe form of FH that is inherited from both parents," he added.

SingHealth's role in precision population health is exemplified through the Centre's

approach. In line with Singapore's focus on this area, the Centre administers tailored therapy at the right time to each child diagnosed with FH, based on individual characteristics and genomics. This personalised approach ensures that each child receives the most appropriate treatment for their specific condition.

The Centre's proactive identification and management of FH in early childhood, with an expected annual screening and management of around 120 children, demonstrates KKH's commitment to address this issue. By encouraging early screening for at-risk children, the Centre aims to limit the risks of lifelong cholesterol build-up and related diseases.

While FH is genetic, there are also non-genetic forms of dyslipidaemia, notably in lifestyle-linked obesity. The Centre also advocates lifestyle adaptations with diet, physical activity, and healthy choices for obese children with dyslipidaemia.

KKH's pioneering efforts in establishing the Centre represent a significant step forward in addressing childhood FH in Singapore. By emphasising early screening, specialised treatment, and precision health approaches, KKH is leading the way in tackling this often overlooked but potentially serious condition in children.



...
"Individuals with FH who are unaware of their condition can develop serious health issues," Prof Yap warns.

If you know of a family or child who could benefit from early screening, you can help by scanning the QR code or booking an appointment through:
<https://for.sg/kkh-child-lipid-clinic-appt-request>



Easier than you think

Achieving your exercise quota is actually quite easy, and can be built up even while watching TV!

by Sol E Solomon

On a hiking holiday in Australia and New Zealand, Dr Cindy Ng and her companions found that they were often the last to reach their destinations although they were the youngest and by no means unfit in any way. The first to finish the long treks were frequently the older hikers. “The older ones — the New Zealanders and Australians in their 60s — were always there first,” said Dr Ng, Senior Principal Physiotherapist, Physiotherapy Department, Singapore General Hospital (SGH).

The reason? “They walked long distances regularly,” she said.

Dr Ng likes to tell this story to motivate her patients and to stress the importance of exercise — or at least to move constantly. Indeed, she noted that people who work on farms often remain fit, even up their 80s, because of the level of activity they maintain. Exercise, she said, is not just about running or walking, but about moving one’s muscles and joints. Exercise does not require a lot of space or equipment — one can simply stand, sit, march on the spot, or do side marches. Even while sitting down to watch television, one can move one’s legs, ankles or shoulders, and do some stretching, she added.

Exercise is merely a sequence of physical movements done repeatedly and regularly, at least three to four times a week. Walking or running should last at least 20 minutes each time. As for lifting weights, people usually do eight to 15 repetitions over a few sets each time. Cycling, swimming, going to the gym, performing qigong and dance routines are all forms of exercise.

Even housework, Dr Ng said, is a form of physical activity, although it does not technically fit the definition of exercise,

as housework is not a set of sequences done repeatedly.

Exercise is necessary to build muscle and bone. “We want to repair, rebuild and grow our bones. The moment we do not load the bones, they will not want to grow. Our body needs some stimulus, otherwise things just get lost along the way. If you don’t use it, you will lose it,” she said.

People may know about the benefits of exercise, but they often still need to be pushed into exercising more regularly. “Always have some company with you when you exercise. A friend or family member can chat with you, encourage you, nudge you, and make sure that you exercise regularly. But even if you are not a social being and you don’t like to socialise with others, there are lots of YouTube videos. Choose one that spurs you on,” said Dr Ng.

Even workaholic Singaporeans can build up their exercise quota — albeit at their office desk. “I get my clients to do heel raises. They can do some stretching if they have some aches and pains, and back extension exercises. Some of them march on the spot,” said Dr Ng.

The home can be a good place for exercises such as squats. But for those who cannot balance or do squats well, Dr Ng

recommends starting with controlled sitting and standing exercises.

Cardio exercises are also a must as aerobic fitness is important. So are dynamic and static exercises. Holding a stretch for 10 seconds to a minute is a form of static exercise. For example, the bounces footballers do before a match help prevent their muscles from being overstretched when they need a burst of speed. It is also good for K-pop dancers as it helps prepare their muscles for agility, without which they might easily get muscle cramps.

Exercise should not be focused on just one area, like concentrating only on muscle building but neglecting aerobic ability, or walking and forgetting about strengthening. Many older adults walk a lot. But as one gets older, it may become difficult to balance, leading to falls. This is because people lose five to 10 per cent of their muscles every decade after the age of 60.

“So people need to do something before that happens,” said Dr Ng. To improve balance, stand on one leg and combine this with some strengthening movements. Line dancing and tai chi train different muscles because these activities involve the constant turning and shifting of the person’s weight.



Exercise is not just about running or walking, but about moving one’s muscles and joints, says Dr Cindy Ng.

PERFECTLY
imperfect
HEALTH

by SGH



To learn more about exercise, scan the QR code to listen to the ‘Ready, Stretch, Go!’ episode of SGH’s *Perfectly Imperfect Health* podcast.



CHEF'S TIP

Tempering spices in oil at the very beginning of the preparation brings out their fragrance. Fenugreek is usually used with seafood such as prawns, fish and squid to mask the 'fishy' smell. Too much fenugreek, however, can make the dish taste bitter.

Prawn and radish curry

4 servings 



Ingredients

- 500g medium prawn (remove shell)
- 140g radish, sliced
- 1 tbsp oil
- ½ tsp urad dhal
- ½ tsp mustard seed
- ½ tsp fenugreek seed
- 100g onion, sliced
- 5 cloves garlic, sliced
- 2 stalks curry leaf
- 2 pieces green chilli, slit lengthwise
- 3 tsp chilli powder
- ½ tsp turmeric powder
- 2 cups water

Roast then grind till fine for best results, or use powdered spices

- 2 tbsp coriander seed
- ½ tsp cumin seed
- ½ tsp fennel seed
- 20g tamarind pulp (mix with ½ cup water and strain for juice)
- 1 tsp salt
- 200g tomato, sliced
- 2 tbsp low-fat yoghurt
- 50g red capsicum, cut into thin strips
- 15g coriander leaf, chopped

Method

- 1 Heat oil in a large pot. Add urad dhal and mustard and fenugreek seeds
- 2 When mustard seeds start to pop, add onion, garlic and curry leaves
- 3 Stir well and add green chillies. Cook till fragrant, then add sliced radish
- 4 Mix chilli powder, turmeric powder, and ground spices with 1 cup water. Add this to the pot
- 5 Continue to boil curry, covered, for 8 minutes
- 6 Add tamarind juice to curry
- 7 Lower heat and simmer till radish is cooked
- 8 Add another cup of water and bring to a boil. Season with salt
- 9 Add prawns, tomatoes and yoghurt.
- 10 Boil prawn until they change colour, then stir in capsicum strips and coriander leaves.
- 11 Remove from heat and serve hot.



Health Tip

Adding vegetables to your curry dish increases the amount of fibre in your meal. Adding radish to this prawn curry increases the fibre content by 2g. You can replace radish with 140g of drumsticks (murungai), and this will provide 7g of fibre.

Estimated nutrient content (per serving)

Energy	148kcal
Carbohydrate	12g
Protein	16g
Fat	4g
Sodium	816mg
Cholesterol	160mg

Local ingredients

Urad dhal, or black gram, is sold in Indian provision shops.

Murungai (moringa oleifera) is a 30–50cm long vegetable that resembles musical drumsticks. The flesh is soft, white and tasty, with edible pea-like seeds. Before cooking, scrape the dark green skin lightly and cut into 6–7cm pieces.

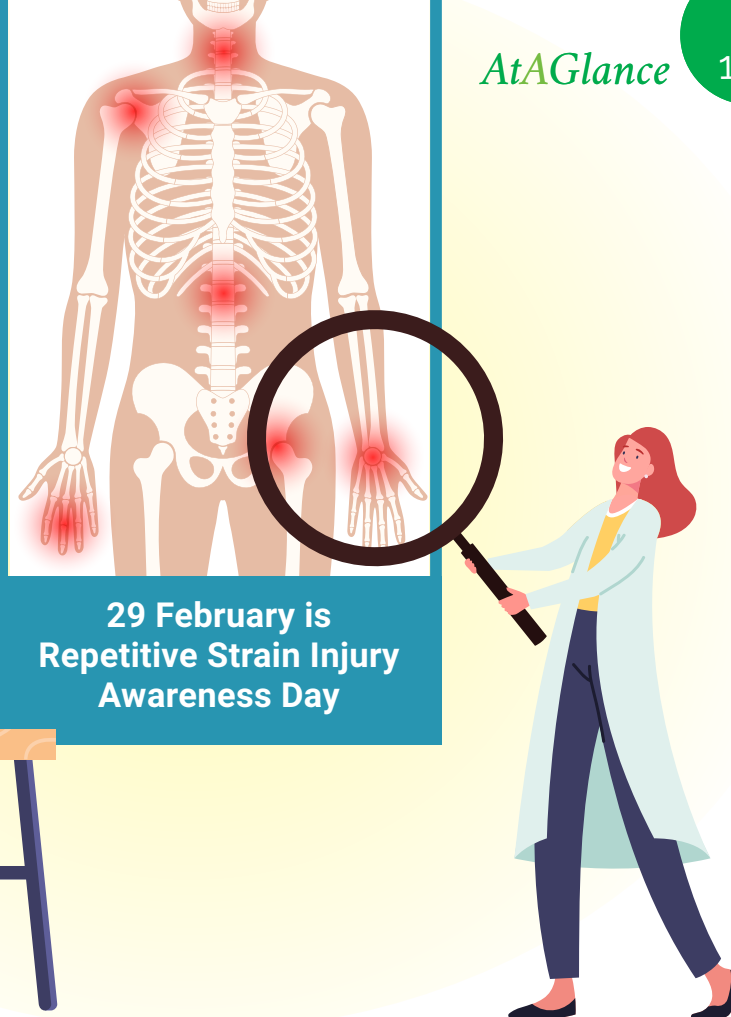
Understanding RSI

Poor posture, especially if maintained over time, can strain muscles and tendons, and lead to more severe problems.

by Chua Kim Beng, with contributions from Dr Xia Zhan, Consultant, Department of Orthopaedic Surgery, and Ms Prajakta Bhalachandra Parab, Physiotherapist, Physiotherapy Department, Singapore General Hospital



29 February is Repetitive Strain Injury Awareness Day



Repetitive strain or stress injury (RSI) is an injury to a part of the musculoskeletal or nervous system caused by repeated use, vibrations, compression or after being kept in a fixed position over a prolonged period.

Frequent computer users, office workers who sit at a desk for a long time, those with physically demanding jobs, athletes, dancers, musicians and other professional performers are at risk of developing RSI.

RSI commonly affects fingers and thumbs, wrists, elbows, arms, shoulders, knees and ankles. Trigger finger or thumb, carpal tunnel syndrome, tennis or golf elbow, rotator cuff tendinitis, shoulder subacromial bursitis, Osgood-Schlatter disease, Achilles insertion tendinitis, back strains, and sprains are some RSI conditions.

Symptoms

Mild stage

- Early signs are pain, muscle ache or soreness, swelling, stiffness, weakness
- Usually triggered by specific activity or task
- Is reversible
- Can last for weeks or months

Moderate stage

- Visible signs of swelling
- Pain at night that can disturb sleep

Severe stage

- Symptoms occur even at rest, with sleep often affected
- Light tasks may be difficult

Treatment

Modify or reduce the activity causing the injury to prevent further damage, which usually is not permanent and will heal over time.

- Follow RICE at home
 - Rest by avoiding activity causing injury
 - Ice or cold compress for 15–20 minutes several times a day
 - Compress by wrapping with elastic bandage to reduce swelling
 - Elevate by keeping injured area above the level of the heart as often as possible

- Use over-the-counter NSAIDs like aspirin or ibuprofen for several days for pain and swelling
- Seek treatment if symptoms do not improve with treatments at home, or are making it hard to perform work and daily activities
- Surgery may be needed, but this is rare

How to avoid getting RSI?

Take regular active breaks

Schedule frequent active breaks every 30–60 minutes to stretch or walk to allow your muscles to reset and recover.



Modify tasks

Try to switch between different activities, especially if your work involves doing the same movements over long periods of time.



Change posture

Workstations can be adjusted to ensure arms, back and wrists are supported to help reduce strain, but it is also important to change posture regularly.



Proper tools and techniques

Consider the use of proper ergonomic tools for your work and ensure safe handling techniques to help minimise strain.

Simple exercises to prevent RSI in the hand

Pain and stiffness in the fingers (from playing computer games)

Hand pumps



1 Make a gentle fist, wrapping your thumb across your fingers.

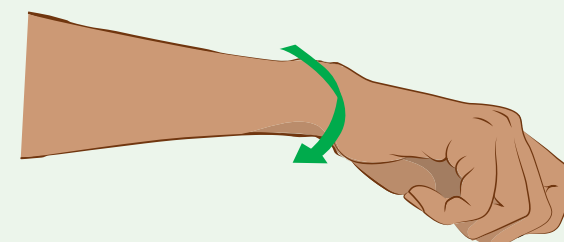
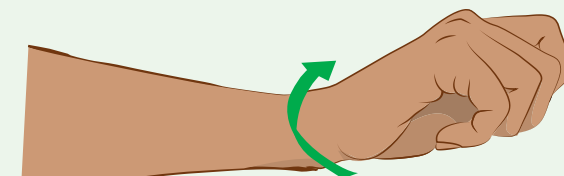


2. Next, stretch out and spread your fingers wide.

3. Repeat with other hand

Wrist rotations

1. Extend your arms straight out in front of you with your palms facing down.
2. Close your hands into a fist. Slowly rotate your wrists in a circular motion.
3. Start with small circles and gradually increase the size of the circles as you become more comfortable.



For more tips, go to

<https://www.instagram.com/reel/CkNbsb9jvps/?igsh=MTM3empzc2s4YWcwgdg==>



Storing meds at room temperature

Q I've always been curious what 'room temperature' means. With air-conditioning, the temperature in my room is lower than outside. So when I am prescribed a medication to be stored at room temperature, what exactly are we talking about? Should I put my medications in the refrigerator if the weather is too hot?

A Medications that are to be stored at room temperature have to be kept at between 18°C and 25°C. Temperatures in Singapore typically fluctuate between 24°C and 33°C, but the majority of medications can withstand the higher temperatures and are good for use till their indicated expiry dates. There is no need to store medications under special conditions like an air-conditioned room, but it is important to avoid direct light and moisture.

It is also not advisable to store medications meant to be stored at room temperature in the refrigerator as they can be damaged by the cold. Some medications like insulin, prescribed to patients with diabetes, require refrigeration. Medications that must be stored in the fridge should be kept inside the main compartment of the refrigerator, and not the fridge door or near the vent areas, where temperatures may fluctuate too much.

Read and follow the instructions on medication labels before storing your medications. Avoid collecting more medicine than needed. Just a couple of weeks extra before the next appointment should be enough.

...
Dr Lim Kiat Wee

Senior Principal Clinical Pharmacist, Singapore General Hospital

Meds, hormones trigger dry eyes

Q Are there medications and hormonal changes that may cause dry eyes? Will regular eye drops alleviate this problem? Can prolonged use of the computer cause dry eyes?

A There is a long list of medications that may cause dry eye symptoms as a result of reducing tear production. Some of the common medications include certain anti-histamines, decongestants, anti-depressants and medications for high blood pressure.

Broadly, the effect of hormonal changes on dry eye disease is in the context of menopause. Some patients with thyroid eye disease also experience dry eyes.

Mild symptoms of dry eyes can often be alleviated with the use of over-the-counter tear substitutes. An eye examination is advised to look for any specific underlying cause before further treatment is recommended.

Infrequent blinking and prolonged screen time without regular breaks may exacerbate symptoms of dry eyes.

...
Dr Woo Jyh Haur

Senior Consultant, Corneal & External Eye Disease Department, Singapore National Eye Centre



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by SGH



For more on OTC meds, tune in to SGH's *Perfectly Imperfect* podcast on this issue. Visit this weblink <https://for.sg/perfectly-imperfecthealth/meds> or scan the QR code.



●●● **that** SingHealth has launched its first batch of 12 electric vehicle (EV) charging points at SingHealth Tower, Singapore General Hospital (SGH) Campus, in partnership with SP Group? The chargers are accessible to both staff and visitors, marking a step forward in SingHealth's Decarbonisation Plan to reduce carbon emissions and promote sustainable practices. During the launch ceremony, leaders from SingHealth and SP activated the first charge on the campus security EV, symbolising a shared commitment to green initiatives.

There are plans to expand the network to over 80 charging points across SingHealth institutions by the end of 2024, and up to 300 by 2028. SingHealth, as a public healthcare cluster, will have the most extensive EV charging network in Singapore. This initiative supports existing sustainability efforts in waste reduction, emissions control, and water efficiency.



●●● **that** Singapore General Hospital (SGH) has a team of specialist nurses that works alongside the hospital's medical teams to provide consultations, promote health education and prevention strategies, as well as developing policies?

They are medical specialists in their own right, with some running clinics and others performing some of the work of doctors. SGH's 53 advanced practice nurses (APNs) and 48 nurse clinicians and speciality nurses specialise in medical fields, including anaesthesia, dermatology, endocrinology, gastroenterology, general surgery, gerontology, haematology, hepatology, hepatobiliary and transplant, infectious disease, internal medicine, intensive care, nephrology, oncology, orthopaedic surgery, rheumatology and urology.

The hospital also boasts 18 collaborative prescribers, APNs who have undergone the collaborative prescribing (CP) course in the National University of Singapore (NUS). They are licensed to prescribe medication and order investigations for patients under their care in collaboration with physicians.

Senior Nurse Clinician (APN) Yee Sow Ling was one of the first CPs, caring for patients with rheumatological conditions. She provides face-to-face consultation as well as virtual clinics to monitor disease activity, drug toxicity, and escalation of therapy for people with systemic lupus erythematosus (commonly known as SLE or lupus), rheumatoid arthritis (commonly referred to as RA), and ankylosing spondylitis. She regularly orders blood and radiological investigations such as x-ray and ultrasound, and prescribes medication to her patients.

The accolade of being SGH's first APN, however, goes to Dr Tan Siok Bee, who sees patients with neurological disorders at the Department of Neurology. She is also Deputy Director, Nursing (APN), a role that sees her growing the APN and specialist nursing team with other nursing leaders.

Focusing on their area of expertise and staying close to patients allow speciality nurses to play a pivotal role in delivering excellent patient care and education, while maximising efficiency and cost-effectiveness at the same time. Ms Chan Yoke Ling, Assistant Director,

Nursing (APN), is also SGH's only APN specialising in endocrinology. During the COVID-19 pandemic, she worked with diabetes nurse educators to start a video consultation service via the Zoom platform to provide consultation, disease monitoring, and health education. Diabetes nurse educators play a vital role as they teach patients with diabetes insulin injection techniques, and also monitor their blood glucose levels. The service, which has benefited patients as they do not have to travel as frequently to SGH for their consultations, has been adopted by other departments for teleconsultation, health education, and disease monitoring.

There are some 180 APNs in total at all SingHealth hospitals and institutions.



