SMA news

For Doctors, For Patients

VOL. 54 NO. 11 | NOVEMBER 2022 | MCI (P) 063/12/2022

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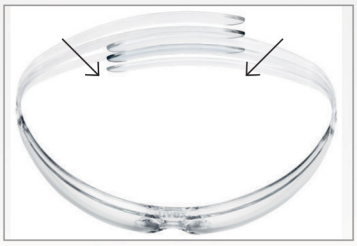

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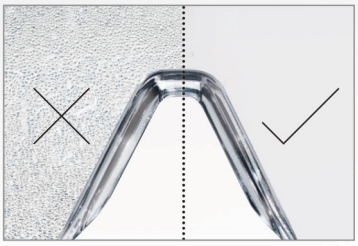

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SMA news
Vol. 54 No. 11 | 2022

PUBLISHER
Singapore Medical Association
2985 Jalan Bukit Merah
#02-2C, SMF Building
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Email: news@sma.org.sg
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UEN No.: S61SS0168E

DESIGN AGENCY
Oxygen Studio Designs Pte Ltd

PRINTER
Sun Rise Printing & Supplies Pte Ltd

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The EDITOR'S MUSINGS

Dr Tina Tan

Editor

Dr Tan is a psychiatrist in private practice and an alumnus of Duke-NUS Medical School. She treats mental health conditions in all age groups but has a special interest in caring for the elderly. With a love for the written word, she makes time for reading, writing and self-publishing on top of caring for her patients and loved ones.

It is hard to believe that I am already penning the editorial for the second-last issue of 2022. We are steadily barrelling into 2023, and with the world opened up once more, it is truly nice to hear about people travelling, attending overseas conferences, and just meeting each other in person after two years of Zoom meetings, where we were often looking at online/beauty-filtered/lighting-optimised versions of ourselves and others.

This is interesting, because our Feature this month is Dr Kenneth Lyen's article on the concept of the "metaverse" and how it will change healthcare. The other night at a birthday celebration, I proudly declared to my younger relatives that my job as a psychiatrist made me "indispensable" and "irreplaceable", unlike some specialties that may be more vulnerable to "replacement" by artificial intelligence and virtual reality. This rather obnoxious declaration was made on the basis that only another human can properly analyse a patient's behaviour and thought patterns, and synthesise all that information back for the patient to understand and make appropriate changes. Reading Dr Lyen's article however, I think I might be wrong. If a virtual reality that could enhance the mental well-being of every human on the planet existed, well then, I would not be needed. But that reality is, for the moment, science fiction and may eventually come with its own amalgamation of problems.

I have chilly but fond memories of huddling in very cold anatomy laboratories as our clinical professors took us through dissections to understand the intricacies of the human body. It is apt then, that we've featured an article by our student correspondents, Joycelyn Soo and Helen Cai, on the National University of Singapore's Department of Anatomy, as it celebrates 100 years since its founding. That is no easy feat, and I wholeheartedly congratulate the department on its centennial celebration. Do read through the first of their two-part article on the department's history and the esteemed professors who have taught generations of medical students.

A/Prof Cuthbert Teo has submitted an interview with Dr Teoh Chin Sim, who is Singapore's first sports and exercise medicine specialist. If you've ever wondered what it is that a sports medicine doctor does, look no further, as Dr Teoh looks back on her interesting career thus far.

As the year end approaches, I know of many colleagues and fellow Singaporeans who are making plans to travel overseas. On that note, I am happy to report that our Indulge articles are finally starting to feature contributions from fellow doctors who have ventured abroad, either for holiday or work. This includes none other than our own Editorial Board member, Dr Clive Tan, as he relates his experience travelling to a familiar and nearby destination, Bali.

With that, I wish our readers all the best for the rest of the year. Don't forget to get your flu shots before you take that trip. Stay safe.

WILL THE METAVERSE CHANGE HEALTHCARE?

Text by Dr Kenneth Lyen

When Mark Zuckerberg rebranded Facebook as Meta, declaring that entering the metaverse would be a gamechanger for his company and the world, I was sceptical. I thought he was merely trying to generate more revenue for Facebook. But as I researched the metaverse, I realised that he may be right, and it may have the potential to affect our lives, disrupt the economy, encourage social interactions, expand education, and yes, maybe even change healthcare.

The COVID-19 pandemic has accelerated our adopting of the metaverse because fears of spreading the virus deterred face-to-face contact.[1] Telemedicine shot up in popularity, and medical consultations and diagnoses were made at a distance. Medical and nursing students were taught online, and even certain specialists, like radiologists, could read X-rays and scans from the comfort of their homes. No doubt the metaverse is already transforming medicine, but exactly how is it happening?

What is the metaverse?

The first problem is defining the metaverse. The term was first coined by Neal Stephenson in his science fiction novel *Snow Crash* published in 1992. He envisioned an imaginary computer-generated universe merged with our mundane physical world which he named "the metaverse".

To date, the definition remains inconsistent.[2] A simplified view describes it as a digital universe. The Oxford Dictionary defines the metaverse as "a virtual-reality space in which users can interact with a computer-generated environment and with other users". These vague definitions mean that anything to do with computers, the Internet and digital devices can be part of the metaverse. These all-embracing definitions are widely adopted, but it means that anything goes, virtually.

Evolution of the metaverse

One might try to understand the metaverse by tracing its development. The problem is that we are still at an early stage of its evolution. We think we know what components are essential, but we are unable to predict how they will evolve, and who knows what new ingredients will be added in the future?

Several simultaneous advances in computer hardware and software have converged to create the metaverse.[3] Computing speed has accelerated over the past decades, making it possible to create animated imaginary backgrounds; we can also produce avatars with facial expressions and the ability to fly around and communicate with real people. Computers are now able to think, understand and interpret information to such a high level that their artificial intelligence is challenging our human intelligence.

A new software development is blockchain technology. Originating from the field of cryptocurrency, a blockchain stores information electronically in digital format. Each block of information is captured in groups and they cannot be changed. The blocks are linked together by "chains". One advantage of this technology is that it guarantees the fidelity and security of the record. Another advantage is that the information is decentralised and can be held by each individual.

There are other hardware inventions that are indispensable to the metaverse. For example, the development of virtual-reality headsets, goggles and gloves enables the wearer to see, hear and touch the computer-generated imaginary environment. These headsets create three major components of the metaverse: virtual reality, augmented reality and extended reality. Examples of each are given below.

Virtual reality

Virtual reality is a computer-generated, totally immersive artificial world with no sense of the real world (ie, engagement with the real world is absent). It is currently used for teaching anatomy, where a healthcare student puts on a headset and can enter a three-dimensional atlas of anatomy and physiology. This is particularly timely because access to cadavers for dissection has become increasingly scarce. By wearing a virtual reality headset, you can see and explore the digital body from the skin, the muscles, the blood vessels and nerves, all the way down to the organs and skeleton.[4]

Surgical students can also use virtual reality to inspect diseased parts of the body, like viewing a twisted fractured tibia, and learn how to diagnose and treat the condition.[5] That said, the technology may require some getting used to. One medical student told me, "Initially I was very excited to examine the body virtually, and I could see how muscles contract. But after a while I

started getting dizzy and I found the anatomical details a bit bewildering, and I grew frustrated."

There are other uses for virtual reality technology as well. Patients with dementia, including Alzheimer's disease, feel more relaxed and can recall childhood memories when wearing virtual reality headsets depicting their childhood environment. Placing a patient with post-traumatic stress disorder in a virtual but safe environment that simulates the original horrendous and dangerous environment has shown benefits to these patients.

Augmented reality

Augmented reality combines both the real world and the digital world. The net result is that it enhances one's experience in the real world by supplementing it with virtual details. A breast-feeding counsellor can train a novice breast-feeding mother wearing a headset on how to breast-feed a newborn baby, for example.[6] The training of a phlebotomist to take blood is helped by wearing special glasses that enhances their ability to see the blood vessels more clearly, enabling them to insert the needle more accurately.

Surgery can also be enhanced by overlaying radiological scans with a patient's real anatomy. One surgeon told me, "When I was removing deeply embedded cancer metastases, the ability to superimpose a CT scan helped me to precisely locate the cancer lesions. This means that surgery can be more accurate and beneficial."

However, a serious limitation of the current augmented reality is the absence of tactile or haptic sensations. "When you feel a patient's enlarged liver, you need to assess its shape and determine whether it is hard or soft, and if it is nodular or smooth," one clinician told me. The metaverse has not reached this stage of craftmanship yet.

Extended reality

Extended reality enables one to have multi-sensory interaction with both physical and computer-generated environments at the same time. This was initially applied to virtual computer games and is now being extended to those working from home but who still need to interact with other staff members or use the office machines.

Extended reality is used in medical education as well. While virtual reality only allows the student to see the simulated body, extended reality allows you to touch and move the virtual body, and you can also combine extended reality with a physical dummy. For example, healthcare workers can practise cardio-pulmonary resuscitation on a plastic dummy, but by wearing a headset and gloves, there is an overlay of digital information onto the physical world, and thus the body looks far more realistic. Surgeons can practise operating on a virtual body and will therefore be better prepared when confronted with a real patient. Additionally, it has been proposed that since medical education need not be confined to one country, one might allow healthcare workers from, say, a developing country to learn from teachers in other parts of the world, including Singapore medical schools.[7]

Other components of the metaverse

Blockchain technology could be used in the healthcare industry as well. Its function would be to decentralise patients' records and allow each patient to keep and store their own personal information.[8] They can therefore decide which reports they want stored, and to whom they will allow the data to be viewed. It overcomes the present problem where each hospital or medical centre stores patient information that is not easily accessible by another doctor at another place.

There are several other technological advances appearing on the horizon, such as robotic surgery. Robotic surgery can enable a surgeon to operate on a patient who may be in a different hospital.[9] Indeed, two or more surgeons from different parts of the world can collaborate in this type of distance surgery.

Another advancement is the proliferation of wearables like the Fitbit, Huawei and Apple watches. These devices can monitor the number of steps one has walked, their heart rate, blood pressure, temperature, skin glucose and even perform eye tracking.[10] This information can promote better health monitoring. Pharmaceutical drug trials can also benefit from monitoring more physical parameters that would alert one to potential side effects earlier.

Issues facing the metaverse

The metaverse is still in its infancy, so we are not absolutely certain what all the good and bad points associated with it are. Here are some early warning signs given by people who have already benefitted or been harmed by the metaverse.

Phishing scams

There have already been reports that cybercriminals have targeted the metaverse and robbed many investors of their money.[11]

Privacy issues

Although we are told that our data and privacy in the metaverse are protected, we cannot be too naive and believe what technologists tell us at face value. The main problem is that a handful of giant companies like Meta (Facebook), Microsoft and Apple currently dominate the metaverse, and this gives them the ability to control and manipulate what data can be entered and regulate how they are retrieved.[12] High-tech criminals will sooner or later find a way to steal stored data.

Art

When playing games such as Minecraft and Roblox, the synthetic landscape and the characters look like bulky cubes which the older generation think are unattractive. But if you look back at early 20th century Cubism paintings by Picasso or splash art by Jackson Pollock, they were also criticised for their lack of art. And when people pay large sums to buy non-fungible token art, quite a number of people also question, are they really buying art?

Infringing copyrights and patents

It is predicted that computer-generated (non-human) "new" works of art or "new" inventions will be increasingly uncovered as a mere copy of something already created in the past.[13] How can

copyrights and patents be protected in the future? Can computers be sued for infringement?

Mental health

Is the metaverse good or bad for mental health? To be able to use telemedicine to talk to a psychologist or doctor may be beneficial. Programmes that promote a good diet and daily exercises can also improve emotional well-being. However, there are computer games that some researchers claim to improve one's intelligence and emotions, while others have found adverse effects such as addiction to the games.[14]

Internet harassment and cyberbullying

For many decades, the Internet has been a milieu where harassment and cyberbullying has infiltrated. It is therefore not surprising that the metaverse has enabled this behaviour to continue, if not increase.[15]

The future

How will the metaverse affect the future of healthcare and medical education? Here are some speculations:[16]

Virtual hospitals

Currently, the A&E departments in many hospitals are overcrowded and many patients visit them for relatively minor symptoms. In the future, initial evaluation could be done online so that the triage personnel (who may be a robot) can direct the patient to the optimal department for treatment. Another change would be to allow earlier discharges after initial treatment in hospital. Better monitoring equipment at home, and telemedicine conducted by nurses, physiotherapists and other healthcare professionals could result in quicker recovery in the home environment.

Virtual reality, augmented reality surgery

Helping surgeons by superimposing scanned images onto the patient's operation sites can improve the accuracy of identifying and correcting or removing the pathology. For example, if one can recognise cancer tissues more readily, the surgeon will be better able to remove them. Surgeons can practise on a digital twin of the patient before operating on the real patient, and this too should result in better outcomes.

Medical and nursing education

Using the full range of visual, auditory and haptic technology, plus enhancing their interactions with teachers and student peers, can make the teaching environment more stimulating. The three-dimensional virtual environment also means that students from different hospitals and different countries can benefit from the exchange. For example, one might learn about rare diseases from another healthcare facility. Currently, medical students are studying human anatomy using virtual technology. In the future, this could expand to the study of physiology, pathology and even biochemistry.

Mental health

We have already mentioned the benefits of virtual reality in treating post-traumatic stress disorder and helping dementia patients regain some of their memory. There are now also a number of new virtual reality video games to treat mental-health-related conditions such as attention deficit hyperactivity disorder, depression and dyslexia.

Final word

To answer the question, will the metaverse change healthcare? The answer is a definite "yes". How long will it take, and to what extent? Well, be (a) patient, and you will see! ◆

Dr Lyen is a paediatrician who has written several books and is the founder of the Rainbow Centre for intellectually challenged and autism spectrum disorder children.

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Advocating for a Better *Healthcare* Profession

Text by Dr Tan Yia Swam

The past two and a half years of COVID-19 seems like a bad dream, from which many of us are waking up – some sooner, others later.

It has left its marks on our social norms. Nowadays, instead of asking "Have you eaten?", we ask "Have you gotten COVID-19?". The previous social divides such as "mask vs no-mask", "vax vs un-vax", and "mRNA vs others" seem to have been gradually forgotten as well.

A dirty job

From "Healthcare Hero", are we back to "zero"? People who shunned healthcare workers (HCWs) may now demand immediate medical attention. People who hailed HCW as heroes may very well now be asking foreign HCWs to go back home, or might complain about the hiring of foreign HCWS.

How short the human memory is!

The healthcare profession is **not** a glamorous job. Nurses have been called "白衣天使" – angels in white. Some look up to doctors as being rich and influential. The hard truth is that most aspects of our jobs are dirty – literally.

HCWs attend to patients in their time of physical need and in extremis. We handle blood and other bodily fluids like mucus, saliva, urine and faeces. Surgeons resect diseased body parts and do our best to restore normalcy. Internists use medication to restore function. Nurses attend to the daily basic needs, such as assisted feeding, bathing and toileting. We look after stomas, purulent wounds, gangrene, and more. We perform the last office for those who pass on.

HCWs also provide some social and emotional support for patients and their families. At its best, we provide context for the medical episode they are going through: how much the routine will cost, what is to be expected, and

We know, we understand: people need to blame someone, and it is easiest to scold the person/ people in front of you. That does not make it any easier to accept, however.

what the common complications and critical care points are. Most times, this is appreciated, and HCWs find it meaningful to not just heal the body but also guide families through such crises.

Human foibles

However, as I have mentioned in my October 2022 parliamentary speech (view at https://bit.ly/3ynuxyl), it seems like the doctor-patient relationship has devolved into a transactional relationship, merely exchanging money for services rendered. There may be people who take it for granted with the mentality that, "I am a paying customer, I expect to be served fast." How do we explain that healthcare is **not** a simple service, that it has to be personalised and tailored to the individual's needs? Some medical conditions are "straightforward" and others are complex. Many patients have their own ideas, beliefs and expectations which influence their acceptance of doctor's recommendations. Additionally, there are also financial concerns, which influence health-seeking behaviours!

As a breast surgeon, I will say that the surgical conditions are really very straightforward to manage. What is fascinating about my subspecialty is the myriad of human emotions that go with it. We see a full spectrum of reactions to breast health: from a normal, healthy woman who is obsessively worried about breast cancer despite being told by several specialists that all her test results are normal; to the woman with a fungating breast tumour in denial for several years and not coming forth to see a doctor – until she has no clothing that can cover up the lesion any more.

Some people are naturally anxious or might have an undiagnosed anxiety disorder. Some have depression. A few have undiagnosed personality disorders and are manipulative and abusive. When there's an acute event, be it a real physical illness or imagined, the psychological burden is real and HCWs frequently bear the brunt of these outbursts.

We know, we understand: people need to blame someone, and it is easiest to scold the person/people in front of you. That does not make it any easier to accept, however. It is no wonder that HCWs are voicing out their unhappiness and seeking greener pastures elsewhere.

The news and social media outlets now report the troubles plaguing our doctors in training, how foreign nurses are moving on to other countries, and how there are bed crunches in the restructured hospitals. None of this is news to us. We have known about it for years. Doctors have to learn to advocate effectively and not just complain or blame the system. Meanwhile, policy-makers have to listen, include people on the ground in some of the decision-making process and trust their opinions.

I am acutely aware that my time in the various leadership roles may soon be reaching an end. I hope I have made some significant contributions and impact in the past three years, and I sincerely hope that there will be others who will continue on the advocacy for doctors, and for patients. ◆

Dr Tan is a mother to three kids, wife to a surgeon; a daughter and a daughter in-law. She trained as a general surgeon, and entered private practice in mid-2019, focusing on breast surgery. She treasures her friends and wishes to have more time for her diverse interests: cooking, eating, music, drawing, writing, photography and comedy.

HIGHLIGHTS

From the Honorary Secretary

Report by Dr Ng Chew Lip

Dr Ng is an ENT consultant in public service. After a day of doctoring and cajoling the kids at home to finish their food, his idea of relaxation is watching a drama serial with his lovely wife and occasionally throwing some paint on a canvas.

Misleading claim attributed to SMA in online advertisement

SMA was recently alerted to an online advertisement with the following misleading statement: "Based on the Medical Association of Singapore, did you know that 82% of General Practitioners (GPs) have no confidence in treating Chronic Pain?". The advertisement included a screenshot of an *SMA News* article on chronic pain management written by an invited writer, and further made an erroneous claim based on a US study mentioned within.

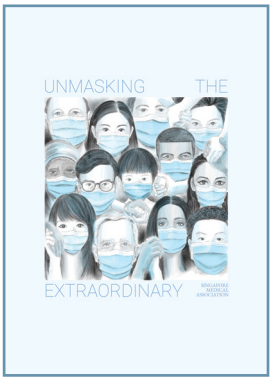
SMA wrote to the company which posted the advertisement to point out that the claim was misleading and did not represent the official position of the Association. The company has since deleted the post and its advertisements referring to the article. As of 6 October 2022, the advertisement is no longer active on the social media platform it previously appeared on.

Book launch: *Unmasking the Extraordinary*

We were honoured to have our Guest of Honour, Minister for Health Mr Ong Ye Kung launch the book at our SMA Annual Dinner on 6 November, in the presence of 400 guests.

Unmasking the Extraordinary is a collaboration between SMA and local illustrator Josef Lee. The book is a collection of 36 illustrated short stories based on real-life experiences of frontliners during the COVID-19 pandemic, alongside heartfelt reflections from healthcare workers and frontliners. It is intended as a tribute to the hard work and sacrifices of the many people on the frontline.

This hardcover artbook is available at $70 (nett) per copy, and all proceeds from the sale of this book will go to SMA Charity Fund, which helps needy medical students. To support this fundraiser, please submit your orders at https://bit.ly/SMABookOrder or scan QR code on the right. ◆



Long-Awaited Reunion at CMAAO 2022

Text by Dr Chong Yeh Woei
Photos by Pakistan Medical Association

I have been chairing more than a hundred weekly Zoom sessions under the auspices of the Confederation of Medical Associations of Asia and Oceania, or CMAAO, over the last two years. The meetings originated with the late Dr KK Aggarwal who started them during the COVID-19 pandemic. He would do research and educate us on aspects of COVID-19, and we would all trade information with each other on the COVID-19 situation in our nations. Unfortunately, he succumbed to COVID-19 in May 2021.

The confederation and its General Assembly

The CMAAO is a confederation of 18 medical associations comprising the Indian subcontinent, Southeast Asian nations, Hong Kong, Taiwan, Japan, Korea and Australia. Our Zoom meetings were also joined by doctors in Brazil, the US and South Africa. We have held 131 weekly Zoom sessions to date, and are so thankful that these sessions have carried us through the dark days of the last two years. We had the opportunity to learn more about the disease (in particular, the immunology aspects) and observe what went on in real-time in various nations across the globe, while also working as a support group when all seemed bleak and dark.

Hence, it was with hope and anticipation that we could gather in person in Karachi, Pakistan for the General Assembly hosted by the Pakistan Medical Association (PMA) on 23 and 24 September 2022. Prior to our meeting, we had heard of devastating floods that had covered a third of Pakistan. As such, quite a number of countries' representatives opted to attend virtually.

1

My colleagues were also apprehensive about me going, but my PMA colleagues called me personally and persuaded me to go as I had to chair the assembly.

Getting down to business

I flew to Karachi via Dubai and was warmed by the hospitality experienced from the moment I stepped off the aerobridge in the airport. They escorted me through customs and immigration in a most speedy and expedient manner.

It was indeed heartening meeting up with the colleagues that we had been seeing only virtually for the past two years. Dr Sajjad and Dr Wasiq of the PMA were welcoming and generous; we were also pleased to meet up with Dr Angelique Coetzee and Dr Akhtar Hussain who hailed from South Africa. Dr Coetzee is the doctor who suspected that a new variant had emerged in Gauteng province where she practises and asked her colleagues to sequence it. That variant was the Omicron strain, and she is now globally acknowledged as the doctor who first spotted that a new variant had emerged.

Our meeting was graced by our colleagues from the Malaysia Medical Association and the surprising appearance of Dr Francesco and Dr Jean Ciarlo of the Brazil Medical Association.

We held a hybrid General Assembly, and were joined virtually by our colleagues from Japan, Korea, Taiwan, Hong Kong, Indonesia, Thailand and Philippines. The meeting also encompassed symposiums on the topic

of "Healthcare in COVID-19", including the prestigious Takemi Taro oration that was delivered by Dr Tipu Sultan. Dr Takemi Taro was the President of the Japan Medical Association from 1957 to 1982. He is venerated for his leadership and was instrumental to the founding of CMAAO.

The symposium also covered presentations from each nation on their journey of handling COVID-19 in the last two years. We enjoyed the country reports of each National Medical Association, and the various representatives delivered a frank assessment of the current situation in their country. We often learn from each other when we share our areas of difficulties, how we resolved certain issues and how we interacted with our governments. The meeting ended with the announcement of a donation of a sum of 30,000 USD (42,500 SGD) from CMAAO to the PMA for flood relief efforts.

Appreciating the city

Karachi is a city of 25 million, and the traffic, as with these megacities, is chaotic. Most motorcyclists do not wear helmets and one can often see a family of three perched on one motorcycle. The hotel we stayed in had automated ramps in the ground to stop vehicle attacks, and the security was armed with Kalashnikov AK-47s and pistols. In fact, we noticed that every street in the city had one such armed individual whose job was to secure the street. All malls and hotels had metal detectors, and the airport had fortified pillboxes with machine guns. This was indeed a city under siege.

Despite the security risks, the hospitality was warm and welcoming, carefully thought out and planned. We enjoyed dinners along the coast with grilled meats and shellfish; had the best nasi biryani I ever tasted; had a lovely evening out under the stars at the old colonial building that houses the PMA; and we were brought to the prestigious Karachi Boat Club founded by the British in 1881. The club was along the coast near the port and framed by mangrove swamps that keep the waters clean with its unique ecosystem. The service was impeccable, and the serving staff were dressed in white, crisp formal jackets and pants, with epaulettes reminiscent of naval traditions.

It was certainly an unforgettable meeting. We were indeed overwhelmed by the kindness and generosity of our hosts, coupled with the rather emotional effect of in-person meetings with people you have met online week after week for a long period of two years. It was with heavy hearts when it came to taking our leave, but we were cheered by the thought of meeting up next year in Dhaka, Bangladesh for our next General Assembly. ◆

Legend

1. The opening of CMAAO 2022.

2. A cultural programme and dinner banquet arranged by our hosts

3. Dr Chong with the legendary Dr Angelique Coetzee from South Africa

Dr Chong is about to enter his sixth decade and trying to decide what is important going ahead for the last leg. Is it leaving a legacy, drinking good Pinot noir, reading the good stuff, keeping an active lifestyle, or just enjoying the good company of his friends? He would like your honest opinion!

Touching Lives
SMACF Bursary 2022

Text by Dominic Neo
Photos by Republic Polytechnic Final Year Project Team 3

On 2 August 2022, without much fanfare, the SMA Charity Fund (SMACF) opened applications for the SMA Medical Students' Assistance Fund (SMA-MSAF) Bursary on our newly minted independent website at https://www.smacf.org.sg.

For the much-coveted SMA-MSAF Bursary, we received a total of 74 applications from students of NUS Yong Loo Lin School of Medicine, NTU Lee Kong Chian School of Medicine and Duke-NUS Medical School.

With the support of our loyal donors, SMACF was able to disburse a total of 51 bursaries amounting to $255,000 to our beneficiaries this year.

The pandemic had scuppered our plans to hold bursary disbursement events over the last three years, and we were absolutely delighted that we could revive our flagship event this year with a turnout far beyond our expectations. Altogether, more than 25 students turned up to meet with SMACF Chairman Dr Chong Yeh Woei, SMA President Dr Tan Yia Swam and SMACF board members at the SMA office.

In his opening address, Dr Chong shared with our beneficiaries SMACF's mission and vision, and how we will continue to support as many beneficiaries as our limited finances permit. Dr Chong also shared anecdotes of his engagement with past recipients who have since gone on to forge successful careers in medicine, some choosing to specialise in their chosen fields while others went into private practice as GPs, providing invaluable service to the communities in the heartlands.

This year's event took on a different format, with our guests divided into three groups. This provided our beneficiaries the opportunity to pick on the wisdom of our board members, who serve in the healthcare sector as doctors and/or healthcare administrators.

The event officially ended at 8.30 pm with our beneficiaries and board members banding together for a group photo. What was heart-warming was that even after the event officially ended, the majority of the beneficiaries stayed behind to mingle with one another for another hour. It was heartening to see them share the backgrounds of their life experiences and exchange contacts so that they could keep in touch with one another.

SMACF will continue to strive towards not only providing financial support, but to also build a close-knit and supportive community among our future doctors. Let us continue "**Supporting Tomorrow's Doctors Today**".

Acknowledgements

SMACF would like to thank Ms Ariana Ria Gopakumar, Ms Lim Shi Yu, Ms Sharifah Roshani and Ms Chen Yun Jie Tricia of Republic Polytechnic Final Year Project Team 3 for their assistance in capturing the event through their insightful photos and videos.

For more information on the event, visit our website at https://www.smacf.org.sg/Events-n-News.

Legend

1. Dr Roland Xu, past recipient and current SMACF board member, in conversation with this year's recipients

2. Bursary recipients joined by SMACF Chairman Dr Chong Yeh Woei, SMA President Dr Tan Yia Swam and SMACF board members for this memorable gathering

Celebrating 100 Years of NUS Anatomy (Part 1)

Text by Joycelyn Soo Mun Peng and Helen Cai, Student Correspondents
Photos by NUS

Joycelyn, student correspondent (Singapore) at *SMA News*, is a third-year medic at the National University of Singapore. She is passionate about teaching and writing, and is an avid swimmer in her free time.

Helen, student correspondent (UK) at *SMA News*, is a first-year medic at the University of Cambridge. She is a huge animal lover and enjoys playing the drums and indulging in theatre in her free time.

The National University of Singapore (NUS) Department of Anatomy commenced its centennial celebration earlier this year, marking its 100th year of establishment in Singapore.

NUS Anatomy: a history

First founded in 1905 as the Straits and Federated Malay States Government Medical School, the later named King Edward VII College of Medicine established the Department of Anatomy in 1922, chaired by Prof JG Harrower. The department started with an office, lecture theatre and dissection hall at the former female Lunatic Asylum, which was vacated during the Second World War. The anatomy infrastructure at Tan Teck Guan Building was only reopened in 1949, and subsequently introduced a histology and neuro-physiology laboratory, founded by Prof A Krishnamurti. New facilities were later opened, such as the Anatomy Museum, animal surgery OT, an animal perfusion room, a tissue culture laboratory and an animal house to keep animals involved in longer-term research. These facilities were key in training surgeons honing surgical skills and anatomists engaging in research related to animal models.

Throughout the last century, the Department of Anatomy has become an integral part in training all students in healthcare, involving medical, dental, nursing and allied health students, as well as trainees of various surgical specialties engaged in Continual Education Training (CET). Anatomy remains a cardinal pillar to the practice of medicine, relevant in every clinical problem, and forms the foundation of a medical student's career.

Anatomy education

The teaching of undergraduate medical anatomy today is broadly divided into three core topics:

1. The musculoskeletal system (upper and lower limbs);

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2. The thorax, abdomen, pelvis and perineum; and
3. The head and neck.

These themes include pre-laboratory didactic lectures, a prosection demonstration and a tutorial. Revisions in the pedagogy saw the introduction of Collaborative Learning Cases and Clinical Application of Medical Sciences, better known to the students as CLCs and CAMS respectively. These provided opportunities for realistic clinical problem-solving with practical application of anatomy and physiology.

Some key events that the department has held in the past include the Singapore Brain Bee Challenge, the International Anatomical Sciences and Cell Biology Conference, and the Asia Pacific International Congress of Anatomists.

Infrastructure in anatomy education

Emeritus Prof Ragunathar Kanagasuntheram worked with Mr Ayubi Berseh (a laboratory technician) to create and curate a series of specially dissected human specimens framed in plastic cases, purposed as long-term learning resources for medical and dental students. This grew to include normal and abnormal specimens; of note is a unique collection of normal and malformed fetuses, all of them labelled to aid better learning. These specimens can still be found at the NUS Anatomy Museum located at MD 11 Level 2, a familiar haven for students keen on revising structures that were taught during prosection classes.

The traditional approach to learning human anatomy during hands-on cadaveric sessions remains popular among students as a mode of knowledge acquisition. Being able to freely visualise from all possible angles – anterior, posterior, medial, lateral, superior, inferior – to picture and map the structures and organisation of the human body is a great boon. As cadavers gradually diminished in quantity, ten years ago, the Department of Anatomy gained the support of the National Organ Transplantation Unit, Ministry of Health to set up a body donation programme for medical and surgical education. Inspired by the model of Silent Mentors at the Tzu Chi College of Medicine, which focused on the humane treatment of cadaveric donations for medical education and research, Prof Bay Boon Huat and A/Prof Ng Yee Kong launched a Body Donation and Silent Mentors programme at NUS. Since then, annual appreciation ceremonies have been held to acknowledge the Silent Mentors for their selfless and noble contributions in enabling invaluable acquisition of anatomical knowledge through realistic cadaveric teachings.

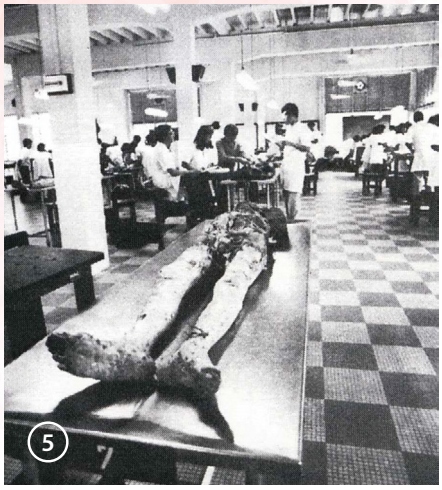
And so, the Silent Mentors continue to teach not only students at the undergraduate level, but also those in postgraduate training at CET courses on "Cadaveric Dissection for Residents". This training plays an important role in the upgrading of surgical finesse and competency in many emerging areas of surgery and helps to supplement training on complex procedures where real-life simulation is not ideal, considering potential risks intra-operatively. Surgical specialties that partner with NUS Anatomy include orthopaedic surgery, hand and reconstructive microsurgery, otolaryngology (ENT),

"The arrival of SARS in 2003 resulted in great difficulty in securing enough cadavers – also known as our Silent Mentors – for dissection during anatomy classes. Emeritus Prof Ling Eng Ang had great foresight in engaging master technicians to develop prosected specimens, which were most valuable in anatomy education, especially since students could not gather in large crowds during dissection sessions."

– Prof Bay Boon Huat, former Head of Department of NUS Anatomy

ophthalmology, plastic surgery, O&G, neurosurgery, oral maxillofacial surgery, cardiothoracic surgery and general surgery. Each of these specialties, especially general surgery, conduct one- to two-day workshops in partnership with NUS Anatomy.

In addition to traditional cadaveric education, efforts adapting to the technological advances and changing educational needs have set in motion various initiatives such as the recent digitalisation of the Anatomy Museum – resulting in the Virtual Anatomy Museum which offers virtual tours of cadaveric specimens and histology slides – "Mixed Reality" (Microsoft's HoloLens) and three-dimensional virtual dissection devices, namely the Anatomage Table.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Research

Over the past century, the Anatomy Department has made extensive contributions to the advancement of medical and anatomical knowledge through research. The department focuses on two main areas for research: neuroscience and cancer biology.

In the field of neuroscience, Prof Ragunathar Kanagasuntheram and his team had significant findings and publications on the innervation, ultrastructure and functional importance of anatomical structures in humans and primates. Emeritus Prof P Gopalakrishnakone is a pioneer of research on toxins and their effects on skeletal muscles and mammalian organs. Prof Ling EA and A/Prof S Thameem Dheen both have devoted interest in the field of microglia and have published notable works on international platforms.

The Cancer Biology Research Programme is overseen by Prof Bay BH, A/Prof George Yip Wai Cheong and A/Prof Chen Leilei, in order to support research in carcinogenesis and cancer progression. Prof Bay BH focuses on biomarkers in cancer and molecular-targeted cancer therapeutics while A/Prof Yip WC is interested in the functional significance of heparan and chondroitin sulfate proteoglycans in breast cancer. A/Prof Chen Leilei's lab delves into the transcriptome instability of human hepatocellular carcinoma.

Notable contributions by the heads of department

Prof JG Harrower (1922–1935) served as the first chairman of the Department of Anatomy. His research focused on the anomalies in the skull of the Hylam Chinese, Hokkien and Tamil populations, and his teaching was well liked by many. The students' lounge in the Medical College was named Harrower Hall to honour his contributions. Prof WA Fell (1936–1941) and Prof Alan Richmond Ellis (1949–1962) then succeeded his position and led the department through the pre- and post-war years.

Prof Ragunathar Kanagasuntheram (1962–1979) was the first Asian head of department who established the teaching and research facilities for the Anatomy Department. These included an animal house, an animal surgery suite, electron microscope facilities and the Anatomy Museum.

Prof Wong Wai Chow (1979–1992) also served as the head of department, and he is widely recognised for his research in neurodegeneration and neuroregeneration. He was succeeded by Prof Leong Seng Kee (1992–1998), who pioneered research in neuroplasticity and the role of nitric oxide in the nervous system.

Prof Ling EA (1998–2008) is a giant in the field of microglia research, and he is fondly remembered by his students for his unique teaching style using the "chalk and board" and "projector and screen". Profs Ling EA and Bay BH (2008–2016) further developed the Anatomy Museum into the modernised, exemplary resource centre it is now today. Together with A/Prof Ng YK, they initiated the Body Donation Programme in 2012 with the foresight to maintain sustainable anatomy teaching using cadavers.


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Most recently, A/Prof ST Dheen (2016–present) serves as the current head of department. He initiated the digital transformation of the department and set up CET surgical anatomy workshops for residents. ◆

The Anatomy Centennial Medical Bursary has been established in commemoration of 100 years of anatomy in NUS, in order to alleviate our students' financial burden while allowing them to focus on their studies and participate meaningfully in the school's programmes and community activities. A firm foundation year for these medical students is crucial in helping them succeed in their studies, and we would like to ensure that no student is left behind in their pursuit of quality medical education. More information is available at: https://nus.edu/3fClLq5.

Legend

1. Tan Teck Guan Building in 1969, the first Anatomy building at Sepoy Lines

2. Prof Kanagasuntheram passing the baton to Prof Wong in 1979

3. Prof Kanagasuntheram and Prof Ling in 1960s/70s

4. Prof Bay Boon Huat, former Head of Department of NUS Anatomy

5. Early Anatomy Hall at Sepoy Lines

6. Anatomy Museum at Kent Ridge before 2003

Excuse Me, But What Exactly Do You Do?

Interview with Dr Teoh Chin Sim

Interview by A/Prof Cuthbert Teo, Editorial Advisor

Dr Teoh Chin Sim graduated with MBBS from the National University of Singapore and Masters in Sports Science (Honours) from the United States Sports Academy. Dr Teoh became Singapore's first female sports and exercise medicine specialist. She is also a Senior Consultant of the Sports and Exercise Medicine Centre at Khoo Teck Puat Hospital. **Dr Teoh Chin Sim (TCS)** has also been the team physician for Singaporean athletes at major sporting events for three decades, most recently as the chief medical officer for Team Singapore at the 2020 Summer Olympics in Tokyo. Here, **A/Prof Cuthbert Teo (CT)** speaks with her to find out more about what her work really entails.

CT: What was it like leading the Team Singapore medical team for the Tokyo 2020 Olympics?

TCS: As a sports and exercise physician, the past two and a half years were unlike anything I had ever encountered. Having led the Team Singapore medical team to multiple major games, preparation for the Tokyo 2020 Olympics was, I daresay, the most complex thus far due to the evolving COVID-19 situation in Japan and around the world. Athletes competed sans spectators (in stark contrast to the recent Vietnam Southeast Asian Games), and produced personal bests, national records, Games records and world records no less!

Thankfully, the tide seems to have turned with the resumption of local and international sporting events and less restrictive safe management measures as COVID-19 vaccination continues around the world and the virus evolves. We are still learning about COVID-19 though, especially about its long-term effects on health and sports performance.

Early days of sports medicine

CT: Where did your career in sports medicine start?

TCS: It was 30 years ago when I started my journey at the Sports Medicine and Research Centre of the Singapore Sports Council (SSC). We were housed in the National Stadium, home of the Kallang Roar and Kallang Wave where 55,000-strong crowds watched many a Malaysia Cup match.

CT: When you began your career, did people understand what sports medicine was about?

TCS: "Excuse me, but what exactly do you do? Do you wear shorts to work and play badminton with athletes every day?" A well-meaning classmate asked me that when he first heard that I had gotten a job as a medical officer at the SSC. He was not to be blamed, of course, because sports medicine was a discipline that existed primarily in the SSC and the Singapore Armed Forces back then.

CT: When did sports medicine become a specialty?

TCS: It would be more than two decades before the specialty had its first fellows inducted to the Academy of Medicine, Singapore in 2015. Today, sports and exercise medicine physicians can be found in both private and public practice, rendering care to the elite and recreational athlete as well as advising our patients and the public on how

exercise and fitness are key pillars of health, and even a form of "medicine" to prevent illness and treat disease.

Physician to athletes

CT: I am sure many people ask you this question – but what is it like treating elite athletes?

TCS: People often wonder what it is like to see and treat elite, national athletes. They are patients who have cares and concerns just like anyone else, with the added demands of their sport, and they also shoulder the expectations of many stakeholders, including their country. As a team physician, my role is to support them as best as I can in their athletic pursuit, but also to be their medical advocate and, very occasionally, this duty may "make people unhappy".

But nothing in medical school training could have quite prepared me for the time I opened my clinic room door at the SSC to a sea of news reporters standing outside wanting to know if soccer celebrity Fandi Ahmad would be cleared to play at a Malaysia Cup match at the National Stadium the next day! What I thought was a private matter and decision between the patient, his coach and doctor became public knowledge in print where I was referred to as "Fandi Ahmad's groin doctor" (as the injury was you-know-where)! Fortunately, all was taken in good spirits as sports creates an atmosphere of camaraderie. Fandi and I also continue to stay connected till this day.

CT: What's your take on doping in sports?

TCS: Other than health and injury concerns, sports and exercise physicians need to be well-versed in the area of anti-doping in sport. Time and again, we read about athletes who are sanctioned for using banned substances without therapeutic reasons, sometimes inadvertently. In fact, all medical practitioners treating national athletes should acquaint themselves with the World Anti-Doping Agency's List of Prohibited Substances and Methods (List), updated annually in January, and you can also cross-check medications with the Anti-Doping Singapore's Check Drugs Database.

CT: You must travel all over the globe for your work?

TCS: I am blessed indeed to have travelled the world – save the African continent – over the past three decades through my involvement at major games, in women and sport, anti-doping in sport, and para sport. Each of the games, each international meeting, each team, each committee, each person and each encounter is unique.

CT: Tell us about one incident in your travels which stands out.

TCS: Of the many, the London 2012 Paralympic Games stands out as one of the most significant turning points in my medical career.

One day, while on the bus to the equestrian venue, I struck up a conversation with an athlete in a wheelchair and asked about how she was introduced to equestrian sport. She shared that she had in fact represented New Zealand in show jumping in the past. Several years before the London Games, she had survived a tragic car accident, waking up to find her boyfriend and best girlfriend dead upon impact, and herself paralysed from waist down. Over the next few years of untold pain, she got back on the horse again for rehabilitation, then training, but this time in para dressage.

As we parted company, I reflected on the risks of her sport where she could sustain further injuries, such as to her cervical spine like the late Christopher Reeves. It was an amazement to me how someone, having lost her love, her best friend, the use of her legs and indeed much of her former life, carved out a new identity for herself.

CT: So, sports can really unlock a person's potential.

TCS: Yes, the exposure and awareness of how sports can unlock the potential of an individual and inculcate a "can-do" mindset despite the seemingly dire circumstances, provided the impetus for change – in my mind, my heart and my entire being – and fostered a passion in para sports to harness its potential to positively impact the rehabilitation journey of an ill or injured person. In addition, I realised how some of us who seem perfectly able never quite live out our potential because we are paralysed instead by our fears and doubts, and complain about what we do not have, instead of maximising what we do have.

Lessons gleaned

CT: What have all these people you have met taught you?

TCS: Since that day on the bus, I have had the good fortune of meeting numerous individuals who have taught me much about living life to the fullest, no matter what hand it deals you. They also have a fine sense of humour and compassionate hearts to encourage others in need.

CT: Any anecdotes from the ASEAN Para Games?

TCS: I recall an incident at the ASEAN Para Games held in 2015 in Singapore.

A wheelchair athlete had rolled into our team medical centre at Marina Bay Sands to ask if I had anything for his skin rash on the anterior shin. Without thinking, I asked if it were itchy as the skin looked rather red, to which he replied, "I don't know, Dr Teoh, because I cannot feel anything!" The roomful of athletes and medical personnel including the athlete himself burst out laughing when I responded sheepishly, "Oh gosh, silly me! What am I asking, but of course you can't feel it (due to past spinal cord injury)!"

CT: Tell us about an athlete who can inspire us.

TCS: Earlier that same year, calamity struck Tan Whee Boon, who lost all four limbs to gangrene following septicaemia from eating raw fish. During his arduous rehabilitation journey, Whee Boon fell in love with wheelchair rugby and now represents Singapore in the sport. He actively promotes it and invites others to wheelchair rugby try-outs on Friday nights at Toa Payoh Sports Hall. He also got himself trained to work independently in a new industry and to become a befriender. He regularly volunteers in an amputee support group and a community sports playgroup for children of various physical abilities called PlayBuddy. In December 2021, Whee Boon was awarded the Goh Chok Tong Enable Award in recognition of his achievements, and he generously set aside ten percent of the award to buy appreciation gifts for PlayBuddy volunteers.

CT: Thank you Chin Sim. Any final words?

TCS: Little did I know that sports medicine would provide such a myriad of opportunities and experiences that have shaped how I think, what I do and the company I keep now. Looking back, I cannot help but be filled with gratitude for these enriching life lessons and am excited for my younger colleagues, knowing that they too will reap much as they sow into their careers in service to others.

Find your passion. Look for a need. Start where you are. It only takes one. Just do it. ◆

PlayBuddy was birthed in 2016 after Dr Teoh learnt that one of her physiotherapy colleagues wished to work with children with neurological conditions that impair their movement. They started with one child with cerebral palsy. At the time of the writing of this article, *PlayBuddy* turned six and they threw a big birthday party in celebration with the children, their families, caregivers, volunteers, and benefactors!

Legend

1. Dr Teoh and medical and secretariat team at the Tokyo 2020 Olympic Games

2. Dr Teoh standing by her mentor, the late Dr Teh Kong Chuan, at the Chiang Mai 1995 Southeast Asian Games

3. Dr Teoh holding her National Healthcare Group (NHG) Outstanding Citizenship Award trophy at the NHG Awards Ceremony 2022

4. Wheelchair rugby athlete Tan Whee Boon and friend Lewis Huang, introduced by Dr Teoh

A/Prof Teo is trained as a forensic pathologist. The views expressed in this article are his personal opinions.

Learning from Patient Experience:

Humanity, Humility and Healthcare

Text by Koh Ye Kai, Nicholas

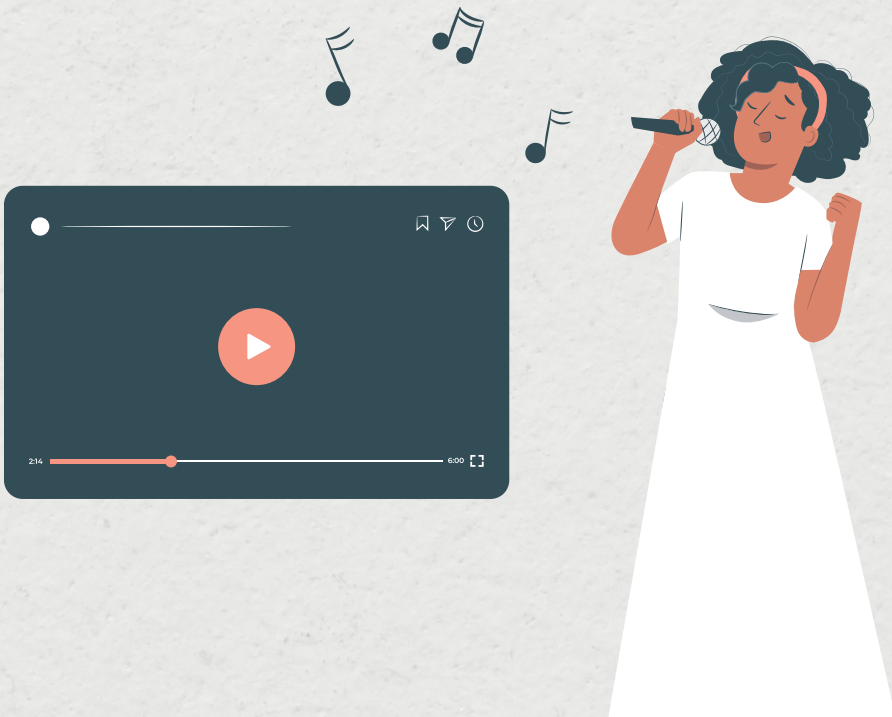
Nicholas is an undergraduate at the NUS Yong Loo Lin School of Medicine. He enjoys analogue photography, the arts, and the humanities.

On the last day of my internship at a local community hospital, with the permission of the nurse manager, I headed to a nearby Kopitiam to buy back a packet of *char kway teow*. Freshly stir-fried from the wok, the packet of noodles was bought not for myself but for a friend I made at the ward whom I shall call Madam Y. I learnt that Madam Y, while not very fond of the food served during hospital mealtimes, loved to eat hawker food. This unique experience we shared over our common love for food was one of the many relationships I had the opportunity to build and engage in during my four-week stint as a nursing intern during my summer break. In this article, I reflect on the importance of humanising healthcare for long-term care patients, as well as on the pearls of wisdom I learnt from the patients themselves: on how to become a better physician – one who is humble, humane and present – and, by extension, a better human being.

Listening, not just hearing

On slow-moving weekday afternoons, the call bell would not ring as frequently as it usually does and most patients would either take naps or be out undergoing physiotherapy. I would then take the time to speak with some patients. On such days, I would sit beside Madam S on a patient chair upholstered in maroon. To her right was her personal entertainment device, an electronic tablet.

Madam S had been admitted after a fall that caused a left intercondylar humeral fracture. Communicating with Madam S took some effort as she was a person with some intellectual disability. I attempted to bond with Madam S by spending time with her. We would watch a series of black-and-white short video films by P Ramlee, one of her favourite filmmakers on YouTube. At the parts where the actors made laughingstocks of themselves – even though Madam S had probably seen the same film many times over before – she would give an infectious chuckle. On other days, she would play a children's educational video on Arabic letters, where we would learn the A to Zs of the language, or we would re-watch an Indonesian singing contest which she was particularly fond of. Madam S would say to me, in her child-like demeanor, "This girl is blind, she cannot see," referring to the female singer dressed in a white gown performing on stage with her melodious voice.



Among the many roles I served as a nursing intern at the ward – including serving meals, feeding the less mobile patients, showering patients, and pushing patients on the commode chair to the toilet – watching YouTube was a task I least expected, but it was one of the few shared activities which I bonded with patients over. Beneath the occasional smile Madam S made while watching her favourite shows was a girl missing her home and missing her mother. Madam S would speak to me, in a fragmented mix of English, Malay and Mandarin dialect, about how she could not sleep at night because she would cry, longing to return home to her mother who was unable to visit for various reasons. While it seemed that there was nothing I could do to give her what she needed, I thought that perhaps being present right there and then at her bedside would give Madam S a chance to share her feelings with someone.

Beyond hearing what patients have to say about their situation at the hospital, I learnt, more importantly, to listen to their predicament to paint a clearer picture of their overall well-being. The difference between hearing and listening is to therefore gain a more thoughtful understanding of the other person's vulnerabilities and emotions, giving these feelings due consideration, and sometimes to simply be present.

Learning from patients

Staying at the corner of the ward were *Nenek* ("Grandma" in Malay) and Madam P, two very kind, sweet and loving ladies with whom I got the chance to interact with. *Nenek* spoke only Malay and, for my first few encounters with her, I could not understand a single word she spoke. I could not respond save for generously nodding my head, and I walked away feeling embarrassed and very aware of my conversational incompetency. A few times, whenever I lingered around that corner of the ward, Madam P would ask for my help to remove her socks from her gangrenous feet. "Thank you, young man", she would say. Very keenly aware of her surroundings, her voice clear and sharp, I came to realise that Madam P was a retired schoolteacher.

On one of the days when I was again generously nodding my head, Madam P turned in my direction and translated a few words for me. It was then that our daily ten-minute conversational Malay lessons started. Armed with a piece of paper and a wooden pencil, I sat on a plastic chair at the foot of Madam P's bed as she entertained every "How do you say… in Malay?" from me. While a patient-doctor relationship traditionally circles the professional need to attend to a patient's concerns, in this scenario the patient's sharing of their knowledge enriches that of the healthcare professional. (Arguably, as a medical student, I would learn more from being in a clinical setting than any form of professional help I can offer to others. I thus appreciate the role reversal here.) Indeed, I learnt more from Madam P than what help I could offer her, and I humbly received this knowledge. I would greet *Nenek* in Malay ("*Apa khabar*?" "*Khabar baik*"), ask her if she had slept well last night ("*Tidur bagus*?""*Ye bagus*") and ask if she had eaten ("*Sudah makan*?" "*Sudah*""*Makan apa*?""*Makan roti*").

Language plays such a crucial role in one's ability to relate to people. Towards the end of my internship, finally able to understand some of her words, I came to know that *Nenek* wanted to offer me bread to eat. To me, it was an incredible experience learning, understanding and being able to converse with another individual in their native language. The beauty of this exchange is beyond any content a medical textbook can teach.

Art, music and healthcare

At the other corner of the ward, I would find Madam Y seated slouching on her bed. On morning shifts, the air-conditioning would turn on at around 9 am for about two hours. Madam Y would beckon me towards her by waving her hands. Then, as I approached her corner of the ward, she would make a gesture indicating for me to help her close all the windows.

Madam Y had been admitted due to a fall at home, and she had previously been diagnosed with schizophrenia. She was vehemently opposed to any proposition to get her out of bed (she insisted that the bed railings were not to be lowered at all times, and that her table had to be adjusted to be "just below the height of the bed railings", arranged parallel to the bed), and would not feed herself with utensils during mealtimes ("My hands very shaky", she said, "the food will drop on me!"). As such, I had the privilege of serving food (and *char kway teow*) to Madam Y during my shifts. On slower mornings, typically after breakfast, I would bring a set of *The Straits Times* and we would share the newspaper. As she flipped through the "Lifestyle" section, looking at the pictures since she could not read English, I would put on some old Mandarin songs at her request:

- “奔向彩虹”（邓丽君）
- “白光”（秋夜）
- “白天不懂的夜黑”（那英）
- “满庭芳”（包娜娜）
- “慈祥的爸爸”（包娜娜）
- “朋友”（周华健）
- “爱拼才会赢”（葉啟田）
- “细水长流 ”（ 梁文福）

“At home I got CDs but now don’t have already”, she says to me in a mix of Mandarin and Chinese dialect, “these songs are very meaningful to me”. As we both shared the space listening to those songs, I was brought back to my childhood during overseas family trips when my parents would play CD playlists of Mandarin classics in the car. I imagine it could have been a similar experience for Madam Y. Art and music have the capacity to bring an individual back in time to relive memories of their past beyond hospital gowns and commode chairs. For a short period of time, the reality of the world just pauses for us to appreciate our individual unique history.

Building relationships through listening, learning and art

Beyond prescribing medicine, changing diapers and serving meals, there is often an overlooked part of the patient’s well-being that can be difficult to address. This aspect of well-being often encompasses the patient’s own values, their emotional and mental state, and their perspective of being at the hospital, coupled with the promise of any therapeutic goals for their stay.

Sometimes, addressing this aspect of patient well-being involves spending time interacting with them and simply being present, however transient or short. Whether listening to what they have to say beyond simply hearing their voices, or looking directly at the patients when speaking to them and observing their body language and facial expressions, it all adds up to build a broader picture of what patients are going through as they transition from being community-independent individuals to being a patient. They, as patients, become someone who requires and receives medical care, and is less independent and less familiar with their immediate surroundings. Caring for patients might also include relating to them while doing shared activities, such as watching YouTube, learning from their experiences or listening to music. As a medical student helping with nursing duties, I had a special opportunity to not only provide nursing care, but to also interact with patients in various ways that allowed me to build a unique relationship with them, thus understanding the patients beyond their medical condition.

You’ve got a friend

Towards the end of my internship, I returned to the ward to find Madam S’ bed empty with its sheets removed, exposing the creases of the waterproof mattress beneath. The micro-USB charging cable, used to charge Madam S’ depleted electronic tablet after hours of watching P Ramlee, was no longer there on the top left corner of the bed. That was the first time at the ward (or rather, the first time with whatever clinical exposure I had till then) that I felt a sense of parting with someone whom I called my friend. A friend who shared with you her feelings about being in a hospital, sharing from a place of loneliness her fear of being away from her immediate surroundings and a sense of uncertainty surrounding her future. I think about how we would spend hours just watching YouTube, the same few short films over and over again. In that moment, we were not alone. ◆

Rediscovering the Joys and Pain

Text and photos by Dr Clive Tan, Editorial Board member

I recall I was due to travel to Orlando, Florida to speak at the Healthcare Information and Management Systems Society (HIMSS) Conference in March 2020. The conference was scheduled to start on 9 March 2020, and my flight was to be on the night of 7 March. At 2 am on 6 March, I received an email from HIMSS stating that the conference and exhibition had been cancelled – just four days before it was due to start. More than 40,000 speakers, exhibitors, attendees and staff were scheduled to be in Orlando for the event, and it was the first time the annual event had been cancelled in its 58 years of history.

Long story short – I got my refund back, but the online shopping from Carter's that I pre-planned for my kids was uncollected, and hopefully someone in the Days Inn by Wyndham Orlando found it to be a helpful gift as the pandemic unfolded. It was fortuitous in hindsight as I was soon plunged into the COVID-19 war in Singapore, first at the Singapore Armed Forces Medical Headquarters, then subsequently as the Head Medical Intelligence at the Joint Task Force (Assurance).

Fast forward two years

Two years of the global pandemic introduced us to the world of online and virtual conferences, and we have gotten so used to it. Bouncing back to in-person meetings and conferences was strangely a "reverse culture shock" experience for many of us. Crossing the Johor-Singapore Causeway again in April this year seemed surreal and getting onto a flight to Denmark in May was trepidatious. A two-week course in Boston and Atlanta this June reintroduced me to the joys of living without a face mask – both indoors and outdoors. I was glad when Singapore finally made mask-wearing optional in August 2022.

I was especially delighted to be invited to speak at the HIMSS22 Asia Pacific Health Conference & Exhibition! After hearing that it was going to be held in Bali, I looked forward to seeing how the island was recovering from the pandemic. Bali is heavily dependent on tourism for its economy and was badly hit by the COVID-19 travel restrictions. With travel re-opening in 2022, Bali has been aggressive in opening up its borders and marketing itself for leisure and business travel. I am not very good at mixing pleasure with my work travels, but hey, there's not a better place to start than Bali.

I felt more relaxed after I completed my speaking engagement, which was a morning plenary on the second day of the conference. That evening, I was ready for some authentic Balinese cuisine, and we went to Bumbu Bali Restaurant & Cooking School near Nusa Dua (not affiliated with the Bumbu Restaurant in Singapore), known best for their satays! They had an open kitchen and alfresco seating. The six of us – Sean, Raymond, Alvin, Whei Chern, Yih Yng and myself, colleagues from National Healthcare Group and friends from Ministry of Health – were seated at a long table

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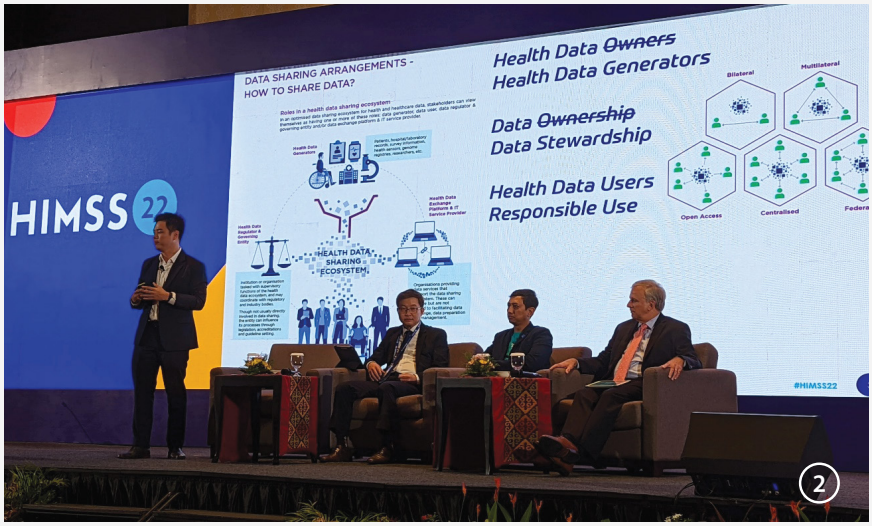


Bali as a conference destination was great! The conference halls were spacious, the food choices were excellent. Those with some additional time on their hands can reconnect with nature through Bali's beautiful beaches and cool mountain tops! Some friends went for a morning hike to catch a glimpse of sunrise from the mountain top; a few went rock-climbing, and many walked along the beachfront in the cool Balinese weather.

with a view of the kitchen, where we could see the chef grilling the satays over an open flame. The satays came in a wide variety, and the beauty of dining in a group of six meant that we could try almost everything on the menu! If I had to choose a favourite, it would be the beef satay. Young coconuts were also a "must order" – they were really fresh and much larger than the Thai and Malaysian varieties that we usually get in Singapore.

Home sweet home

I was due to fly back to Singapore the day after the conference. Without much more time for sightseeing, I made the best of my morning by taking a leisurely stroll along the Nusa Dua beach, which was quite deserted – a likely sign that the tourism industry in Bali was still taking time to recover. It was quite another picture at the airport though: the immigration was crowded and outbound flights were filled to the brim. I guess the airports may be what makes it less enjoyable for some, but I honestly did not mind it as I took the time and opportunity to reconnect with friends who were on the same flight.

With the rest of the world opening up, including perennial favourites such as Japan, it is unlikely that I will be in Bali anytime soon. I am grateful for the invite by HIMSS to be at Bali for the conference, and I hope for the Balinese people that their tourism and economy will do well in the upcoming years. ◆

Legend

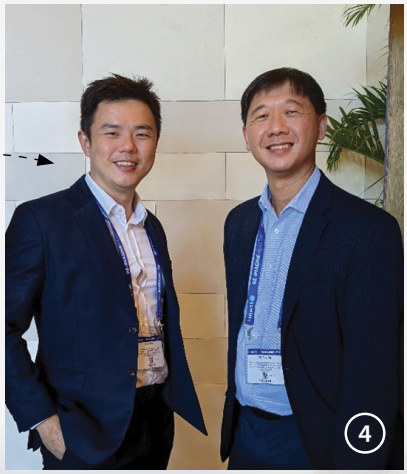
1. With Shawn, Raymond, Alvin, Whei Chern and Yih Yng at the satay dinner

2. Speaking and moderating a plenary on Data Sharing, with experts from South Korea's Health Insurance and Review Agency, Indonesia's Ministry of Health and HIMSS' Vice President

3. Bali's international airport was crowded with throngs of tourists and business travellers! Outbound flights were filled to the brim

4. Dr Tan and Dr Ng Yih Yng, who was invited to speak on Tan Tock Seng Hospital's Hospital without Walls Initiative

5. The quiet beachfront at Nusa Dua. Or maybe it was too early – this photo was taken around 7 am



Dr Tan is a public health specialist based in the National Healthcare Group, currently working on integrated care, digital health and population health. He is looking forward to travelling with his wife and three kids in December; their first overseas travel as a family since December 2019.

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