SMA news

For Doctors, For Patients

VOL. 54 NO. 5 | MAY 2022 | MCI (P) 077/12/2021

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Tapping on Its Merits

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References:
Aptima HPV Assay – Benefits of Apitma mRNA (Hologic brochure) | www.aptimaforher.com/genotyping.html
Aptima BV, CV, TV Assay – A New Standard of Care for Vaginitis Patients (Hologic brochures) | Aptima COMBO2 Assay for CT/NG (Hologic leaflets)

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The EDITORS' MUSINGS

Dr Tina Tan

Editor

Dr Tan is a psychiatrist with the Better Life Psychological Medicine Clinic, and a visiting consultant at the Institute of Mental Health. She is also an alumnus of Duke-NUS Medical School. Between work and family life, she squeezes time out for her favourite pastimes – reading a good (fiction) book and writing.

I am excited to present this month's issue to our readers. It marks my second term on the SMA Council and rounds up roughly two years since I took over as the *SMA News* editor, which was also when the COVID-19 pandemic started. It is heartening to see that life is returning to some level of normality after two tumultuous years. We have kicked off a snippet series where we invite doctors to share their reflections on the past two years, and we at *SMA News* welcome any further submissions from our readers. As a psychiatrist, I believe that it is good to share and talk about what has gone wrong, and also what has gone right in that blip which was caused by COVID-19 (and not Thanos #avengersinfinitywar).

For those more social-media savvy (and even for those who are not), this issue showcases various aspects of navigating the social media minefield, and how some of our colleagues have used various platforms to promote healthy living, their areas of specialty, or even their hobbies. As someone who has recently rediscovered the rather addictive joys of social media (after shunning it for various reasons), these articles are a reminder that social media has become part and parcel of our lives, for better or for worse, and also a reminder of the roles it plays in our personal and professional lives.

Social media has weaved itself into the fabric of our lives. For some, the online persona is an imagery of the subconscious alter ego, the mouthpiece of one's opinions, a reverie of fantasy and realism. Some of us may already be on platforms such as Facebook, Instagram, Twitter and LinkedIn. While curating articles for this issue, I chanced upon TikTok and Snapchat, and I am sure that there are other apps people use too.

Social media is a medium of self-expression. Depending on which group of friends we are reaching out to, one may use different platforms. I have a set of Facebook friends and another set of Instagram friends because many of my millennial colleagues are not on Facebook.

Social media has also weaved itself into the professional realm. The growth of virtual cardiology congresses during the pandemic prompted me to start a Twitter account. Many of my international cardiology colleagues go by a Twitter handle. The hashtag, retweet and mention functions are perfect for networking with peers and professional organisations.

Twitter can elevate the scientific impact of new research papers. This is an informal and instant way of information dissemination superseding the usual method of the oral presentation at a conference. Twitter promotion of research papers has a positive impact on future citation rates. In the future, researchers may be informally ranked by a matrix of citations and digital footprints, the highest being "cited, with digital footprint", and the lowest being "not cited, with no digital footprint".

Dr Lim Ing Haan

Guest Editor

Dr Lim is the first female interventional cardiologist in Singapore. She is an early adopter of new technology and is a key opinion leader in international cardiology conferences. She shares a clinic with her twin sister, an ENT surgeon in Mount Elizabeth Hospital. Travel, fine food, family love and friendships are the things that keep her going.

The influence of social media cannot be underestimated. The #CardioTwitter hashtag has reached a euphoric phase where it can reach out to a huge audience with a specific interest. This can cut both ways. On the one hand, researchers can tap on the knowledge of their peers or seek opportunities for research collaborations. On the other hand, real-time debates on controversial subjects may come at a furious pace and turn vitriolic. The cardiac stenting versus coronary artery bypass graft debate between cardiologists and cardiothoracic surgeons is one example of a trial by Twitter. In fact, international cardiology conferences now appoint digital ambassadors on the Twitter platform to moderate discussions.

In this issue, we have invited Dr Stephanie Yeap to write about her use of social media as a musician and a doctor, Dr Suraya Zainal Abidin to share her opinion on engaging patients through social media, and Asst Prof Low Ting Ting to introduce the cause she promotes and advocates for on social media. Enjoy reading!

Social Media

Tapping on Its Merits

Text and photos by Dr Stephanie Yeap

Social media has taken on many forms over the past 20 years.

In the early 2000s, Friendster had just emerged for people to connect with friends on the Internet, just as the era of the dial-up connection began to evolve. Those were the days when every teen would hop onto MSN after school to connect, one short message after another – a liberation from the confines of the limited characters SMSs would allow. Myspace was the perfect platform for people to post about their lives and share their favourite music, if you could wait out the loading time on each page with your broadband connection.

We now fast forward to today, when our attention spans have whittled down to a mere 15 seconds – swipe up for the next TikTok, swipe left for the next Instagram story.

Life as Stephycube

In my life before medical school, I was a young musician in junior college, with about two years' worth of posts on my Instagram account. The username "@stephycube", the same moniker I used for my performances, is a play on my full name ("Steph Y Y Y" = "Steph Y^3" = "Stephycube" *haha*)

I would shout this name out in between music sets, calling on the crowd to give the account a follow or to drop a "Subscribe" on YouTube if they liked the performance. Gone were the days of selling CD-ROMs or making cassette mixtapes. These social media platforms were the quickest and most efficient way of sharing my music, pandering to the way music was consumed.

My covers and original music would be uploaded, and I would document my life as musician and student in individual posts to share with those connected with my account. The outreach of the Internet was incredible, and listeners and users from all over the world – America, Spain and even Poland – would drop Facebook messages or direct messages on Instagram to share their thoughts and greetings.

As I continued on in medical school, we were introduced to what I am sure is now more than familiar to all of us in the medical field: the Personal Data Protection Act (PDPA). The Hippocratic Oath we had taken at the White Coat Ceremony had called upon us to "respect the secrets which are confided in [us]." Our lecturers had counselled us gravely on the story of an all-too-revealing blog post about a patient encounter. In general, the advice was to avoid posting anything that was related to our medical life.

Wanted to post a snap in the ward? "PDPA," someone would warn. A quick quip on Twitter about a certain patient? "PDPA"

Dr Yeap is a medical officer in ENT. Outside of the hospital, she performs and writes music, and documents her life with her dogs on Instagram @stephycube, which is also her stage name. Steph also runs the *Singapore Medical Journal* Instagram page.

– the four letters hung tightly on the tips of our tongues throughout our time as students, each looking out for the other to ensure that we would not get in trouble from an accidental social media post.

Many of us became more careful with sharing about our personal lives on social media, for fear of an inadvertent slip-up that could reveal patient details. At the same time, the question of whether I should set up a separate Instagram account for my music weighed heavy on my mind – for one, to avoid such a risk of leaking confidential data, and simultaneously, to curate my music more specifically and avoid diluting its content.

However, as I grew as a medical student, I also grew in my music – life bleeding into art through school projects and personal conversations with patients, grappling with mortality and humanity. Furthermore, my interest in music extended to medical work, and I found myself being closely involved in music groups comprising medical students, such as carolling during Christmas, or being part of hospital-run bands with patients and doctors. There, I discovered that my identity as "Stephycube" could not be divided between that of the medical student and the musician, but that it was a whole representation of my life – and it was how I intended to share my identity with everyone.

Hence, @stephycube remained, and like my peers' accounts, it was maintained carefully to ensure that even if snippets of medical student life were featured, they would be bereft of any identifiable details. I went on to create more music and graduated to enter the healthcare workforce.

Life as Dr Yeap

Being a doctor is quite different from being a medical student – I'm sure many of us can attest to that. As work began, my music endeavours diminished. Medicine was always my dream job, but amid the highly anticipated excitement of saving patients' lives also came the humdrum of the daily routine of rounding wards and running clinics, or just administrative work. My Instagram account now featured mainly the more entertaining bits of life, such as exercising, nice dinners and the occasional singing clip.

As I became a medical officer, my interest in surgery and procedures grew – from every ingested fishbone that got grasped out with a flexible bronchoscope and creepy-crawly that was retrieved from a ear, to the heart-warming stories of triumph over disability when patients with traumatic brain injury recover well. I witnessed my fellow colleagues celebrating their clinical achievements and accounts of learning as well – from tales of the Emergency Department with a successful return of spontaneous circulation from a resuscitation case, to the quiet personal talks with the ailing grandmother in the geriatric ward talking about her last wishes.

These anecdotes lay testament to the small and great victories in medicine and the work we do in helping better people's lives.

The landscape of social media remains ever-changing, and just like the rest of our non-medical friends, our use of Instagram and other platforms remains closely entwined in daily life. Doctors, nurses and healthcare staff are, after all, just regular people experiencing the evolution of technology at the same pace as everyone else. How best then could we as healthcare workers navigate social media while protecting the very people we work with – our patients?

Some set up anonymous accounts to post memes (ie, a photo or picture captioned with text, often funny but mostly with pointed commentary) which other healthcare workers could relate to. The especially creative among us drew original comic strips, detailing their emotional encounters of life as a doctor while maintaining anonymity behind these doodles. Many, including myself, would post short 15-second Instagram Stories on our day, with de-identified versions of our anecdotes. I've found that even something as seemingly mundane as the food I eat on call makes for a relatable experience with others trudging through the night in another hospital.

Not only did this foster a sense of community among healthcare workers – that we were not alone in these successes and failures – but it also allowed non-medical followers to catch a glimpse of our amazing day jobs.

Those who followed my Instagram page from my music days also took notice of these – some would comment on how cool the experiences were; others, including medical students and even younger followers, would be

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intrigued to find out more about certain procedures and life in medicine.

Then came along my exciting role of running the Instagram page of the *Singapore Medical Journal* (*SMJ*; @smj.sg), as part of their social media team. By creating infographics of highlighted articles from each month's issue, we have helped to translate academic information into bite-sized posts not just for quicker consumption by our healthcare colleagues, but also for the layperson interested to know more about medical research in Singapore. Furthermore, we designed each month's posts to share briefly about pertinent recommendations and guidelines in Singapore, such as screening measures for colorectal cancer and breastfeeding advice from a medical perspective.

As it seems, social media is becoming more friend than foe to doctors and other healthcare workers in connecting with the non-medical world.

Life as a social media user

I have realised now that there need not be a clear distinction between my life as a doctor and my personal life on social media. It is easy to fall into the temptation of portraying a certain persona on these platforms for followers to perceive. However, rather than crafting disparate identities of being a musician versus a doctor, I have learnt to reconcile this by taking care to respect personal data while curating these objective experiences.

Of course, there remain challenges ahead in navigating social media as a doctor. As society becomes more interlinked via the Internet, so do our patients reach closer into our personal lives and even closer in communication with us. What happens when a patient drops us a follow on our page, or what if they use information from our personal accounts – such as our relationships, families and hobbies – against us in a professional setting?

A recent study in the *SMJ* titled "Doctors and Social Media: Knowledge, Gaps and Unsafe Practices"by Low et al[1] highlights that despite an existing set of recommendations established by the Singapore Medical Council Ethical Code and Ethical Guidelines (SMC ECEG), there remains "much heterogeneity in social media-related knowledge" among doctors. For one, the SMC ECEG states that "if you are active in social media, you must ensure that exposure of your personal life and your words and behaviour do not diminish your professional standing before patients or the public, or bring the profession as a whole into disrepute."

Low et al surmises that though official guidelines are available, in reality "it is impossible to formulate similar guidelines for all possible usage scenarios given the broad application areas and involved stakeholders."

Therein lies the difficult balance of doctors as social media users. Such platforms serve as a means to connect with others and a powerful method of self-expression, but we must maintain vigilance – not just to protect our patients, but to protect ourselves in an increasingly litigious society as well.

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Indeed, we as a society will continue to explore new frontiers of technology, and the demand for efficiency of information will continue to rise. Even today, TikTok presents itself as the latest and most attractive form of content now, but who knows what more gripping forms of social media lie ahead of us?

As doctors and healthcare workers living in this day and age, we must harness the potential of these platforms. We remain passionate in sharing our knowledge with the world, to celebrate rather than be afraid of our achievements in our work and to quench curiosity rather than stifle it, all while keeping true to the very first creed we undertook – to serve humanity and protect their secrets confided in us. ◆

Legend

1. A fish bone retrieved with a flexible bronchoscope by the author, from an encounter on call

2. A screenshot of an Instagram story, showing the featured topic for the February 2022 issue of the Singapore Medical Journal

Reference

1. Low JM, Tan MY, Joseph R. Doctors and social media: knowledge gaps and unsafe practices. Singapore Med J 2021; 62(11):604-9.

Raising Awareness Responsibly

Text by Dr Tan Yia Swam

A big thank you to Members who attended the SMA Annual General Meeting (AGM) on 24 April 2022, and for the unanimous support in my third (and final) year as President (see page 10 for AGM report). It has been a tumultuous two years, and I hope that this year sees us in calmer waters.

Efforts for the profession

Looking back at the past year, we have had multiple projects and outreach efforts (do read about them in previous issues of *SMA News* and our latest annual report). Broadly speaking, these SMA projects aim to provide support not only for our Members, but also for our medical community, especially during COVID-19. When doctors are well looked after, that leaves us better able to look after patients, without worry.

Let me sum up the three key areas:

1. The private sector

A robust private sector will complement a busy restructured service. SMA's representation in the Multilateral Healthcare Insurance Committee offers a perspective of the challenges doctors face in the private sector. The Committee's work is ongoing, so as to address as many of these problems as possible and achieve an equitable healthcare system. We are aware of the various tensions and the need for fair utilisation of taxpayers' money in subsidised care, fair use of private facilities, and fair reimbursement for appropriate work done. COVID-19 has taught everyone that healthcare resources are precious and limited – there must be right-siting of care.

2. Doctors in training (DIT)

Most people would have read of the recent news articles featuring the struggles of our young DIT. What many may not know is that SMA has a DIT committee who has been working hard to address these issues for more than a decade – the issues are complex and there is no one-size-fits-all solution – through building good networks and relationships with other stakeholders. In recent months, their work has culminated in a series of effective engagements with Senior Minister of State Dr Koh Poh Koon, and representatives from the Ministry of Health (MOH) and MOH Holdings. They will continue to work closely with relevant authorities in the months ahead to effect changes.

I spoke in Parliament of the harassment faced by healthcare workers (HCW).[1,2] My wish is that the discussions will lead to better support against harassment and bullying, and provide long-term solutions for a meaningful career in healthcare – not just for DIT, but for all HCW.

3. Being a bridge

Concurrent with my Nominated Member of Parliament role – which will also end next year – I wish to show everyone what the SMA is about: that we can be a bridge for doctors and patients, for doctors and the government. As individual practitioners, we keep our eyes and minds on the patient in front of us. Top healthcare leadership in turn looks at the big picture. That is why there seems to be discrepancies between policy and real-life application sometimes; and precisely why the SMA is essential – to bring the ground's feedback and concerns to MOH and other authorities. SMA has always been doing that, but alas, much of our work is unspoken of, or unpublicised.

Doctors and social media

I have been asking in my columns: who reads print nowadays? (I am rather disturbed that I get very few comments/feedback on my writing; perhaps only the editorial team reads these?) Someone teach me how to get onto social media. I need more views!

This issue of *SMA News* casts a spotlight on social media: I am sure everyone is aware of Elon Musk's ongoing acquisition of Twitter. I do not use it much, but I have read about the postulated implications and downstream effects.[3,4]

We have to be mindful of how we could be manipulated by what we are exposed to. We often talk about how kids are exposed to violence or R-rated imagery in shows and games; how about ourselves? We assume that as adults, we should be more discerning, but just think back over the past two years of confusion, the rapid changes, and the different types of reporting and media we were exposed to: doctored images; catchy WhatsApp messages that were so believable and so easily passed on; and the arresting headlines with stories that tug at the heartstrings. The many comments by various online personas – some with such provocative content that one gets spurred into an emotional response. I list a few examples here (but for your own sake, **do not Google for them!**): videos of COVID-19 creating zombies, and government officials shooting the infected in the streets; that vaccines are an alien/billionaire's conspiracy to control the human population; that xxx is a miracle cure for COVID-19 that the "government" is suppressing; and that slur on GPs, which we addressed in a joint letter with the College of Family Physicians Singapore.[5]

What is real and what is not real? What is a fact, and how do we interpret the facts?

Traditionally, reporting took a lot more work. There were many layers of checks with various people involved in the heavy responsibilities of getting an article ready, including the writer/journalist, the editorial board, the editor-in-chief, the photographer, and multiple checks in layout, etc. There is a physical limitation in the speed and quantum of publication, printing and distribution. Recall those movie moments of a young boy waving a rolled-up newspaper shouting, "Hot off the press!"

Yet these days, with social media, **anyone** can be a one-man publication house. Any random opinion can be sent out with a click and amplified within seconds. Voice-to-text, text predictions and autocorrect functions ease the writing process. Choosing fonts and layouts, you can pre-plan content to be published at fixed intervals. Smartphone camera quality allows near-professional level of photography and videography, and there are numerous blogs on simple camera tricks and editing tips. Add in evocative captions and how easy it is to sway people – cats, food, travel, babies and tasteful nude photos – all to get the likes. One could even pay social media companies to get more likes. Social media platforms have artificial intelligence algorithms, to push even more related content to users.

Pros and cons

There are massive benefits, and risks as well. Benefits include a cheap and rapid way to raise awareness and outreach. This is especially useful for fundraising activities (for example, the happy outcome for Devdan),[6] and to dispatch news of current events (as seen in cases of school shootings or the ongoing war in Ukraine). For daily lives, we get to do virtual shopping, price comparisons and reviews easily from the comfort of our homes. Even better, the algorithms may introduce me to a brand that I have never even heard of, so that I have more choices! But I guess I betray my age when I say that I still like to head out and view items physically before purchase.

Risks include the problems of biased reporting, and not being able to distinguish truth from half-truths or outright lies. Reviews can be faked by getting friends/paid accounts to give five-star reviews. Conversely, for trolls to give one-star reviews just to thrash a company.[7] Ultimately, each and every one of us just has to learn to be discerning, and to exercise critical thinking! Not everything we see online is true; and the real, human connections are what matter in the long run. For those of us spiritually inclined, the personal accountability to our conscience and our god is the ultimate judgement.

Oof. Getting too heavy and serious. The *SMA News* editorial board has invited a series of good articles from colleagues, who share their experiences on social media. I have shared a few simple tips last April as well.[8] Enjoy reading, and do write in to us at **sma@sma.org.sg** to share **your** tips on how SMA can be more effective in social media outreach! ◆

References

1. Committee of Supply 2022 debate, Day 6: Tan Yia Swam on protecting healthcare workers from abuse. CNA [Internet]. 9 March 2022. Available at: https://bit.ly/3LplrWt.

2. Ang M. NMP who received death threat as junior doctor calls for better protection for healthcare workers. Mothership [Internet]. 9 March 2022. Available at: https://bit.ly/3NkzbCH.

3. Page C. It's not rocket science: Why Elon Musk's Twitter takeover could be bad for privacy. TechCrunch+ [Internet]. 26 April 2022. Available at: https://tcrn.ch/3yHQVUq.

4. Ng B. Explainer: Why has Elon Musk bought Twitter and what are the implications for the social media giant? today [Internet]. 26 April 2022. Available at: https://bit.ly/3NjiPu6.

5. Tan TL, Lim R. Forum: GPs play critical role in the public health system. The Straits Times [Internet]. 25 May 2021. Available at: https://bit.ly/3PmdF2p.

6. Tan T, Chua N. 'It's a miracle': Boy treated with $3m drug donated by public can now walk with support. The Straits Times [Internet]. 19 January 2022. Available at: https://bit.ly/3woaS1d.

7. Varga G. Fake Reviews: How to Fight Them and Protect Your Brand. In: Modern Restaurant Management. Available at: https://bit.ly/3PriRlu. Accessed 10 May 2022.

8. Tan YS. Social Media: Tips on the Dos and Don'ts. SMA News April 2021. Available at: https://bit.ly/5304-ES.

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.

2022 SMA Annual General Meeting

Text by Lee Sze Yong, Manager, Council Support

The 2022 SMA Annual General Meeting (AGM) was successfully conducted on 24 April 2022, with the 62nd Council and SMA Members in attendance.

SMA President Dr Tan Yia Swam started the proceedings by thanking Members for attending the AGM via teleconference. She highlighted the following key points during the President's message:

1. Post-COVID-19 – challenges that remain for the profession, continued engagement with stakeholders on relevant issues.
2. Junior doctors' welfare – including harassment/ bullying concerns.

Honorary Secretary Dr Ng Chew Lip then highlighted the ground rules for the teleconferencing AGM, and referred Members to the SMA Annual Report 2021/2022 themed "Advocating Change".

Honorary Treasurer Dr Daniel Lee Hsien Chieh presented the 2021 accounts for SMA, of which he highlighted an operating surplus of $414K (excluding investment accounts) in 2021. The accounts for SMA Pte Ltd (SMAPL) were presented by Adj Prof Tan Sze Wee, Chairperson of SMAPL. SMAPL's profit and loss statement largely depends on the performance of its investments. For 2021, SMAPL's investment account achieved a net profit of $923K after tax, which includes a dividend income of $226K.

Dr Chong Yeh Woei, Chairperson of the SMA Charity Fund (SMACF), reported that SMACF awarded bursaries to 57 medical students in 2021, disbursing a total of $285,000.

Members present affirmed the SMA Council's proposal to elect Prof Tan Chorh Chuan as an SMA Honorary Member. The Honorary Membership will be conferred during the SMA Annual Dinner, to be held in November this year.

Elections for the 63rd SMA Council were then conducted, and Dr Tan Yia Swam was re-elected as SMA President for her third term. Following which, the election for the executive committee was conducted.

The AGM also approved the appointment of A/Prof Cheong Pak Yean to replace Dr Tan Cheng Bock as a Trustee of the SMAPL.

With that, the AGM was concluded. ◆

63rd SMA Council 2022-2023

President
Dr Tan Yia Swam
MBBS (S), MMed (Surg), FRCS
- Nominated Member of Parliament
- General Surgeon at Thomson Breast Centre

1st Vice President
Dr Ng Chee Kwan
MBBS (S), FRCSEd, FRCS (Glasg)
- Urologist at CK Ng Urology & Minimally Invasive Surgery

2nd Vice President
Dr Tammy Chan Teng Mui
MBBS (S), GDOM (S), GDMH (S)
- Family Physician at T C Family Clinic

Honorary Secretary
Dr Ng Chew Lip
MBBS (S), MRCS (RCSEd, UK), MMed (ORL) (S)
- ENT Surgeon at Ng Teng Fong General Hospital

Honorary Assistant Secretary
Dr Benny Loo Kai Guo
MBBS (S), MMed (Paed) (S), MRCPCH
- Paediatrician at KK Women's & Children's Hospital

Honorary Treasurer
Dr Daniel Lee Hsien Chieh
MBBS (S), MPH (Harvard), GDFM (S)
- General Manager & Chief Operating Officer at Thomson Medical

Honorary Assistant Treasurer
Dr Lee Yee Mun
MMed (Surg), MPH, FRCSEd
- Urologist at Nexus Surgical

Council Member
Dr Anantham Devanand
MBBS (Lond), MRCP (UK)
- Specialist in Respiratory Medicine, Intensive Care Medicine, Internal Medicine at Singapore General Hospital

Council Member
Dr Chie Zhi Ying
MBBS (S), MPH (S), MMed (FM)
- Family Physician at National Healthcare Group Polyclinics

Council Member
Dr Lee Pheng Soon
MBBS (S), FFPM (Pharmacology) (RCP, UK)
- Family Physician at Family Doctors at 365

HIGHLIGHTS

From the Honorary Secretary

Report by Dr Ng Chew Lip

SMAsk distribution exercise

In appreciation of your continued support, the SMA Membership Committee is pleased to present SMA face mask (or SMAsks!) to Members in good standing (one mask each, no reservations and while stocks last).

You may collect your SMA face mask at our office (2985 Jalan Bukit Merah, #02-2C SMF Building, Singapore 159457) from Monday to Friday between 9 am and 6 pm **or** email us at membership@sma.org.sg if you would like to receive one in the mail. Masks are available in navy blue, grey and white.

We look forward to serving and representing you for many more years.

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.

SMA Wine Chapter renamed in honour of Dr NK Yong

The SMA Wine Chapter has been renamed the SMA NK Yong Wine Chapter in honour of SMA Past President, the late Dr Yong Nen Khiong who passed away in March 2021.

Dr Yong was our longest serving President and was elected President of the SMA for the following terms: 1980–1981, 1982–1985, and 1987–1989. Dr Yong was conferred the SMA Honorary Membership in 2002. He and his team successfully performed the first open-heart surgery in Singapore in 1965.

Dr Yong began his foray into wines in late 1982, and was recognised worldwide as an authority on the subject as well as for his most impressive wine collection. He wrote a weekly wine column for *The Business Times* for 30 years.

We wish to record our appreciation to his wife, Mrs Melina Yong, for giving us permission to rename the Wine Chapter after Dr Yong. We believe this renaming combines the two great passions of the late Dr Yong – medicine and wine. ◆

63rd SMA Council 2022-2023

Council Member
Dr Lim Kheng Choon
MD (S), FCFR (UK), MMed (Diag Rad)
- Radiologist at Singapore General Hospital

Council Member
Adj A/Prof Tan Tze Lee
MBChB (Edin), MRCP (UK), FRCS (Edin)
- President of the College of Family Physicians Singapore
- Family Physician in The Edinburgh Clinic

Council Member
Dr Ivan Low Jinrong
MBBS (S)
- Doctor at HQ Medical Corps, Singapore Armed Forces

Council Member
Dr Tan Zhenwen Tina
MD (S), MRCPsych (UK), FAMS
- Psychiatrist at Better Life Psychological Medicine Clinic

Council Member
Dr Low Tchern Kuang Lambert
MBBS (S), MRCPsych (UK), Dip Acup (S)
- Psychiatrist at Institute of Mental Health

Council Member
Dr Toh Choon Lai
MBBS (S), MMed (Surg), FRCSEd
- Orthopaedic Surgeon at Orthopaedic Associates

Council Member
Dr Raj Kumar Menon
MBBS (S), MMed (Surg), FRCSEd
- Trauma and Vascular Surgeon at National University Hospital

Council Member
Dr Wong Chiang Yin
MBBS (S), MMed (Public Health), FAMS
- Executive Director & Group Chief Executive Officer at Thomson Medical

Council Member
Adj Prof Tan Sze Wee
MBBS (S)
- Assistant Chief Executive, Enterprise at Agency for Science, Technology and Research (A*STAR)

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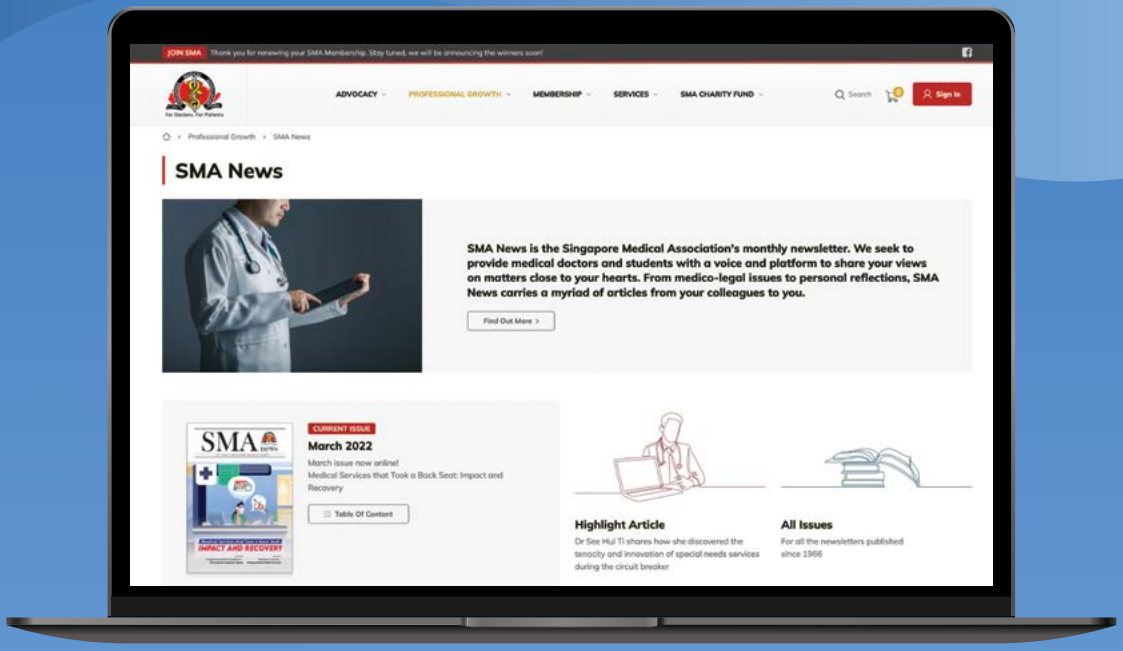

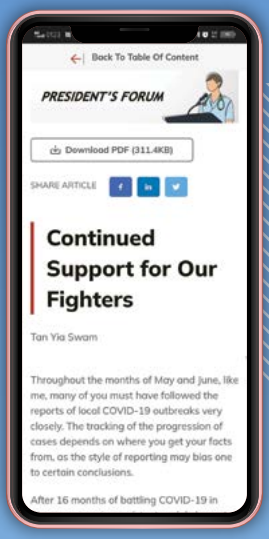

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SMA Charity Fund Welcomes

Two New Directors

Text by Ronnie Cheok, Assistant Manager, SMA Charity Fund

The SMA Charity Fund (SMACF) is pleased to welcome two new Directors to the Board. At the same time, we bid a fond farewell to our two outgoing Directors.

Our first new Board Member is Dr Ng Chew Lip, who is no stranger to SMACF, having been part of the team which conducted a survey on medical students' living expenses during his days as a medical student. This survey helped immensely in guiding our decision on the quantum of the SMA Medical Students' Assistance Fund bursary. Dr Ng is also currently serving on the SMA Council as the Honorary Secretary, and is a head and neck surgery consultant at Ng Teng Fong General Hospital.

The second new Board Member is Dr Chie Zhi Ying, who is a familiar face in SMA where she currently serves as a Council member and Deputy Editor of *SMA News*. Dr Chie describes herself as a young and enthusiastic doctor, with a strong interest in the field of healthcare education, and a passion for writing about healthcare issues as well as championing patient-centred care. Dr Chie is currently Deputy Head of Woodlands Polyclinic, an appointment she has held since 2021 concurrently as a family physician there.

We look forward to a fruitful working relationship with our two new Board Members as we push ahead relentlessly in support of Tomorrow's Doctors Today! ◆

Visit https://smacf.org.sg/ or scan to find out more about SMACF

The new Board of Directors is as follows:

Dr Chong Yeh Woei, Chairperson

Dr Ng Chew Lip

Mr TK Udairam

Mr Colin Lim

Mr Alex Koh

Dr Lim Kheng Choon

Dr Chie Zhi Ying

Dr Noorul Fatha As'art

Ms Koh Lin-Net

Dr Roland Xu

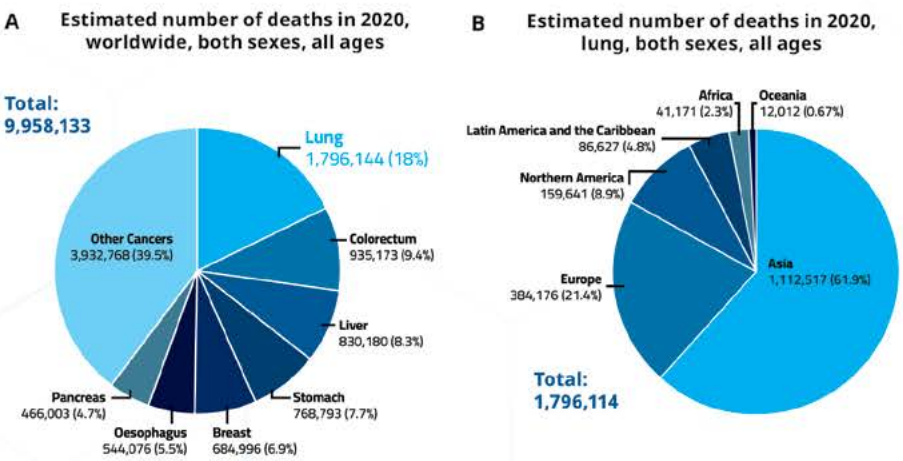
SMACF would like to place on record its deepest appreciation to outgoing Board Members Adj Prof Tan Sze Wee and Dr Wong Chiang Yin for their immense contributions to SMACF since its inception. We would also like to take this opportunity to wish them all the very best in their future endeavours, and we look forward to their continued support of our cause.

Lung cancer in Asia – targeting *EGFR* gene mutations

Dr Aaron Tan
Senior Resident Physician,
Division of Medical Oncology,
National Cancer Centre Singapore, Singapore

In the last two decades, the therapeutic landscape for lung cancer has undergone a significant paradigm shift, transitioning from conventional cytotoxic regimens to precision-based approaches involving targeted therapies for specific tumour genotypes and, more recently, immunotherapeutic approaches harnessing the body's immune system. This has been a much-needed step forward, given that lung cancer is the second most diagnosed and deadliest cancer worldwide. In 2020, it was responsible for almost 1.8 million deaths and accounted for 18% of all cancer-related deaths (**Figure 1**).[1,2]

Figure 1. Estimated number of deaths in 2020: lung cancer (both sexes, all ages), (A) by proportion of all cancers, and (B) by geographic region.[2]



In Singapore, lung cancer is the third most frequently diagnosed cancer in males and females, with the incidence slightly higher in males (13.7% vs. 7.7%). During 2015–2019, it was the leading cause of cancer-related death in males (3,997 deaths) and the third most common in females (2,008 deaths).[3,4]

Traditionally, lung cancers have been classified into non-small-cell lung cancer (NSCLC), which account for 80–85% of cases, and small cell lung cancer. NSCLC further consists predominantly of adenocarcinoma and squamous cell carcinoma histologies.[5] The majority of patients present with locally advanced or metastatic disease. Although cigarette smoking is still the most common aetiologic factor in the development of lung cancer,[6] a significant proportion (approximately 25%) of lung cancers are not smoking related.[7] With an improved understanding of lung cancer biology and tumour genetic profiling, this has led to the discovery of an expanding list of oncogenic driver gene alterations, including gene mutations and rearrangements, which are responsible for driving tumour growth and spread.[8] Importantly, this has resulted in the development of many effective targeted therapies which inhibit these driver gene alterations.[8] Building on this molecular platform will continue to facilitate more advanced personalised treatment approaches in the future.[9-12]

Epidermal growth factor receptor (EGFR; also known as ERBB1) is a member of the ERBB family of tyrosine kinase receptors, and is a transmembrane glycoprotein. The EGFR glycoprotein structure contains an extracellular ligand-binding domain and an intracellular tyrosine kinase domain that mediates the actions of multiple ligands including EGF, transforming growth factor (TGF)-a, heparin-binding EGF-like growth factor and amphiregulin.[13,14] Thus, constitutive activation of the EGFR protein, which may occur following gene mutations in cancer, results in activation of these downstream signalling pathways and promotes cellular proliferation.[13]

Somatic oncogenic driver mutations in the *EGFR* gene were first identified in NSCLC patients in 2004.[15] Most *EGFR* mutations arising in NSCLC patients occur in gene sequences coding for the tyrosine kinase domain (exons 18–21) of the receptor, with the most common mutations occurring in exons 19 (in-frame deletions) and 21 (L858R point mutations).[13] Interestingly, there is significant geographical diversity in the prevalence of *EGFR* mutations, with much higher prevalence in Asian (approximately 40–60%) compared with Western (10–20%) NSCLC populations.[16] In Singapore, the prevalence of *EGFR* mutations in advanced lung adenocarcinoma may even be as high as 61%.[16,17] A higher prevalence of *EGFR* mutations is also found in non-smokers compared with past or current smokers, females compared with males, and patients with adenocarcinoma compared with non-adenocarcinoma histology.[18] Indeed, it was the clinic-opathologic phenotype of predominantly female never-smokers of Asian origin with lung adenocarcinoma, in which the presence of activating *EGFR* mutations sensitive to EGFR inhibition with targeted therapy was originally established.[19]

Targeting of the EGFR tyrosine kinase domain has led to the development of specific EGFR tyrosine kinase inhibitors (TKIs) over the last 20 years. Several generations of EGFR TKIs have been developed, predominantly for the common *EGFR* exon 19 deletion and exon 21 L858R mutations. First-generation TKIs (gefitinib and erlotinib) are competitive inhibitors at the EGFR intracellular tyrosine kinase domain.[13,14] Large phase 3 clinical trials of patients with advanced or metastatic *EGFR* mutation-positive NSCLC initially demonstrated that these first-generation EGFR TKIs had superior response rates and progression-free survival (PFS) compared to chemotherapy.[20] Second-generation EGFR TKIs (afatinib and dacomitinib), which are irreversible inhibitors of the EGFR intracellular tyrosine kinase domain, subsequently also showed significant efficacy in randomised clinical trials compared with first-generation EGFR TKIs.[20,21]

Despite their initial efficacy, patients treated with first- or second-generation EGFR TKIs will inevitably experience disease progression at a median of around 12 months due to acquired drug resistance.[23,24] Molecular analysis of tumours resistant to first- and second-generation EGFR TKIs, has shown that an exon 20 T790M mutation in the *EGFR* gene is the most common cause of acquired resistance, arising in around 50% of tumours.[23,24] Osimertinib, a third-generation EGFR TKI with high selectivity for both the *EGFR* T790M mutation and sensitising *EGFR* mutations, was originally approved for the treatment of T790M-positive resistance.[9,25] More recently however, in a phase 3 clinical trial, osimertinib also demonstrated superior PFS and overall survival (OS) as first-line therapy in advanced or metastatic *EGFR* mutation-positive NSCLC compared to first-generation EGFR TKIs.[26,27] Notably though, in the Asian subgroup, osimertinib significantly improved PFS, but OS appeared comparable to first-generation EGFR TKIs (OS data remain immature).[26-28] In common with earlier generation TKIs, the development of acquired resistance to osimertinib is still frequently encountered, although the molecular mechanisms involved may be more heterogeneous.[24,29]

Taken together, the survival benefits with upfront EGFR TKI therapy for patients with advanced *EGFR* mutation-positive NSCLC are now well established. Locally, for example, in an analysis of over 6,000 Singaporean patients with lung cancer (92% with NSCLC) over a 10-year period (January 2004 to December 2013), TKI use was significantly associated with improved OS.[30] EGFR TKIs are now standard-of-care as first-line therapy, as recognised by international guidelines,[9,31-33] with molecular testing for the presence of *EGFR* mutations also part of routine clinical practice. Nevertheless, there remains some debate over the optimal choice of EGFR TKI. Pan-Asian adapted Clinical Practice Guidelines for the management of patients with metastatic NSCLC recommend EGFR TKIs for standard-of-care first-line treatment of Asian patients with *EGFR*-mutated NSCLC, with first-, second- and third-generation EGFR TKIs all potential options.[9] Recent European Society of Medical Oncology (ESMO) expert consensus recommendations on the management of *EGFR* mutation-positive NSCLC, indicate osimertinib as the preferred option for first-line treatment.[32] In addition, combinations of first-generation EGFR TKI with chemotherapy[34,35] or anti-angiogenic therapy[36,37] have demonstrated efficacy in large phase 2 and 3 trials – and are also potential upfront treatment options. Ultimately however, practical considerations in determining the optimal first-line treatment for patients include patient fitness, co-morbidities, drug toxicity profiles, burden of disease, sites of metastases and treatment costs.[38,39]

As EGFR TKIs also block the EGFR-regulated pathways in the skin and gastrointestinal tract, drug-related toxicities, such as diarrhoea, acneiform skin rash, mucositis, and paronychia are common. Clinicians may manage these with supportive medications, dose reductions where required or, occasionally, discontinuing treatment and switching to an alternative therapy. Other important, but less common, adverse events include liver toxicity and interstitial lung disease.[20,40]

Whilst *EGFR* exon 19 deletions and exon 21 L858R mutations are most common, there are other *EGFR* mutations which may also be treated with targeted therapies.[8] For example, *EGFR* exon 20 insertion mutations occur in approximately 2% of all NSCLCs, and comprise up to 12% of *EGFR*-mutated NSCLCs.[41,42] They are associated with poor response to the aforementioned EGFR TKIs.[41,42] However, novel targeted therapies, including a bispecific antibody targeting *EGFR* and *MET* (amivantamab) and an EGFR TKI (mobocertinib), have recently demonstrated promising efficacy in phase 2 trials.[41,42] These have led to early regulatory approvals in the US,[43,44] albeit not yet in Singapore. Lastly, afatinib has shown efficacy against other uncommon *EGFR* mutations, such as G719X, S768I and L861Q – and is often considered in patients harbouring these mutations.[45]

Importantly for local patients, the Ministry of Health has recently recommended changes to the coverage for outpatient cancer drug treatments by the nation's basic health insurance, Medishield Life, to ensure patient access to clinically proven and cost-effective treatments.[46,47] These changes include the subsidisation of a broader range of cancer drug treatments and extending Medication Assistance Fund subsidies to more Singaporeans.[46] Several EGFR TKIs and chemotherapy treatments have been included in the approved list of cancer drug treatments, ensuring that *EGFR* mutation-positive advanced NSCLC patients in Singapore have access to cost-effective care.[47]

References

1. Sung H, et al. CA Cancer J Clin 2021;71(3):209-49. **2.** International Agency for Research on Cancer, 2022; Available from https://gco.iarc.fr/today/online-analysis-pie?v=2020&mode=cancer&mode_population=-continents&population=900&populations=900&key=total&sex=0&cancer=39&type=1&statistic=5&prevalence=0&population_group=0&ages_group%5B%5D=0&ages_group%5B%5D=17&nb_items=7&group_cancer=1&include_nmsc=1&include_nmsc_other=1&half_pie=0&donut=0. Accessed 2 May 2022. **3.** National Registry of Diseases Office. Available from: https://www.nrdo.gov.sg/. Accessed 2 May 2022. **4.** Ang YLE, et al. J Thorac Oncol 2021; 16(6):906-11. **5.** American Cancer Society. Types of Lung Cancer. Available at: https://www.cancer.org/cancer/lung-cancer/about/what-is.html#:~:text=About%2080%25%20to%2085%25%20of,(outlook)%20are%20often%20similar. Accessed 25 May 2022. **6.** Bade BC, Dela Cruz CS. Clin Chest Med 2020; 41(1):1-24. **7.** Sun S, et al. Nat Rev Cancer 2007; 7(10):778-90. **8.** Tan AC, Tan DSW. J Clin Onco. 2022; 40(6):611-25. **9.** Wu YL, et al. Ann Oncol 2019;30(2):171-210. **10.** Park K, et al. Ann Oncol 2020; 31(2):191-201. **11.** Molina JR, et al. Mayo Clin Proc 2008;83(5):584-94. **12.** Peters S, et al. Ann Onco. 2012; 23 Suppl 7:vii56-64. **13.** Bethune Gm et al. J Thorac Dis 2010; 2(1):48-51. **14.** Ranson M. Br J Cancer 2004; 90(12):2250-5. **15.** Lynch TJ, et al. N Engl J Med 2004; 350(21):2129-39. **16.** Tan DS, et al. J Clin Oncol 2016;34(1):91-101. **17.** Tan AC, et al. Lung Cancer 2020;139:207-15. **18.** Zhang Y-L, et al. Oncotarget 2016; 7(48):78985-93. **19.** Mok TS, et al. N Engl J Med 2009; 361(10):947-57. **20.** Hsu W-H, et al. Ann Oncol 2018; 29(suppl_1):i3-9. **21.** Park K, et al. Lancet Oncol 2016; 17(5):577-89. **22.** Wu YL, et al. Lancet Oncol 2017; 18(11):1454-66. **23.** Sequist LV, et al. Sci Transl Med 2011; 3(75):75ra26. **24.** Nagano T, et al. Cells 2018; 7(11):212. **25.** Takeda M, Nakagawa K. Int J Mol Sci 2019; 20(1):146. **26.** Soria JC, et al. N Engl J Med 2018; 378(2):113-25. **27.** Ramalingam SS, et al. N Engl J Med 2020; 382:41-50. **28.** Cho BC, et al. J Thorac Oncol 2019; 14(1):99-106. **29.** Leonetti A, et al. Br J Cancer 2019; 121(9):725-37. **30.** Toh CK, et al. Ann Acad Med Singap 2017; 46(9):333-8. **31.** NCCN Guidelines for Non-Small Cell Lung Cancer. Version 3.2022. Available at: www.nccn.org. Accessed 25 May, 2022. **32.** Passaro A, et al. Ann Oncol 2022 Feb 14;S0923-7534(22)00112-0. doi: 10.1016/j.annonc.2022.02.00. Online ahead of print. **33.** Bironzo P, Di Maio MA. J Thorac Dis 2018 May; 10(Suppl 13): S1556–S1563. **34.** Noronha V, et al. J Clin Oncol 2020; 38(2):124-36. **35.** Hosomi Y, et al. J Clin Oncol 2020; 38(2):115-23. **36.** Saito H, et al. Lancet Oncol 2019; 20(5):625-35. **37.** Nakagawa K, et al. Lancet Oncol 2019; 20(12):1655-69. **38.** Aziz MIA, et al. J Med Econ 2020; 23(11):1330-9. **39.** Tan AC, et al. Expert Rev Anticancer Ther 2019; 19(6):431-5. **40.** Zhou J-Y, et al. Expert Opin Drug Saf 2020; 19(5):589-99. **41.** Park K, et al. J Clin Oncol 2021;39(30):3391-402. **42.** Zhou C, et al. JAMA Oncol 2021; 7(12):e214761. **43.** US FDA. Press release. Available at: https://www.fda.gov/drugs/resources-information-approved-drugs/fda-grants-accelerated-approval-amivantamab-vmjw-metastatic-non-small-cell-lung-cancer. Accessed 1 June, 2022. **44.** US FDA. Press release. https://www.fda.gov/drugs/resources-information-approved-drugs/fda-grants-accelerated-approval-mobocertinib-metastatic-non-small-cell-lung-cancer-egfr-exon-20. Accessed 1 June, 2022. **45.** Yang JC, Sequist LV, Geater SL, et al. Clinical activity of afatinib in patients with advanced non-small-cell lung cancer harbouring uncommon EGFR mutations: a combined post-hoc analysis of LUX-Lung 2, LUX-Lung 3, and LUX-Lung 6. Lancet Oncol 2015; 16(7):830-8. **46.** MOH | MediShield Life Review. Available from https://www.moh.gov.sg/home/our-healthcare-system/medishield-life/what-is-medishield-life/medishield-life-review. Accessed 30 March 2022. **47.** MOH | Cancer Drug List. Available from https://www.moh.gov.sg/home/our-healthcare-system/medishield-life/what-is-medishield-life/what-medishield-life-benefits/cancer-drug-list. Accessed 30 March 2022.

Congratulations to Our Winners!

As SMA continues to rally for important issues that affect the medical profession and bring them to the attention of relevant authorities, we thank our Members for your continuous support of our Association and work. These efforts would not have been possible without you!

We are pleased to announce the 20 winners* of the SMA membership renewal lucky draw.

Abdul Bashir Bin Abdul Kadir

Bay Ee Lin Sharon

Chan Kay Boon Kevin

Chan Mei Li Mary

Ann Cheong Yan Yan

Damodaran Ajith

Dinesh Nair

Goh Kok Hean Christopher

Goh Kye Hock Robin

Goh Ziying

Ho Liam Pock

Hwang Ern Huei Joel

Kam Li Shan Grace

Kwa Xian Wen Charlene

Lai Shieh Mei

Marie Bernadette Lim Xin Yi

Ng Li Shia

Rachel Ong Rei Chi

Teo Eng Kiong

Wong Zeng Hao Joel

**These Members will be contacted separately with details on how to claim their S$100 eCapitaVouchers.*

Text by Dr Suraya Zainul Abidin

"By the way Doc, I follow you on TikTok!" a patient cheerfully mentions as she leaves my consultation room after seeing me for the first time. It is a pleasant ending to an otherwise routine consultation, but it puts a smile on both our faces and instantly elevates our connection.

Social media has seen an exponential rise in the number of active users over the past ten years. More than half of the world (58.4% or 4.6 billion people) are now on social media and spend an average time of two hours and 27 minutes daily on their devices accessing various digital platforms. Facebook leads the way as the most popular social media platform with close to three billion active users, followed by other popular apps such as YouTube, Instagram and TikTok.

Globally, healthcare providers are quickly learning to use social media to connect with their patients, to share information (and combat misinformation), and to stay connected with colleagues worldwide.

My social media journey started during my maternity leave at the height of the COVID-19 pandemic in July 2020. With nowhere to go and a newborn in my arms, I spent some time exploring TikTok which I had thought was "for the youngsters". But these social media platforms are so intelligent that they can discern what content appeals to you, even if you might not consciously realise it yourself. My "FYP" or "For You Page" was filled with videos of various healthcare professionals, with narratives of their work lives, myth-busters, surgical videos, and of course some dance challenges too. Most of the content was light-hearted and easy to digest, presented with catchy music.

Looking at the viewership and comments on these videos made me realise the huge appetite for medically related information from the patient perspective. There is so much that goes on behind the scenes that remains a mystery to our patients: "What goes on in the OT? How is my surgery done? What do the implants look like?" And so began my foray into making TikTok videos – initially with some videos of the surgical instruments I used regularly in the OT and then some snippets of commonly performed orthopaedic procedures.

Information is empowering. The more the patient knows and understands about their condition or the procedure they might be going for, the more involved the patient feels in their care. Most of my consultations last about 15 to 20 minutes. It is hardly enough time to establish rapport, create a connection, explain a medical condition in depth, and check in with patients about their understanding and concerns.

Social media has given me the opportunity to connect with my patients outside of that short time in the clinic. They get to see what I do on a day-to-day basis and get a glimpse into the "behind the scenes" of the OT – something that is a huge source of anxiety for patients going for surgery.

For me, social media has been a useful tool, but there is a careful balance to tread: abiding by the Personal Data Protection Act is a concern, as is maintaining a professional image of both the profession and the medical institution. I view the use of social media as an alternative way of connecting with my patients, complementing my consultations and interactions with them, and helping my patients to understand more about their care.

Dr Suraya is a consultant orthopaedic surgeon at Singapore General Hospital. She has a subspecialty interest in musculoskeletal oncology, and passionately believes in uplifting young women and advocating for women in surgery. She graduated from Imperial College in 2008 and is a mother of four.

Advancing Women in Cardiology

Paving the Way for Gender Diversity

Text by Assistant Prof Low Ting Ting

I remember vividly my interview for the local medical school, National University of Singapore, in the year 2000. In a large formal room, three serious-looking male professors stared down at one wide-eyed young female of 19 years old. Among the gruelling questions about my capabilities and strength of my character – the last question came down to this, "How are you going to handle your family and medical career when you marry and have kids?"

Before and now

Gender bias was a subtle undercurrent upon entering medical school. It was a common assumption that if you are female, you will likely quit or back down on professional advancement when motherhood comes along. I was certain that the male candidates did not get asked such questions. For female candidates, a smart answer to this question could be the tie-breaker. My answer then was, "I will marry the right kind of man for a husband."

More than two decades on, the medical school no longer has a quota for enrolling female students. Thank goodness! More women are topping off the Dean's list, graduating as specialists, attaining professorship titles and leading in academia or research. With good luck and in good faith, I am so glad to have become a full-fledged cardiologist, mother of three boys, and wife to a loving and supportive husband all at once.

Male predominance in cardiology

Women continue to be a minority in cardiology training. Despite women making up about 50% of medical school students currently, women cardiologists make up a sombre 14% of all cardiologists among the active members of the Singapore Cardiac Society. Historically, cardiology has been a male-dominated field, with the proportion of female consultants being one of the lowest across all medical specialties.

Cardiology is a competitive specialty with demanding training requisites. The core cardiology curriculum requires competencies in numerous invasive skills, such as performing coronary angiography, cardiac catheterisation, pacing, structural intervention, transoesophageal echocardiogram, and honing the ability to interpret multiple cardiac imaging modalities from ultrasound and CT, to nuclear scans and MRI. The need for long training hours and radiation exposure for procedures means that a career in cardiology requires some personal sacrifice, regardless of gender. For women, however, the sacrifice may be greater due to traditional gender roles at home.

Surveys have revealed that female trainees consider stable hours and family friendliness as important factors in deciding their future career.[1] There is a clear disparity between the requirements of cardiology training post and the most common priorities laid out by female doctors in choosing their future specialty. There is also a tendency for women to view pregnancy as a career threat, especially with the need to put skills training on hold during pregnancy or months of maternity leave. Additionally, women are more likely to take time off due to childcare responsibilities and are more likely to have spouses who also work full-time.

Growing women in cardiology through social media

The risks of not having more women in cardiovascular specialties include a less diverse set of experiences and opinions to make consequential clinical and scientific decisions. If gender inequality is to be addressed, perceptions of cardiology need to change so that women feel that they are equally able to have a successful career as a cardiologist. Female role models are clearly important to demonstrate that this is possible. All senior cardiologists have a responsibility to encourage junior doctors who show potential to consider a career in cardiology, whether they are male or female.

In the current era, the rise of social media has influenced how female physicians can communicate and foster connections globally. Virtual platforms, such as Twitter, Facebook, Instagram and WhatsApp, are becoming avenues for female cardiologists to unite for greater representation of gender issues and advocacy efforts. Another important example of these efforts is the hashtag activism used to bridge the gap in gender issues. This social media activism can be used to promote a culture shift within the field of cardiology, creating a more inclusive, respectful work environment.

Social media's ease of accessibility and its ability to reach one's intended audience in the blink of an eye, makes it a remarkable conduit of social influence. This will allow gender representation and positive role-modelling more freely. Hopefully, continued social media conversations on gender narratives also help create allies in men, as men can actively express their support for growth of women in real time.

Raising others

The challenges faced by women and mothers in interventional cardiology are alive and abundant. In the end, I learnt that I too, could thrive as well as my male counterparts. I am grateful for the seniors (male and female) who encouraged and supported me in training, particularly those who are not only devoid of gender bias but actually revelled in my growth and success. It is hoped that a new social media initiative to grow a "Women in Cardiology" network, with like-minded female cardiologists, can uplift and raise other women for the glass ceiling break. ◆

Reference

1. Douglas PS, Rzeszut AK, Merz CNB, et al. Career Preferences and Perceptions of Cardiology Among US Internal Medicine Trainees: Factors Influencing Cardiology Career Choice. JAMA Cardiol 2018 1;3(8):682-691

Asst Prof Low is a senior consultant cardiologist at the National University Heart Centre, Singapore. She is also on the Singapore Cardiac Society Council 2021-2022. You can connect with her on Twitter @drttinglow.

Figure from CJC Open 2021 3S130-S136DOI: (10.1016/j.cjco.2021.08.009)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Medicine and the Law

Of Deaths and the Crown

Unpacking Our Coronial System

Text by Eric Tin and Dr Alex Cheng Wei Ray

Eric is a senior partner and co-head of the Disputes & Specialist Practice of Donaldson & Burkinshaw LLP. He specialises in medical defence and healthcare law matters, and is an external prosecuting counsel for several statutory boards. Prior to private practice since 2008, he was with the Singapore Legal Service and has held appointments including District Judge, Coroner, and Deputy Public Prosecutor.

Dr Alex is a family physician who works as a locum medical doctor during his free time. Aside from his medical qualifications, he also holds the degrees of Bachelor of Laws, Master of Laws, Master of Professional Accounting, Master of Business of Administration and Juris Doctor. He is an incoming practice trainee lawyer of Donaldson and Burkinshaw LLP.

This is the first article of a three-part series. In this, the authors will focus on historical developments of the coronial process and provide an overview of the process. Part 2 will focus on the parties involved in a Coroner's Inquiry and Part 3 will focus on the various phases of a Coroner's Inquiry.

"The only two certainties in life are death and taxes" is an oft-heard saying,[a] but how many of us know that there used to be a job overseeing both of these human certainties in medieval England?

In the beginning

In that era, the office bearers of the *custos placitorum coronae*, meaning "keeper of the pleas of the Crown" in Latin, not only had to travel to various localities to investigate causes of sudden and unnatural deaths, they also collected taxes for the Crown as part of the job scope.[b] That was the origin of the term "coroner", derived from the French *couronne* and Latin *corona*, meaning "crown", for whom the office bearer served.

Fast forward a millennium, the coroner as we know it today has shed the tax collector role but continues with the critical function of investigating causes of sudden and unnatural death. Singapore's first coroner Andrew Farquhar was appointed in 1827,[1,c] after Sir Stamford Raffles founded Singapore in 1819. For a period of time in early colonial Singapore, medical doctors were appointed as coroners.[1] When the Criminal Procedure Code 1900 was introduced in the Straits Settlement Crown colony of Singapore,[2] it imported a coronial system that was quasi-criminal and fault-finding in nature.[3] This meant that in addition to determining the circumstances under which the deceased came by his/her death, the coroner also had to inquire whether any person was criminally liable. These provisions remained when Singapore achieved independence in 1965 as a sovereign republic, and were eventually repealed with the enactment of the Coroners Act (CA) in 2011.

A unique feature of the Coroner's Court is that proceedings are known as Inquiries or Inquests. This is because these proceedings are undertaken in an inquisitorial setting with the coroner taking a lead role in investigating the cause of death and proactively asking questions of the witnesses and parties before the Court. This is in contrast with the proceedings in the civil and criminal courts which follow the adversarial process, whereby opposing parties take on a "combative" stance and decide the evidence to adduce before the court to prove their respective case, while the judge is akin to a passive impartial referee who determines the outcome in terms of liability (and quantum if applicable in civil courts) based on the merits of each party's case.

From fault-finding to fact-finding

The CA which came into effect on 2 January 2011 changed the nature of our coronial system from fault-finding to that of fact-finding,[4] in line with the approach taken in the UK, New Zealand, Australia and Hong Kong. A key justification for the change is that under the Singapore Constitution, the public prosecutor has the discretionary power to control the proceedings for any offence,[5] including the power to decide whether a person should be prosecuted. It is therefore unnecessary for the coroner to come to any conclusion on criminal responsibility. Instead, the coroner's primary role is to focus on fact-finding for the cause of death. The public prosecutor may still take cognisance of the coroner's findings, if relevant in deciding whether to prosecute any person associated with the death.[6] The inquisitorial nature of coronial proceedings remains unchanged under the CA.

The following provisions of the CA set out the statutory framework of the coronial process. As can be seen, the crux of the state coroner's role is to focus on ascertaining the facts and circumstances leading to a death, instead of apportioning blame.

i. Section 27(1) of the CA provides that the purpose of an Inquiry into the death of any person is to inquire into the cause of and circumstances connected with the death. To this end, a Coroner's Inquiry must be directed at ascertaining, insofar as these matters may be ascertained, (a) the identity of the deceased, and (b) how, when and where the deceased came by his death. All these concern findings of fact.

ii. Section 27(2) of the CA provides that a coroner at an Inquiry shall not frame a finding in such a way as to determine any question of criminal, civil or disciplinary liability. For example, it is not for the coroner to make any finding that any person is guilty of a criminal offence, liable for medical negligence, and/or guilty of professional misconduct or disreputable conduct. Nonetheless, if the coroner is of the view that there were lapses in medical care which caused or contributed to a patient's death, he/she is not precluded from making findings where liability may be inferred from the facts determined or recommendations made, short of framing these findings as one of criminal, civil and professional disciplinary liability.

iii. Section 45 of the CA provides that no oral testimony or conditioned statement admitted in the course of an Inquiry shall be admissible in any subsequent judicial or disciplinary proceedings as evidence of any fact stated therein, other than proceedings for an offence under the CA or an offence of giving or fabricating false evidence under any written law.

What is "death"?

Notably, although death is a prerequisite for the CA to be invoked, the term "death" is nowhere defined in the CA. It should come as no surprise that due to the advancement in medical technology, the definition of death has changed over the years. In the past, the common law approach has been to leave the determination of death to the medical experts, with the only criteria being cardiac death. However, developments in medical technology which now allow for a patient to be kept alive by machines while the heart is removed (for example, in a transplant) have stretched the definition of cardiac death beyond its limits.

By way of a statutory amendment in 1998, the Interpretation Act (IA) stipulates that a person is regarded to have died on the occurrence of either (a) an irreversible cessation of circulation of blood and respiration in the body of the person, or (b) a total and irreversible cessation of all functions of the brain of the person.[7]

The concept of cardiac death and brain death have been referred to in criminal[8] and tort[9] cases respectively, albeit not engaging the IA definitions. The enquiry as to whether there has been irreversible cessation of circulation of blood and respiration is to be determined according to the standards of medical practice.[7] On the other hand, total and irreversible cessation of all functions of the brain is determined based on the following statutory criteria:[7]

i. The person's condition is undoubtedly due to irremediable structural brain damage, and the diagnosis of any disorder which can lead to the irreversible cessation of all functions of the person's brain must have been fully established;

ii. That there is no suspicion that the person's condition is due to depressant drugs, hypothermia or metabolic and endocrine factors; and

iii. That the person's cessation of spontaneous respiration is not caused by neuromuscular blocking agents or other drugs.

The Interpretation (Determination and Certification of Death) Regulations[10] further stipulate the main criteria for determining brain death as follows:

i. The pupils are fixed and non-reactive to strong light;

ii. No corneal reflex;

iii. No spontaneous motor response to painful stimulus, excluding spinal reflexes;

iv. No oculocephalic reflex;

v. No gag reflex or reflex response to tracheobronchial stimulation;

vi. No vestibulo-ocular response on instillation of 50 cubic centimetres of ice-cold water into each ear; and

vii. No spontaneous respiration even with carbon dioxide tension at 50 millimetres or more of mercury.

The brain death criteria may also be supplemented by other tests contained in the First Schedule to these Regulations, namely, (i) cerebral angiography to confirm that there is no intracranial blood flow, or (ii) radionuclide scan to confirm no intracranial perfusion.

Death reporting obligation

According to the State Courts' Annual Report 2020,[11] the total Coroner's Court caseload was 4,125 cases in 2019 and 4,219 cases in 2020. The Annual Report, however, does not provide a breakdown of the types of coroner's cases. In a written answer given by Minister for Law Mr K Shanmugan to Member of Parliament Ms Sylvia Lim's parliamentary question,[12] it was noted that in 2019 and 2020, there were 1,961 investigations into unnatural deaths which were reported to the State Coroner. Out of these 1,961 investigations, a Coroner's Inquiry was not held for 1,413 (72%) investigations. Besides these generic numbers, there is no publicly available statistical information on medical-related death cases which underwent the coronial process. Such deaths that end up as coroner's cases are wide-ranging. Broadly speaking, cases directly or indirectly related to the use of anti-coagulants; iatrogenic deaths resulting from surgical repairs, perforations and punctures; deaths relating directly or indirectly to septicaemia; deaths resulting from adverse drug reactions; and deaths relating directly or indirectly to peritonitis may be made the subject of Coroner's Inquiries.[d]

A medical or healthcare practitioner who (i) attended to a person professionally at or immediately before the person's death or during the person's last illness, or (ii) is present at or after the death of a person, and who has reasonable grounds to suspect that the deceased had undergone or received any medical treatment or care that may have caused or contributed to the death of the deceased, shall report the death to a police officer in the prescribed form within 24 hours upon being aware of that death.[4] Failure to do so without reasonable excuse is an offence.

The reporting of such medical-related deaths will trigger police investigations. However, if the coroner is satisfied that the death was due to natural causes, he/she may decide not to hold an Inquiry.[4] This can happen, for example, where the post-mortem examination report by the forensic pathologist concluded that there was a natural cause for the death even though the patient died following the medical treatment, and the patient's next-of-kin have no issues or concerns that require ventilation in an Inquiry. ◆

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References

1. YK Lee. A short account of the coroner in early Singapore (1819-1869). Singapore Med J 2005; 46(10):576-91.

2. Criminal Procedure Code 1900, Ordinance No. XXI of 1900.

3. Criminal Procedure Code (Cap 68, 1985 Rev Ed).

4. Coroners Act (Cap 63A, 2012 Rev Ed).

5. Constitution of the Republic of Singapore (2020 Rev Ed).

6. Singapore Parliamentary Debates, Official Report (19 May 2010) vol 87 (Assoc. Prof. Ho Peng Kee, Member of Parliament). Available at: https://bit.ly/3wtaJKp.

7. Interpretation (Amendment) Act 1998. Available at: https://bit.ly/3N9o8Ny.

8. Wang Wenfeng v Public Prosecutor [2012] 4 SLR 590.

9. Goh Guan Sin (by her litigation representative Chiam Yu Zhu) v Yeo Tseng Tsai and another [2021] 3 SLR 364.

10. Interpretation Act – Interpretation (Determination and Certification of Death) Regulations (Cap 1, Section 2A 2000 Rev Ed). Available at: https://bit.ly/3CXtK8Q.

11. Singapore Courts. One Judiciary Annual Report 2020. Available at: https://bit.ly/3CZtN3O. Accessed 24 July 2021.

12. Ministry of Law. Written Answer by Minister for Law, Mr K Shanmugam, to Parliamentary Question on Investigating Into Deaths Due To Unnatural or Unknown Causes in Last Two Years. Available at: https://bit.ly/3JrcnQ8. Accessed 24 July 2021.

Notes

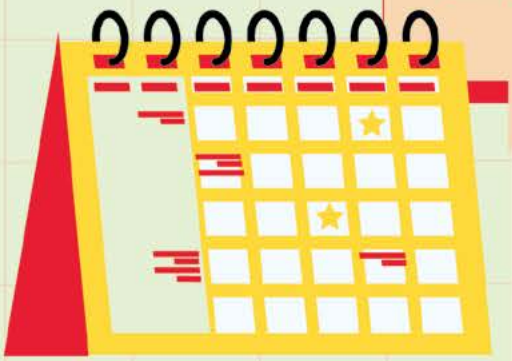
a. This quote has sometimes been attributed to Mark Twain but online resources have commented that Benjamin Franklin is more likely to have been the source.

b. For a quick history lesson, the speech "The Coronial Jurisdiction: Lessons for Living" by The Honourable Wayne Martin AC Chief Justice of Western Australia at the 2016 Asia Pacific Coroners Society Conference, Perth is illuminating. It is available at https://bit.ly/37FYRdz, last accessed 19 July 2021.

c. Andrew Farquhar was likely a son of Singapore's First Resident William Farquhar: https://bit.ly/3L1BMQM.

d. These categories and some of the case studies were discussed in the book Coroner's Practice in Medical Cases.

It's been Two Years...



As Singapore slowly resumes some form of normality with the relaxation of COVID-19 restrictions, we take this chance to invite our Editorial Board members to reminisce about what they have missed in the last two years. Whether they are things one could not do or had to do, regular activities that now seem foreign, or lessons gleaned from the pandemic, here are what they have to share.

Text by Dr Tina Tan, Editor

It's been two years since I've celebrated the Lunar New Year (LNY) with my relatives the way my family usually does. It's been two years since I've seen some of them. Some of my cousins have had children whom I've not met yet, while the seniors have aged and some have even passed on. Then there are those who don't seem to have changed at all. At least, on the outside.

None of us have truly remained unchanged or unscathed since the COVID-19 pandemic first struck Singapore on the eve of LNY in 2020. For us doctors and healthcare workers, the initial fear and unease grew into grim determination. Like soldiers, we kissed our families goodbye at our doorsteps, donned our personal protective equipment and braved the medical front lines. I haven't touched my passport or worn jewellery in two years. Our juniors were seconded and we seniors stepped down. We said farewell to our colleagues as workplace separation kicked in and Zoom meetings became the norm. At one point, we even endured two months of circuit breaker (CB) which, oddly enough, now seems like a distant memory.

With time, and as the battle stretched on with no end in sight, we grew weary and tired. There was fatigue in the trenches and in the back rooms, where decisions were constantly being made with ever-changing information. I've never felt more drained than when I received circular after circular from our benevolent authorities during one particularly unrelenting period of Phase whatever-it-was post-CB. I'm fairly certain there are others who have had it worse, and I do not mean to downplay all they've endured. It's been rough for all of us.

It's been two years since I've seen the lower half of my patients' faces. Some of them have never seen the lower half of mine. I know my patients and my colleagues by their eyes, never before realising how expressive those windows to our souls can be. Catching glimpses of their noses, lips and cheeks feels strange, though liberating. I've learnt to ignore the very subtle muffling of voices that comes with wearing masks. There are children who have been born into a world where face masks, hand sanitisers, Zoom and ART testing are a routine part of life.

It's been two years. And I am cautiously optimistic for Singapore. As we climb back to our feet and clear the battlefield for life to resume, I know it won't be the same for many of us. The past two years will have left its mark on us all, in good and bad ways. I, for one, confess that I'm a little anxious for the day when we all get to lower our masks, and discard the anonymity and physical protection against viruses that came with them. What will I see on the other side of the person who now faces me, maskless?

I invite all of us to allow the catharsis of our inner beings, for that internal battlefield to be cleansed. Write about the past two years; it's okay to talk. We all need to heal. Write about your fears. We're here to listen.

Text by A/Prof Daniel Fung, Editorial Advisor

It's been two years, and I have since lost a parent, given away a daughter and gained two grandsons. The pandemic may have turned our lives around and changed the way we interact as humans, but it has not stopped life from going on. In fact, it allowed us to experience life in different ways.

Before the pandemic, healthcare was digitalising but at a snail's pace. It took us ten years to get an established telepsychiatry programme up when the technology to do this well was available in the early years of the new millennium. Singapore's telemedicine guidelines were developed in 2015 and yet it was only in 2020 that full-scale implementation was kick-started by the COVID-19 pandemic. The arguments of poor rapport and lack of therapeutic alliance were perhaps, in retrospect, just excuses for not taking an innovative leap. Studies published widely during the pandemic suggested that telehealth was just as effective, if not more so, as face-to-face consults in some situations. We have also been able to move to a paperless mode much quicker than we had planned.

To me, the pandemic demonstrated two key aspects of life. The first is that life must go on, and even as some industries have suffered, others have grown tremendously. A small company called Zoom became so ubiquitous, it's hard to imagine work without it. The second is that when push comes to shove, innovations can be readily taken up. Timing and opportunity are in fact the hidden possibilities of dangers and risks. Finally, I would like to see how this digitalising of healthcare translates into smart healthcare, something we have envisioned but not fully experienced. Smart means that the data is organised in such a way that it can be used to inform and predict health outcomes. The ability to now use the digitalised systems to provide smart solutions will determine how healthcare can truly be democratised for the population.

Text by Dr Chie Zhi Ying, Deputy Editor

It's been two years since COVID emerged
Lives shaken, lost and transformed
How time flies and how all became a blur
What transpired in between these years I wasn't sure

As I trudged along to the consult room
There was a lingering sense of dread and gloom
The never-ending queue of patients looms
At the peak of the pandemic we fervently hope it will all end soon

Gowned up in thick PPE – gloves, visors, caps and N95 masks
There lie ahead the many daunting tasks
To see our patients efficiently is a real must
The numbers we see will make you aghast

The air was swelteringly hot and still
Sticky and sweaty are all I feel
Seeing stars and dots in my vision field
Turning thirsty and hungry before I knew

Gone were the days of fun and parties
The streets laid quiet, deserted and empty
The many circulars became tedious and lengthy
Eating alone and working from home became trendy

Crowds rushed to stock up the everyday commodities
Virtual lessons and meetings became a reality
We bade goodbye to all social activities
And travelling overseas simply became a luxury

After countless swabs and vaccinations
And braving waves of viral mutations
Infections and recovery prevailed across the nation
Transiting to endemic state came to fruition

With measures relaxed and life returning to norm
Be proud we have weathered this dragged-out storm
Eagerly marching to work with uniforms neatly donned
Let us now look forward to a new life of joy and pomp ◆

A Life in Medicine Fully Worthwhile

Interview with Emeritus Prof Cheah Jin Seng

Interview by Dr Toh Han Chong, Editorial Advisor
Photos by Prof Cheah Jin Seng

Emeritus Prof Cheah Jin Seng graduated MBBS (Honours) from the National University of Singapore, and he is also a Fellow of the Royal Australasian College of Physicians and Fellow of the Edinburgh College of Physicians. He is also an Emeritus Consultant with the National University Hospital. Aside from his academic achievements and many contributions to the field of endocrinology, Prof Cheah is also well known and respected for being an avid collector of stamps, postcards and Peranakan porcelain, which he has donated generously to various museums.

Dr Toh Han Chong – THC: Thank you very much for granting us this interview. To start off, why did you choose to study medicine?

Prof Cheah Jin Seng – CJS: I was born in Penang in 1938 and attended Penang Free School. That makes me about 83 years old, 83 years and three months to be exact. After I graduated from Penang Free School, I came down to Singapore for medical education. In my time, if you wanted to study medicine, it was based on an entrance examination. I can't remember exactly what questions they asked, but if you did well in your entrance examination, you would be accepted for medicine. My time was the last year in which there was this entrance examination. There was nobody in my family who was a doctor. Why and how we chose medicine, in our time, was simple: you take the entrance examination, and if you do well, they offer you a place in medicine.

THC: And let me guess, you topped the year right?

CJS: [*laughs*] They don't tell you whether you topped the year or not, just whether you are qualified to enter medicine. I did surprisingly graduate with honours in 1963; then there were only two other students that graduated with honours, Dr Chan Kong Thoe and Dr AC Jumeax. Honours were given to those who had scored distinctions in all their final-year subjects, which were medicine, surgery, and O&G. Some years later, the rules were changed to allow the awarding of honours to those who had done well in their course but had not obtained distinctions in all the final-year subjects.

It is perhaps worth recording that what I paid as tuition fees for the whole course in my time was less than what the present students pay in one year. So that was how I became a doctor. I won't pretend to say that I took up medicine because I wanted to save mankind. It was simply based on the results in the entrance examination.

THC: So who were your contemporaries in medical school? Were there people that our readers might also know?

CJS: Of course there were, like Dr Teoh Eng Soon for example. He was my classmate. And of course the great Prof Chia Boon Lock, who has passed away.

THC: Can you recollect what some of your fondest memories of medical school were?

CJS: People have asked me: what is the best time of a doctor's life? I told them that it is when you graduate; when you pass the MBBS and they say you are now a doctor, before you start work. Your elation as a doctor is completely punctured the day you start working.

THC: (*laughs*) Was it very tough starting life as a house officer?

CJS: In those days, yes, because back then, we were doing night calls every other night sometimes.

THC: Wow, really? That's tough. And your pay wasn't very good either even adjusting for inflation over the years.

CJS: When I first started work in 1963, my pay was $250 a month. Then at the end of the year, before I finished my housemanship, it was increased – if I remember correctly – to $650.

Starting out as a doctor

THC: If you were to give any advice to medical students about how to prepare to be a doctor or how to prepare for medical examinations, what would they be?

CJS: You'll never be prepared to be a doctor until you become a doctor. You don't know what doctoring is until you

graduate. For examinations, the reason I did well was that I knew how to prepare for them. I studied the past year's questions and I studied the examiners, including who was coming to be the external examiner. And so, during the examination, I would be able to tell the examiner what he/she wanted to hear, how to flatter them [*chuckles*].

THC: At that time when you were working as a house officer, was there any feeling that you knew what you were going to specialise in? Nowadays, young medical graduates have to start thinking about their specialties very early.

CJS: No, I didn't know at the time. Actually, I started my training in O&G, and I didn't particularly like it because there were too many night calls [*chortles*].

THC: I believe at that time KK Women's and Children's Hospital (KKH) basically had the most deliveries in the world – very busy! How can young graduates gear themselves up mentally and emotionally for the housemanship year and post-graduate year one?

CJS: It's simple. You just have to tell yourself that as a houseman, you are the youngest and lowest in the rank, in the whole hierarchy and in the department you are in. So you must be humble, and you must be prepared to work very hard and do lots of night calls.

THC: As you became a medical officer (MO), how was your workload while preparing for the Membership of the Royal Colleges of Physicians (MRCP) at the same time?

CJS: As a medical officer, you must continue to work long hours. It is mainly bull perseverance. And you must be humble. You must always ask for help, don't try to bluff your way through. In those days, the MRCP was quite simple and predictable, because you could predict what you would be asked. However, the challenge posed for its preparation was that the pass rate back then was less than 30%. Now it is higher – the students are better informed, and they are better prepared for the examinations. And of course they are smarter [*smiles*]. Every generation is always smarter than the last.

THC: You also completed an MD thesis, right?

CJS: Yes, on thyrotoxic periodic paralysis. I did it two or three years later, after I passed my Fellowship of the Royal Australasian College of Physicians.

Moving up the career ladder

THC: What led you to endocrinology instead of say, cardiology or respiratory medicine?

CJS: I really have no good answer to it. I suppose it was because at that time, not many people took up this specialty. That's why I decided that it was a good time to take it up.

THC: So when you were head of Medical Unit I (MU I), who were the other leaders of medicine at Singapore General Hospital (SGH) together with you?

CJS: John Tambyah was my contemporary. He was one year my senior. The late Profs Chia Boon Lock and Seah Cheng Siang as well, they were my teachers. I knew them well. I have great admiration for Prof Seah, because he is one of the few doctor-leaders who would admit when he doesn't know something, and he would ask for help. At that time, my office was quite near his, along the same corridor. So whenever there was anything that he wasn't sure of, he would ask us. That was his great humility.

In SGH then, your father (Dr Charles Toh) gave us the last lecture on cardiology before we graduated – on mitral stenosis.

THC: I feel one of the most rewarding things for academicians like you is that you have so many generations of young doctors who are very grateful to how you have trained them. It's the same with Prof Loong Si Chin for neurology.[a] That's one of the great traditions in medicine – teaching and mentoring.

CJS: I hope that's true. Prof Loong has a fantastic reputation as a neurologist.

Medical education in the present

THC: How do you think the medical curriculum could better gear medical students for their medical practice?

CJS: Now the students are much better educated. They know if you want to make money, you aim for this specialty or that specialty, like cardiology or oncology, and so on. But of course this will change with time. I'm excited about the huge advances in medicine, and many of the conditions that were incurable are nowadays treatable at least. But I'm somewhat worried that doctors today may be very technically inclined and savvy, but they may not be equally adept human doctors.

THC: I'm sure you've been on the selection committee for medical school at some point in your career. What are the qualities that you looked out for in a student who wants to enter medical school?

CJS: I always tell the students that I look for one simple quality: honesty. Honesty is the most important quality as a doctor. And that's what I learnt from my ex-chief Prof Gordon Arthur Ransome. He is also one of the few people who will admit

that he didn't know something when he really didn't know. Prof Ransome is quite different from Prof Seah in certain ways. I got to know Prof Seah very well especially towards the end of his career. Whenever I visited him in his office, I would ask for tea or water, but he would order a better drink [*chuckles*]. One reason why Prof Seah is a great icon of medicine is because he treated the students well. Also, whenever there were exchange and elective medical students who came to Singapore, he would look after them well, and he would entertain them and so on. He was a great student of Prof Ransome.

THC: There is the famous story about how Prof Seah would walk into a ward and say, "I can smell typhoid in the Bed 3 patient". That's also been said about you. How do you develop such clinical acumen?

CJS: That is by trial and error, and also you have to practise and practise. I worked with Prof Ransome. He would always tell us how to elicit and interpret even the most subtle clinical signs in medicine. And he always remained humble even as a great teacher.

THC: Are you concerned that technology is taking away the bedside skill of a clinician?

CJS: Of course. Nowadays the clinicians' clinical skill is not considered as important, that's why they don't pay much attention to it. You cannot go backwards in medicine. You cannot just get the students to do it. Now the priority of the students is different, you see. Their main aim is to make sure they pass their examinations as quickly as possible, and their higher examination also as quickly as possible.

THC: Do you also feel that one of the pressure points for young doctors is a sense of a shrinking opportunity to become a resident, and also for them, the present cost of living is so much higher, so there's a lot of pressure to try to generate a better income?

CJS: Yes, that is the unfortunate thing; young doctors nowadays do have to earn more money than before. They have to work harder and there is an inclination that they now more often look at which discipline to specialise in, so that they can make enough money rather than primarily look at how to be a better doctor.

Current issues in medicine

THC: What are your feelings about electronic health records? Even doctors in the US, young and old, feel that the electronic health records are sometimes not such an enabler of the clinical process, workflow and patient care.

CJS: Electronic health records will come sooner or later, so you may as well accept it and embrace it as part of your work. Not only must you embrace it completely, you must embrace it with your eyes open. Nowadays with the electronic health records, how do most of the younger doctors clerk cases? They often cut, copy and paste information from various sources. If the admitting doctor says, "this is the diagnosis, etc", they might follow blindly. In today's medicine, you end up being very savvy and consumed with your keyboard. I think the most harmful thing is that when one does copy-and-paste often, then the next doctor that comes along follows suit, and the third doctor also follows what the second doctor has written, so errors are more likely going to be accentuated without said doctors even realising that the errors are there.

THC: I remember when I was a young doctor doing ward rounds with you, you always had a characteristic sense of humour, and that was also something that Sir William Osler was known to have.

CJS: Of course. In medicine you must always have a sense of humour. When you are overworked, you must look at the light side, otherwise you get burnt out.

THC: Do you think we are under-doctored or over-doctored?

CJS: We are both over-doctored and under-doctored. Over-doctored in the sense that we have too many doctors overall, and you just want to get your work done without much thought to it. We are under-doctored in the sense that you don't allow the young HO or MO to spend enough time in clerking and assessing the patient. The complexity of medicine and computerisation of clinical work today has also added to the challenge and burden of care on the healthcare workers.

THC: That's interesting. How would you advise the leadership on change management or to tweak the medical school curriculum to rise to the challenges of the evolving landscape of practising medicine?

CJS: How you would change the medical curriculum is not dependent on the Dean or the medical school. It's thrust upon them, you see, because it depends on what the medical school regards as more important than others.

THC: I remember that when I interviewed Prof Chew Chin Hin, we talked about his time in Tan Tock Seng Hospital (TTSH) and the fight against tuberculosis, cholera and other then common infectious outbreaks. As a senior doctor, you've seen many pandemics and epidemic outbreaks. There was cholera in the 1960s, then there was HIV/AIDS when I was in London in the 1980s – which exacted a lot of fear for many in the UK and worldwide at the time – then SARS, and now COVID-19.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What are your thoughts on these waves of pandemics and epidemics?

CJS: New waves of viral outbreaks and pandemics will continue to come. The most frightening of the epidemics was SARS. The mortality was high. I was quite foolish at that time. I didn't realise that it was such a dangerous condition and I was not fearful and not as careful as I should have been. This present COVID-19 pandemic causes comparably lower mortality per infected population. If the present pandemic was like SARS, we might have lost many more doctors and healthcare workers.

THC: Besides Prof Ransome and Prof Seah, who are your other role models whom you looked up to?

CJS: I am an admirer of Paul Wood. I think there are too many to mention, but I should mention the late Dr Tow Siang Hwa. He was a most entertaining teacher in O&G.

THC: How was your experience as a medicine trainee in Australia, and was their healthcare system then different from ours?

CJS: They were definitely different when I was there as a trainee – a houseman there has to clerk only five cases a day, instead of 20 or 30 cases.

THC: Do you think a hospital administrator needs to be a doctor?

CJS: No, I don't think so. Because the role of the administrator or the CEO of a hospital is to administer the hospital, and not dwell on the details. He/she can pick up on the workings and culture of medicine separately. Nowadays a lot of the CEOs of hospitals are not doctors.

THC: Have you ever thought about going into private practice?

CJS: I have, many a time. The reason I didn't go into private practice was because I didn't have a family to support, and so I didn't feel the financial pressure as much. What I earned was enough.

Of stamps, Peranakan porcelain and peacocks

THC: Would you call collecting stamps and Peranakan porcelain a happy parallel of your medical life?

CJS: Outside medicine, my passion is collecting stamps and postal history (especially of the Japanese Occupation of Malaya). I also collected Peranakan porcelain. I have donated my best pieces to the Peranakan Museum of Singapore. I find that collecting helps distract you from your work, and you don't become stressed out. I specialise in the Japanese Occupation stamps, so I know that period much better than the other periods.

THC: Are there any books that have stayed with you or have influenced your life?

CJS: I would say that the biography that influenced my life is perhaps the biography of Wu Lien-teh, the famous plague fighter. He was from Penang Free School. The younger generation may not know, but Wu Lien-teh is the only Chinese person who has been nominated for the Nobel Prize in medicine. And he would have won it if he were not Chinese. He is, in my opinion, the greatest doctor of his generation.

THC: Many have told me: "Prof Cheah is a world leader in stamps, in vases, in bowls." Was that a hobby from childhood? How did you source for all these stamps and collectibles?

CJS: No, not from childhood. Soon after I become an MO, I got interested in collecting stamps and Peranakan porcelain. Most of the collection was done through auction. You could bid through postal bids.

I have also published six books on the picture postcards of Singapore, Malaya, Penang, Perak, Selangor and Johore. They are:

1. *Singapore: 500 Early Postcards*
2. *Malaya: 500 Early Postcards*
3. *Penang: 500 Early Postcards*
4. *Perak: 300 Early Postcards (Postcard Series)*
5. *Selangor: 300 Early Postcards*
6. *Johor: 300 Early Postcards*

THC: Which restaurant in Singapore would you go to for authentic Penang food?

CJS: Penang Place in Fusionopolis is quite good. The secret to good Penang char kway teow is that they put a lot of lard [*chortles*].

THC: Are you a durian lover? Are there any health benefits to durians?

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CJS: Yes, I enjoy durians, but there are a lot of dis-benefits [*laughs*].

THC: Do you go out often still, or do you stay mostly at home?

CJS: I try to go out at least twice a week. I like to go to the parks. The nearest one I go to is Labrador Park, because there are peacocks there that I like to see every now and then. It's so rare to see a peacock.

THC: Does the peacock respond when it sees you?

CJS: I won't dare to go that near it. They were reported to be quite aggressive. I read about a small child that was bitten by a local peacock.

THC: Prof Cheah, thank you for taking the time to share your life with *SMA News*. ◆

For the full interview, please visit https://bit.ly/5405-Interview.

Note

a. A/Prof Loong Si Chin has passed away on 15 May 2022, after this interview was conducted.

Legend

1. Prof Cheah receiving his Doctor of Medicine scroll from Prof BH Sheares

2. Prof Cheah in MBBS robe, 1963

3. Prof Cheah receiving Datoship from the Sultan of Selangor on 11 December 2013

4. Rare Peranakan spoon and its spoon rest, each showing the four immortals (c1900)

A Taste of Travelling

Work Trip to the US

Text and photos by Dr Reuben Soh

Pre-pandemic, our work schedules in public institutions were peppered with overseas conferences and teaching engagements. In addition, my family often travelled during the school holidays. These past two years of COVID-19 have certainly led to non-stop work, particularly since we had to cope with an immense backlog of elective surgeries from the initial circuit breaker period, as well as the periodic mandated cessation of elective surgeries.

A chance to head overseas

In mid-2021, I had the opportunity to visit a fellow spine surgeon in the US to familiarise myself with a new surgical navigation system. With the worldwide rollout of this system, Singapore would likely be the first country in Asia to obtain this technology. I was keen to learn the workflow and technique so that we could readily apply this to our patient population. With the Vaccinated Travel Lanes (VTL) that began in November 2021, I felt it would be an opportune time to proceed with the visit, as it would be a good platform to share ideas and find new surgical pearls by observing fellow spine surgeons in the US. Additionally, I felt a short break would be great to recharge mentally and physically. All this was made possible with VTL, without having to quarantine upon return to Singapore.

I had to do quite a fair bit of preparatory work for the VTL travel to the US. For starters, US travel for Singaporeans still required an Electronic System for Travel Authorization approval.[1] As I was going on a VTL return flight, there were a few critical details required:

1) Notarised vaccination certificate[2]
2) Pre-departure PCR testing[3]
3) Knowledge of the location of test centres in the US within 48 hours of departure (this can be tricky especially if travelling out of state)

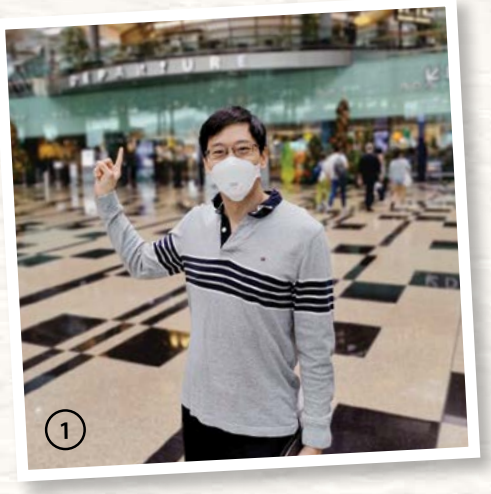
I had initially aimed to have my pre-departure PCR done on a Friday. However, the pent-up demand for travel had led to many clinics being booked solid.

My packing list included some N95 masks and ART kits. My trip would take me into New York (NY) with business meetings in New Jersey (NJ) and North Carolina (NC). The day of my departure came and having not travelled for around two years, it felt so surreal as the car rolled past the bougainvillea bushes and I glimpsed the control tower of Changi Airport.

Starting the trip proper

I travelled by Singapore Airlines (SIA) and much of the check-in process was already available on the SingaporeAir mobile app. I would just need to drop my bags and show my vaccination status and PCR results to the counter staff, which went quickly. Travelling one month into the start of VTLs, I suspect many teething problems were already ironed out, and I completed the check-in process within 20 minutes. Boarding was on time and as I entered the air bridge, I suddenly felt a little apprehensive – it was going to be a 17-hour flight and I would be sleeping and working with a mask on for most of the trip.

The cabin crew was cheerful as usual. One could almost see their smiles from behind their masks as they greeted boarding passengers. Upon reaching my seat, I found a COVID-19 care pack with two masks, a hand sanitiser and some disinfecting wipes. I proceeded to wipe down my seat and plugged in my personal headphones. Looking around, I could see that the flight was



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full, with many returning Americans as it was the Thanksgiving weekend. As a tip, those who like to read should bring your own reading materials as SIA no longer provides them on the flight. Passengers can also opt to download magazines via the SingaporeAir app.

The flight time passed quickly. I used the time to catch a movie, sleep, eat a little and update my slide decks for the two presentations that I would be doing in NJ and NC. Before long, I saw the outlines of NY. Landing in the John F Kennedy International Airport (JFK), the arrival procedures were straightforward and as it was an early morning flight, I was able to clear security within the hour. I noticed that all transportation in NY, including Uber and taxis, had a mask-on rule for passengers. These were certainly important rules to stick to if I wanted to stay COVID-19-free.

This being my first visit to NY, I had made a list of places to see. Times Square, Central Park and the Statue of Liberty, along with a few meals at popular haunts would certainly be all I could squeeze in. Reassuringly, many restaurants and department stores had notices requiring all patrons to don a mask and to also show vaccination certificates before granting entry. This certainly contributed to travel safety for the trip. Walking around the city, I estimated around 80% to 90% of New Yorkers kept their masks on and would only remove them during mealtimes.

Concluding the overseas drought

I completed my meetings in NJ the next day and flew to NC for a surgeon visit and research meeting. Landing at NC, I immediately noted that each US state had differing practices; mask-wearing was neither mandatory nor enforced in many of the establishments there. Many had signs encouraging mask-wearing but left it up to the individual's comfort.

I had a fruitful meeting in New Hanover Hospital, NC and observed four cases, noting how workflow could be improved in my own operating theatre. I came away with new thoughts and surgical pearls for anterior minimally invasive spine surgery.

My flight back from NC to La Guardia Airport in NY brought me to the tail end of my trip. After a quick shopping trip around the corner for some fresh bagels to bring home for my children, I was off to JFK. The SIA desk in JFK was busy. Many Americans were using SIA to transit to Thailand and Australia as the VTL would save them much travel time. With a mere hour to spare, I cleared airport security and waited patiently for boarding.

Concluding three locations within five days was tiring and I slept most of the fight back home. Upon reaching Singapore, all passengers were herded straight for a PCR test. The process was quick, and an hour after landing, I was on my way home in a taxi. My COVID-19 test results were released five hours post-testing. Phew, I was negative! During my absence, America had seen its first Omicron case and looking back, I was fortunate to have just missed the Omicron wave there. A supervised ART on days three and seven concluded my travel journey. I must say that the travel process was slightly stressful and certainly expensive given the testing requirements but overall, I found the trip refreshing and found myself recharged for a new year of challenges! ◆

2

Update: The process of VTL has been further simplified since my travels in December 2021. SIA now only requires passengers to be fully vaccinated for air travel out and into Singapore.[3]

References

1. Official ESTA Application Website, U.S. Customs and Border Protection. Available at: https://bit.ly/381Mx7J.

2. Notarise.sg. Available at: https://bit.ly/3EonhEC.

3. Singapore Airlines. Quarantine-free Travel to Singapore. Available at: https://bit.ly/3EoB3qI.

Legend

1. Exhilarated to be able to travel again!

2. Times Square, New York

3. A great day of surgery with Dr Alex Thomas of New Hanover Hospital, NC and Dr Wong Chung Chek, head of Spine Surgery, Sarawak General Hospital


3

Dr Soh is a senior consultant in the Department of Orthopaedic Surgery, Singapore General Hospital. He tries to juggle his passions in teaching, doing spine surgery as well as spending time with his wife and three daughters. An avid traveller, he has entertained himself during the pandemic with many long bike rides around Singapore.

• SALE/RENTAL/TAKEOVER •

Singapore Clinic Matters Services: Singapore's pioneer clinic brokers. We buy and sell medical practices & premises and also provide other related clinic services too. Yein – 9671 9602. View our full services & listings at https://singaporeclinicmatters.com.

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Clinic for sale. Tenanted. Royal Square. Floor with good foot traffic. 495 sq ft. Square layout with no pillars. Easy to re-configure & good for investment. Lock-in loan interest rate before it goes up. WhatsApp: 6256 8273.

District 10 GP clinic, long established with good patient numbers, prominent frontage, near MRT and bus stops, with full fixtures and furnishings, for takeover. Email enquiries to lohkun@yahoo.com or SMS 8201 2080 for confidential discussion.

• POSITION AVAILABLE/PARTNERSHIP •

Seeking Registered Paediatrician - International Medical Clinic (IMC), established over 24 years ago is seeking fully registered Paediatrician to join our Children's clinic! If interested, please send your interest with CV to hr@imc-healthcare.com. We would love to hear from you!

• MISCELLANEOUS •

VPL with 610 and 530 handpieces $3,000; Multi Color Led $500; Daeshin IDS R2PL $12,000. Other used equipment are available. All equipment comes with 3 months warranty (except wear and tear). Enquire or interested, please email: drbcng@gmail.com.

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More than 180 doctors have completed the **Graduate Diploma in Mental Health** since its launch in 2010. Feedback from past participants include how the course has enhanced their expertise to assess, identify and treat common mental health conditions and enabled them to provide more holistic care for their patients.

Government subsidy is available (subject to terms and conditions).

The next run of the course opens for registration from

28 March 2022 to 4 July 2022.

This one-year programme is jointly offered by the Institute of Mental Health and the Division of Graduate Medical Studies, National University of Singapore.

For more details, visit
https://www.imh.com.sg/Education/Medical-Education/Pages/GDMH.aspx
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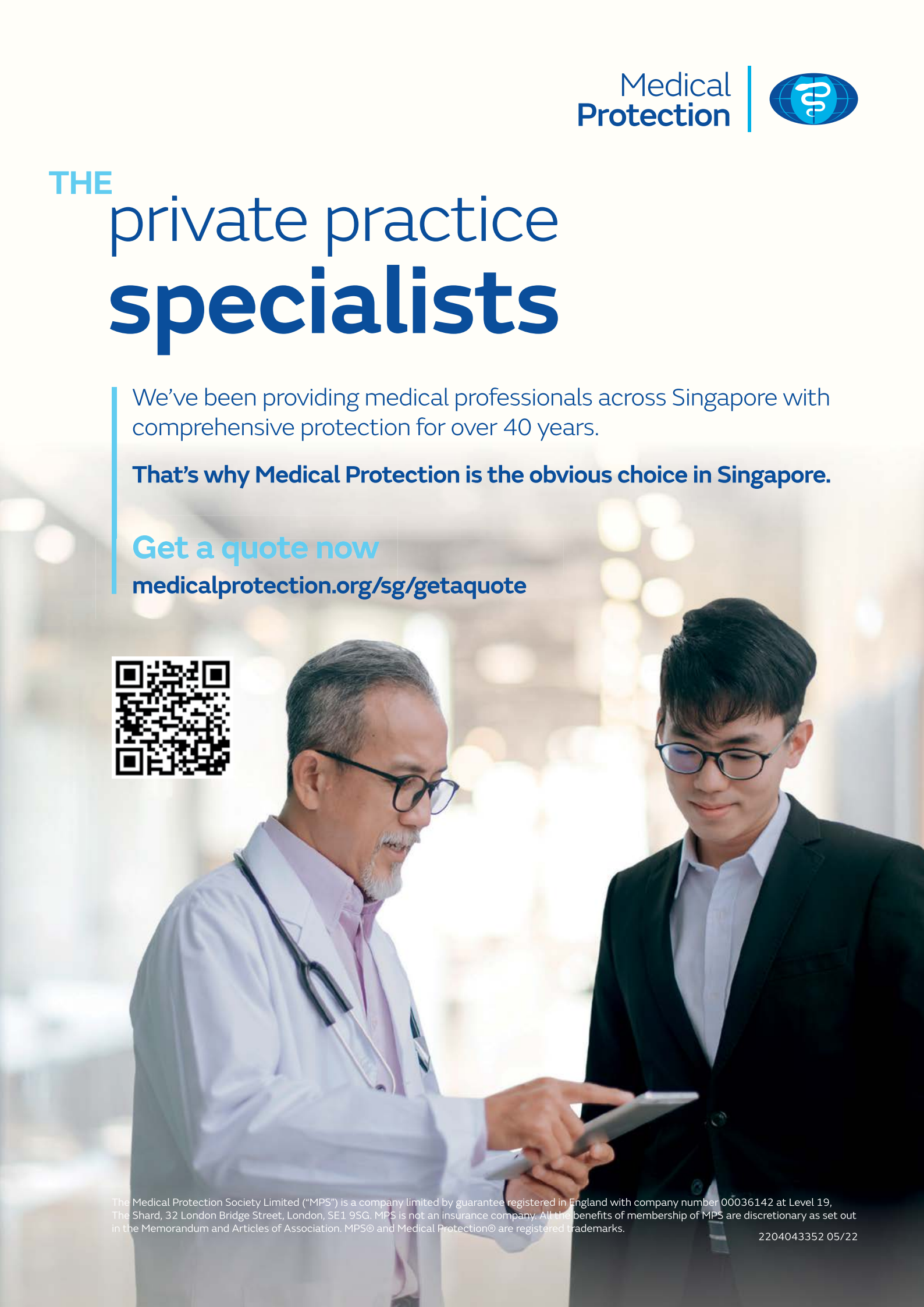

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