SMA news

For Doctors, For Patients

VOL. 56 NO. 2 | FEBRUARY 2024 | MCI (P) 066/12/2023

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The Editors' Musings

DR TINA TAN

Editor

Dr Tan's secret identity is that of a self-published author with four fantasy books, a children's book, and most recently, a vampire book. Conversely, she tells her readers that her secret identity is that she is a doctor. In truth, she has no idea how she juggles all of this, including her family life. Perhaps she has a clone somewhere who does all her "extra stuff", including managing the beast that is social media. If you want to find out what she is up to, check out @lindalingwrites on Instagram.

Once upon a time, a girl devoured books to cope with stress. She, as George RR Martin said, "lived a thousand lives through fiction". She tried her hand at writing but did not get anywhere, because she wanted to focus on her career. Then she became a psychiatrist and realised that being a reader and writer helped her understand her patients better. She had already lived a thousand lives, which let her see through her patients' eyes even more clearly. She picked up writing once again and found that her life experiences made her a better writer. By the time you read this, she will have published her sixth fiction book as a form of creative self-expression, in the hopes of touching someone else's life beyond the clinical confines of her consult room.

That girl is me.

It is a truth universally acknowledged, that art can help doctors be more empathetic and less likely to experience burnout.[1,2,3,4,5] Also, according to Oscar Wilde, imitation is the sincerest form of flattery, as you can tell by my blatant partial use of the famous opening line from the classic, *Pride and Prejudice*.

This issue is not meant to celebrate those who have achieved great things with their art (though we certainly laud those who have), but to celebrate those who use their art in their day-to-day practice, whether to cope with stress, to relieve a patient's suffering, or to simply connect better with another soul. Therefore, it is my sincerest hope that anyone who reads this issue will recognise that art is just as crucial to medicine as medicine is itself.

Finally, I would like to welcome Dr Yap Qi Rou to our Editorial Board. Dr Yap is a medical officer and can therefore provide on-the-ground perspectives and insights on issues relating to junior doctors. Welcome, Dr Yap.

References

1. *Jones DS. A Complete Medical Education Includes the Arts and Humanities. Virtual Mentor 2014; 16(8):636-41.*

2. *Marchalik D, Rodriguez A, Namath A, et al. The impact of non-medical reading on clinician burnout: a national survey of palliative care providers. Ann Palliat Med 2019; 8(4):428-35.*

3. *Engel T, Gowda D, Sandhu JS, Banerjee S. Art Interventions to Mitigate Burnout in Health Care Professionals: A Systematic Review. Perm J 2023; 27(2):184-94.*

4. *Glatter R. Can Art Heal Our Healers? Forbes [Internet]. 17 March 2019. Available at: https://bit.ly/49lMLBl.*

5. *Mangione S, Chakraborti C, Staltari G, et al. Medical Students' Exposure to the Humanities Correlates with Positive Personal Qualities and Reduced Burnout: A Multi-Institutional U.S. Survey. J Gen Intern Med 2018; 33(5):628-34.*

Dr Tan's published books

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, Dr Lim Ing Ruen, an ENT surgeon at Mount Elizabeth Hospital. Both believe in the power of food, travel, laughter and loyalty in forming strong family bonding.

This issue features doctors involved in the arts and highlights the complex interaction between medicine and art.

The art of the practice of medicine refers to how doctors interact with patients and their relatives. It is a complex interplay between the art of diagnosis, of communicating and of dispensing care. Diagnosis and treatment can be taught, but patients' responses vary, and the effective doctor is one who can establish a unique connection with the patient. Looking through the lens of art can influence the humanities of the practice of medicine. In this issue, we witness how parallel interests in theatre, illustration and calligraphy have sown the path for some of our colleagues. They have each cultivated their personal interests in different art forms, and become more introspective, empathetic and attentive in the practice of medicine.

I would also think of art as medicine. Art offers an outlet for the expression of emotions and engaging the disparate parts of our consciousness. The "Faculty of Medicine Shield Theatre" is an annual performance by the medical students, giving them a platform for artistic expression. Many of our colleagues are great dancers, talented musicians and prolific writers. Their creativity allows them to be recognised, discerned and heard beyond the field of medicine. Their works give them a narrative to pave the way for humane doctoring.

Not many know that Dr Wong Tien Hua volunteers on the National Arts Council (Singapore). In this issue, Dr Wong shares with readers his experience in promoting art. Far fewer are aware that our Editor, Dr Tina Tan, is a published author of a series of fantasy books. To all the fans of the world of fantasy, do visit Dr Tan's social media page! Happy reading to all, especially those who collect art, create art and enjoy art. Finally, I wish everyone a Happy Chinese New Year of the Dragon! ◆

Welcome On Board

Dr Yap Qi Rou is a medical officer rotating through the public healthcare sector. She is a medical alumnus of the NUS Yong Loo Lin School of Medicine. In her free time, she enjoys reading, writing, creating art and travelling.

Greetings to the readers of *SMA News* and fellow healthcare professionals, and thank you to the SMA Editorial Board for so warmly welcoming me onto the team.

With the shift in Singapore's healthcare towards preventative care and more initiatives to get the younger crowd to take charge of their health at an earlier age, I look forward to exploring the changing healthcare landscape with everyone. May everyone have a good year ahead and I hope to touch on topics that everyone can relate to! ◆

Two Worlds Collide: Medicine Meets Art

Text and photos by Dr Yew Tong Wei

I started learning Chinese calligraphy from my father at the age of seven, and naturally delved into Chinese ink painting and seal carving later. Since then, I have not stopped practising the arts, even as I studied and practise medicine.

Chinese art fascinates me with its depth. It is revealing of the artist's character and inner qualities, and it connects with the profound philosophy of how we interact with the world and the people around us. A great piece of traditional Chinese art is often silently powerful, spatially soothing and able to evoke long-lasting, reflective emotions. The ability to create artworks with such qualities lies upon the mastery of brush techniques first and foremost, but beyond that, the effective "use of self" by the artist, and the display of empathy, connection, and understanding of humanity and our environment.

This is no different from the practice of medicine. In our formative years, much energy is channelled towards learning the science of medicine. There is just so much to read and remember, and then we learn to apply the knowledge to clinical circumstances. As we become more well versed with all the professional knowledge and skills and grow to become more experienced clinicians, we realise that many a time, the most impactful moments occur when we combine these skills and knowledge with our own personality traits, belief systems, life experiences and cultural heritage – the "use of self" as a doctor, and being an authentic "person" for our patients.

I consider myself very fortunate to be able to wander into the two best worlds – medicine and art – with experiences in each field nourishing the other. As an endocrinologist, I work with people living with long-term conditions such as diabetes, and their stories serve as valuable inspirations for me in creating my artworks that form meaningful connections beyond words with viewers. On the other hand, the sensitivity and observances that I learn from the practice of art enhances the way that I interact, communicate and empathise with my patients.

Living in Singapore where East meets West also provides me with unique paradigms and opportunities that allow me to innovate and rejuvenate these traditional Chinese art forms, by infusing my artworks with refreshing modern touches while maintaining elegance and classical eminence. These pursuits outside of medicine and attempts to marry legacy and modernity when creating my artworks are fun, invigorating and helpful for my well-being.

Legend

1. Chinese calligraphy written in a more modern arrangement. It reads: "I dance freely to the tune of the breeze under the bright moon, O what night is this night?" (30 x 30 cm, 2019)

2. "Auspicious Blossom" (138 x 34.5 cm, 2022) depicts auspicious Nanyang objects including orchids, Peranakan tiles, kamcheng *(Peranakan ware) and tangerines, using the Chinese "gongbi" (careful realist) style. The image of this painting has been used to produce lacquer wine-cum-watch box souvenirs*

Dr Yew straddles the line between science and art – an endocrinologist on one hand, and an artist in Chinese calligraphy, painting and seal carving on the other. His artworks have been displayed internationally and featured in commercial collaborations. His solo exhibition was held successfully in 2019, supported by the National Arts Council.

In the medical profession, "the art of medicine" is a term often used to remind physicians that medicine is rooted in both art and science. This issue's Feature, we invite three doctors who have gone beyond the duality of art and science, to embrace and practise the arts alongside medicine. They share below their journeys in the arts scene and how these experiences enrich their medical practice.

Text and photos by Dr Katelyn Chiu

It all started with one-woman shows in my bedroom.

I was at the tender age of 9 and took on all the roles needed to put on a theatre production: script writing, acting, directing, prop-making, costume designing, and even marketing. I sold tickets to my family to come and watch me star in a play, presented by yours truly. Recognising my interests, my parents then encouraged me to audition for the School of the Arts, Singapore's (SOTA) theatre studies, and I got accepted! I studied theatre in SOTA for four years and learnt all aspects of theatre production while honing my craftsmanship as a thespian.

Fast forward to 2024, I am currently a Postgraduate Year 3 doctor, midway through my first year of internal medicine residency. I recall being asked during my medical school interview how studying the arts might bode well for me in a career as a doctor. I believe that studying theatre has shaped me to be a more empathetic individual and challenged me to strengthen my communication skills. As theatre performers, we learn how to immerse ourselves in make-believe worlds and bring characters to life. These characters often have different values, perspectives, motivations and ambitions from our own. We spend an immense amount of time on character building beyond what the script offers, in order to meaningfully embody these characters. We read between the lines, and we listen.

Although I am still in the infancy of my medical career, I believe that the key to being an excellent physician is to be a great listener. To listen, not simply to our patients' physical ailments, but to all that is unspoken and perhaps unseen – including their body language and tone of voice – and being astute with regard to their family dynamics. Theatre has cultivated in me a keen sensitivity towards people of all backgrounds. It has taught me to see my patients beyond their list of medical issues, as people with families, communities and much more. It is such a privilege to be privy to our patient's lives.

I do hope that more healthcare workers will consider dabbling in the arts – whether as a performer or a patron. Art can help us to keep our hearts tender.

Legend

1. Katelyn as an amateur dancer, performing at University Town with the Medicine Dance Crew

2. Katelyn grinning widely in front of the awards clinched by NUS Medicine Year 4 Playhouse production "My Grandmothers Love Letters", which she directed

Dr Chiu is a first-year internal medicine resident at National University Health Systems. She takes pride in being a jack of all trades and dabbles in many hobbies that she is not particularly good at. On weekends, you can find Katelyn playing the piano or rehearsing monologues in her bedroom.

Text and photos by Dr Kevin Loy

In my upper secondary school days, I often found myself bored with the equations and algebra being taught on the blackboard during A Maths lessons. I started doodling on my exercise book pages with my pencil to relieve my boredom. I drew anything that amused myself and passed them on to my classmates, mostly to their great approval and humour. That was how I first began to draw. Thank goodness I still managed to pass my A Maths examinations at the end of the year.

Influences

Over the years, I continued to have an interest in doodling and in art. I loved reading comics such as *Peanuts*, *Calvin and Hobbs*, *The Wizard of Id*, Archie comics, as well as Marvel and DC comics such as *Spider-Man*, the *X-Men* and *Batman*. I loved graphic novels too; for example, Frank Miller's *The Dark Knight Returns* series and Stan Sakai's *Usagi Yojimbo*. All of these have influenced my drawing style to some degree.

Analog to digital

As time passed, I found myself in the National University of Singapore's medical school at the age of 18. Time was a premium at this point but I still managed to find some to express myself through art. I gradually shifted from predominantly pen, paper and watercolour mediums to a purely digital medium. I purchased my first Wacom digitiser tablet shortly after graduating medical school some 30 years ago. I remember it being a tiny one but it was good enough for me to draw directly into the computer, which saved a lot of time. Nowadays, I draw mostly on my iPad Pro with an Apple Pencil.

Laughter, the best medicine

As a doctor of many years now, I have experienced the gamut of maladies and illnesses from patients who have walked through the door of my GP clinic. And even though medical science has come a long way since the days of my graduation, there is still no cure for many of the diseases we face. Many times, I have had to face the patient squarely and, with a slight shrug of the shoulders, tell them: "Sorry, I can alleviate the symptoms, but there is no cure to the underlying problem."

In the face of intractable disease, on top of the prescribing of medicine and surgery, I feel it is just as important to feed the soul and the spirit. This is where I truly feel that laughter and humour are good medicine. It says in the Good Book that "A merry heart makes good medicine, but a broken spirit drieth the bones." If we cannot relieve the body, perhaps we can go a little way in relieving the hearts and souls of our patients. Indeed, a merry heart does make good medicine. Who knows, perhaps that is the chief use of art in this world that we live in?

Dr Loy has been a GP for many years now. He doodles whenever he can in his free time. He dreams of retiring from GP life and becoming a full-time doodler.

Legend

1. Gundams are my first love

2. Excuse me, did you see a man wearing a tall hat pass this way?

3. An illustration accompanying the March 2017 President's Forum in SMA News

We are certain that there are many more art practitioners among healthcare workers. *SMA News* hopes to continue seeking out these practitioners to share their life stories with our readers, so that more may experience the benefits of the arts. If you are keen to share your story, please reach out to us at news@sma.org.sg.

Medicine and Art

Text and photo by Dr Ng Chee Kwan

In my bedroom, there is a painting of roses which was given to me by a family friend as a housewarming gift. In vivid brushstrokes, the artist painted pink and peach roses, contrasting nicely with a background in various shades of blue. I was told by my family friend, a retired nurse, that its artist was none other than Dr Earl Lu.

Dr Lu was a prominent general surgeon, art collector and painter. He had a passion for painting roses, and he often presented his paintings for sale at fundraising exhibitions.[1] He also generously gave paintings to nurses as tokens of appreciation,[2] which was how my family friend acquired some of his artworks. I did not have the opportunity to meet Dr Lu, nor do I have a talent for drawing or painting. However, I do know of other doctors who like to paint as a hobby and interestingly, many of them are surgeons too.

I did not take much interest in art in my younger years, preferring the sciences. Like most doctors of my generation, I did triple sciences (Biology, Chemistry and Physics) for both my O- and A-Levels. The subjects that we covered in medical school were understandably entirely science based. The only exposure that I had to the arts then was through the National University of Singapore (NUS) Playhouse – an annual competition in which NUS medical students across all five years of study competed to see who could put up the best (and funniest) play.

I have since realised that medicine is both a science and an art. The scientific aspect of medicine is based on medical knowledge and research, but the art of medicine encompasses how doctors diagnose, explore treatment options, communicate and promote healing.

Nowadays, I prefer going to the art museum rather than the science museum; there is something about the arts that uplifts the soul, and reflecting on a good piece of art helps me to understand the various aspects of the human condition. Even though I am not capable of producing a beautiful artwork like Dr Lu, I can certainly still benefit by appreciating art.

Engaging in art may aid in personal development. This need not be confined to the visual arts, but extends also to music, acting and literature. Incorporating the arts in medical education may help produce more well-rounded doctors. The Association of American Medical Colleges states that "[t]he integration of the arts and humanities into medicine and medical education may be essential to educating a physician workforce that can effectively contribute to optimal health care outcomes for patients and communities".[3]

This issue of *SMA News* places focus on doctors and the arts, and I hope it inspires you to begin your own journey into the arts. ◆

References

1. Li S. Coming up roses. The Straits Times. 30 April 1992, Community, page 12.

2. Yeo KS. Roses are red... and pink, purple and blue. The Straits Times. 30 July 1989, Nurses' Day, page 10.

3. Howley L, Gaufberg E, King B. The Fundamental Role of the Arts and Humanities in Medical Education. Washington, DC: Association of American Medical Colleges, 2020.

Dr Ng is a urologist in private practice and current President of the SMA. He has two teenage sons whom he hopes will grow much taller than him. He has probably collected too many watches for his own good.

Singapore Medical Association

For Doctors, For Patients

SMA Annual Dinner 2024

Sheraton Towers Singapore
39 Scotts Rd, Singapore 228230
Grand Ballroom Level Two

19 May 2024 (Sunday)

Guest of Honour
Professor Kenneth Mak
Director-General of Health

Cocktails will be served from 6.15 pm
All guests to be seated by 7.15 pm

Tickets
SMA Members: $2,188 nett per table
Non-SMA Members: $2,488 nett per table

For enquiries and booking,
email Mr Seth Chen at dinner@sma.org.sg.

HIGHLIGHTS

From the Honorary Secretary

Report by Clinical Asst Prof Benny Loo Kai Guo

Dr Loo is a paediatrician in public service with special interest in sport and exercise medicine. He serves to see the smiles on every child and athlete, and he looks forward to the company of his wife and children at the end of every day.

AST Ethics course

84 doctors participated in the Advanced Specialist Training (AST) Ethics course that took place from 11 to 13 January 2024. This marked the first run of the course in 2024, with three more planned for the year.

The AST Ethics course, organised by the SMA Centre for Medical Ethics and Professionalism (CMEP), is a mandatory exit certification requirement for all specialist trainees and residents. The course is specifically designed for doctors soon completing their specialist training, and embarking on the next stage of their professional growth to becoming consultants.

The purpose of the course is to prepare such doctors to lead clinical teams with independent medical and ethical decision-making skills. This is important as many consultants will go on to assume leadership positions in professional and clinical governance, as well as in medical education.

Running since 2006, the AST Ethics course curriculum has been adjusted over the years to cater to the changing healthcare environment. Feedback surveys further help the faculty refine the course with input received from course attendees. To date, we have conducted 77 runs of this course, benefiting 5,312 participants.

More details on the AST Ethics course can be found at the following link: https://www.smacmep.org.sg/ethicscourse.

If you are an exiting specialist trainee who needs to take this course, please contact us at astethics@sma.org.sg.

Lifelong learning is an integral part of a doctor's professional development. For more information on SMA CMEP and its programmes, you can visit the SMA CMEP website at https://www.smacmep.org.sg.

MME CME webinars by SMA

The Singapore Medical Council's requirement for mandatory medical ethics (MME) core points as part of continuing medical education (CME) and renewal of practising certificates (PCs) came into effect on 1 January 2024. Doctors renewing two-year PCs are now required to accumulate five such MME CME points as part of the minimum requirements.

SMA CMEP has since made more than ten MME CME points available for free to all SMA Members in good standing. These are available on SMA's online learning platforms, obtainable via journal articles and recorded lectures. 898 points have already been obtained by participants in January 2024. In addition, SMA CMEP is running a series of bimonthly MME CME webinars which are also complimentary for Members.

The first run of this series with Dr Lee Pheng Soon lecturing on the topic of "Medical Professionalism" was successfully conducted on 3 February with an audience of 856 practitioners. We thank everyone for your patience and understanding during the course of registration. SMA would also like to welcome the new Members who have joined us during this period, and we look forward to serving our Membership.

The next instalment on 6 April 2024 will feature Ms Kuah Boon Theng who will be speaking on the topic of "Informed Consent". To find out more about our MME CME programmes, visit https://bit.ly/SMA-MME. ◆

Helping women live the fullest life after breast cancer

By Dr Rose Fok Wai Yee, National Cancer Centre Singapore

Dr. Rose Fok is a family physician with special interest in oncology and practises at the National Cancer Centre Singapore, caring for survivors of breast and gynaecological cancers. She also runs a risk management clinic to optimise surveillance for patients with pathogenic genetic variants. She also practises at SingHealth Polyclinics (SHP), where she cares for patients with complex primary care conditions and also co-developed a community palliative care programme.

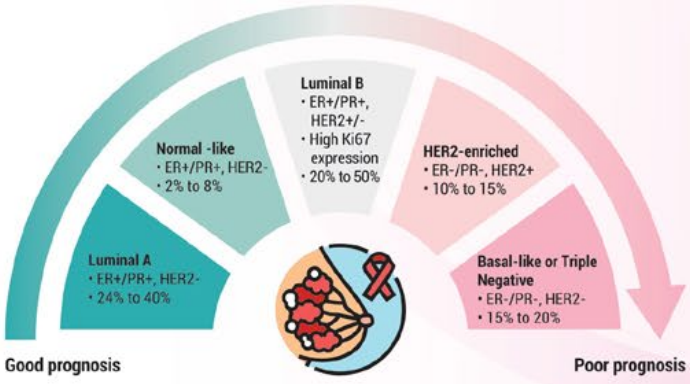
Breast cancer is the most common cancer among women in Singapore, accounting for about 3 in 10 cancer diagnoses in women in Singapore. Fortunately, due to advances in the diagnosis and treatment of breast cancer, 82.5% of women with breast cancer survive even after 5 years.[1] In this regard, breast cancer may be considered by many as a chronic disease.

Breast cancer: not a single disease

Breast cancer is a heterogeneous group of cancers of the breast, with each type differing in biological drivers, histological biomarkers, biological behaviour, response to treatment and prognosis. The five types of breast cancer are as follows (**Figure 1**):[2-4]

- **Luminal A breast cancers** are characterised by the presence of estrogen receptor (ER) and/or progesterone receptor (PR) and the absence of human epidermal growth factor receptor 2 (HER2) and have a low expression (≤20%) of the Ki-67 cell proliferation marker. These tumours have a good prognosis.
- **Normal-like breast cancers** are also ER- and/or PR-positive and low Ki-67, with normal breast tissue profiling. Its prognosis is slightly worse than luminal A cancers. Normal-like cancer is less sensitive to paclitaxel- and doxorubicin-containing preoperative chemotherapy than basal-like breast cancer and HER2-enriched subtypes.[3]
- **Luminal B breast cancers** are moderately low ER-positive tumours and have a high expression of Ki67 (>20%). These tumours have a worse prognosis compared with Luminal A tumours.
- **HER2-enriched breast cancers** are characterised by high HER2 expression. This group constitutes 10-15% of breast cancers. Whilst they can be fast-growing, they are generally responsive to anti-HER2 targeted treatments.
- **Basal-like or Triple-negative breast cancers** are ER-negative, PR-negative and HER2-negative. They are aggressive tumours and constitute about 20% of all breast cancers.

Figure 1. Types of breast cancer[3,4]



Beating breast cancer in Singapore

Minimising the impact of breast cancer in the population encompasses screening and surveillance of high-risk individuals, early diagnosis, appropriate treatment as well as long-term management. Importantly, primary care physicians (PCPs) play vital roles in most of the steps of breast cancer prevention and control.

- **Screening** – the Screening Test Review Committee, under the Academy of Medicine, Singapore, recommends breast cancer screening (via mammography every 2 years) for all asymptomatic women aged 50 to 69 years old. Those aged 40-49 years old and those above 69 years old may be offered screening based on their risk profile.[5] PCPs help to ensure timely screening for all at-risk individuals.
- **Genetic counselling, testing and surveillance of high-risk individuals** – A small proportion of breast and ovarian cancer may be due to inherited genes (e.g., *BRCA1* and *BRCA2* pathogenic variants) that may be identified through genetic testing. Genetic counselling is done before testing and is recommended in patients with a personal or family history of breast cancer at age ≤50 years, multiple family members affected by related cancers (e.g., breast and ovarian cancer), or a known pathogenic variant in the family.[6] Genetic counselling and testing should also be considered for patients with basal-like breast cancer, multiple breast cancers or male breast cancer. PCPs may help to reveal important details in medical and family histories, discuss potential differentials and inheritance patterns, and explain the implications of genetic test results.[7]
- **Diagnosis** – After the appropriate imaging tests and biopsy, the specimen needs to undergo determination of hormone receptor status, Ki-67 expression and HER2 status.[8]
- **Treatment** – The definitive treatment of breast cancer depends on the cancer stage, the genetic and immunohistological characteristics of the tumour, and the patient's values and preferences. Treatment options include surgery (e.g., lumpectomy and mastectomy), radiotherapy, and systemic therapy (e.g., hormonal therapy, chemotherapy, targeted therapy and/or immunotherapy).[8]
- **Long-term care** – Survivors would require long-term care to cope with the long-term side effects of treatment (e.g., cognitive impairment, peripheral neuropathy or osteoporosis), psychosocial aspects of the disease, and continued surveillance for recurrence, especially among those with high-risk germline pathogenic variants.[9-11] PCPs may aid in managing these long-term concerns. For example, PCPs may regularly assess objective cognitive functioning and osteoporosis risk and provide pharmacological and nonpharmacological interventions to address these issues. Furthermore, PCPs may provide preventive care health information, identify and address psychological needs, and facilitate referral to specialists when needed.[10]

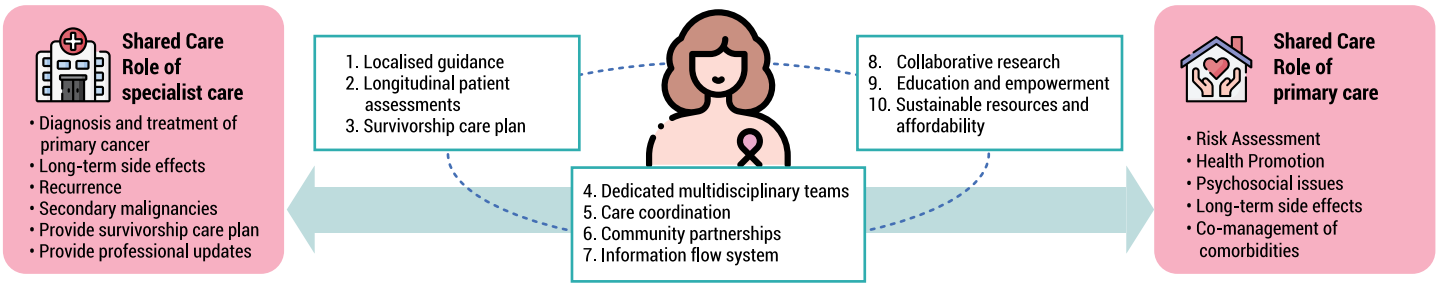
"Living with, through, and after cancer"

Cancer survivorship, while not a new concept in Western countries, is only now taking root in Singapore. Despite the term, cancer survivorship goes beyond survival. It encompasses "living with, living through, and living after cancer". Survivorship care is survivor-centred care consisting of integrated and coordinated care to promote wellness and holistically improve the state of health of patients with cancer and survivors through access to both specialist and primary care to allow survivors to receive the right type of care at the right time and in the right environment.[11] Survivorship care should also be accessible, equitable, research-driven and evidence-based.

The key components of optimal survivorship care in Singapore include the following (**Figure 2**):[11]

- **Plans for patient care:**
  (1) Localised guidance, (2) longitudinal patient assessments and (3) survivorship care plans
- **A team approach:**
  (4) Dedicated multidisciplinary teams, (5) care coordination, (6) community partnerships and (7) information flow systems
- **Programme support:**
  (8) Collaborative research, (9) education and empowerment, (10) sustainable resources and affordability

Figure 2. Components of optimal survivorship care in Singapore and the roles of the specialist and the primary care physician in the shared-care model



The role of PCPs in cancer survivorship care widens as cancer survival improves and the number of cancer survivors grows. Integrating primary care in breast cancer survivorship may be achieved through a "shared-care" model of care, which involves the joint provision of care by oncologists and PCPs (**Figure 2**) to achieve higher satisfaction with the care survivors receive, in contrast to an oncologist-centric model.[10,12] This model recognises that PCPs are in the best position to address the psychological concerns of breast cancer survivors, co-manage comorbidities, identify the early signs of recurrence, and promote self-management and preventive health behaviour. The strong relationships and therapeutic alliances PCPs keep with their patients and families can help motivate lifestyle measures; promote adherence to treatments, follow-ups and cancer surveillance; and improve the management of comorbidities. This approach to breast cancer survivorship is most appropriate for patients with a low risk of recurrence and whose health issues have already been stabilised.[10,12]

Partnership and close coordination between specialists and PCPs is crucial to the success of a shared-care approach to breast cancer survivorship. Strategies to facilitate partnership and coordination include the use of standardised communication channels such as survivorship care plans, training and knowledge-sharing using various methods and channels, and the optimised use of digital resources and technologies.[9,10]

This model of breast cancer survivorship is already being implemented in certain initiatives in Singapore. The National Cancer Centre Singapore and the SingHealth Polyclinics have jointly initiated a pilot study that allows suitable early-stage breast cancer survivors to undergo shared care at the Polyclinics.[13, 14] This study trained ten PCPs to take part in the programme to improve healthcare access to breast cancer survivors in the community. The programme also helps to improve adherence to treatment, follow-up visits, and appropriate screening for cancer and common comorbidities such as diabetes. Comprehensive care may then be fully turned over to PCPs once breast cancer survivors have been in remission after 5 years or more.

Conclusion

As more women with breast cancer in Singapore live with, live through, and then live after cancer, the need for long-term healthcare shifts from the hospital to the community. I encourage both PCPs and specialists to become partners in helping cancer survivors live their fullest lives after breast cancer.

For educational resources, click **here** to access the resources of the Primary Care Oncology Education Unit (PCOEU).

REFERENCES:

1. Ministry of Health, Singapore. Singapore Cancer Registry Annual Report 2021. Accessed on 29 September 2023. nrdo.gov.sg/docs/librariesprovider3/default-document-library/scr-ar-2021-web-report.pdf?sfvrsn=591fc02c_0. **2.** Orrantia-Borunda E, Anchondo-Nuñez P, Acuña-Aguila LE, et al. Subtypes of Breast Cancer. In: Mayrovitz HN, editor. *Breast Cancer (Internet)*. Brisbane (AU): Exon Publications; 2022 Aug 6. Accessed 29 September 2023. https://www.ncbi.nlm.nih.gov/books/NBK583808/. doi: 10.36255/exon-publications-breast-cancer-subtypes. **3.** Wawruszak A, alasa M, Okon E, et al. Valproic Acid and Breast Cancer: State of the Art in 2021. *Cancers (Basel)*. 2021;13(14):3409. doi: 10.3390/cancers13143409. **4.** Kavarthapu R, Anbazhagan R, Dufau ML. Crosstalk between PRLR and EGFR/HER2 Signaling Pathways in Breast Cancer. *Cancers (Basel)*. 2021;13(18):4685. doi: 10.3390/cancers13184685. **5.** Agency for Integrated Care. Cancer Screening. Accessed on 07 October 2023. https://www.primarycarepages.sg/healthier-sg/care-protocols/preventive-health-care-protocols/cancer-screening. **6.** National University Cancer Institute Singapore. Cancer genetics clinic. Accessed on 29 September 2023. https://www.ncis.com.sg/Our-Services/Specialties/Pages/Cancer-Risk-Assessment-and-Genetics-Clinic.aspx. **7.** National Cancer Centre Singapore. Cancer Genetic Services. Accessed on 11 October 2023. https://www.nccs.com.sg/patient-care/specialties-services/cancer-genetics-service. **8.** Shaw T, Fok R, Courtney E, et al. Missed diagnosis or misdiagnosis: Common pitfalls in genetic testing. *Singapore Med J.* 2023;64(1):67-73. doi: 10.4103/singaporemedj.SMJ-2021-467. **9.** Gradishar WJ, Moran MS, Abraham J, et al. Breast Cancer, Version 3.2022, NCCN Clinical Practice Guidelines in Oncology. *J Natl Compr Canc Netw.* 2022;20(6):691-722. doi: **10.** Chan A, Lum ZK, Ng T, et al. Perceptions and Barriers of Survivorship Care in Asia: Perceptions From Asian Breast Cancer Survivors. *J Glob Oncol.* 2016;3(2):98-104. doi: 10.1200/JGO.2016.004929. **11.** Ke Y, Fok RWY, Soong YL, et al. Implementing a community-based shared care breast cancer survivorship model in Singapore: a qualitative study among primary care practitioners. *BMC Prim Care.* 2022;23(1):73. doi: 10.1186/s12875-022-01673-3. **12.** Loh KW, Ng T, Choo SP, et al. Cancer Supportive and Survivorship Care in Singapore: Current Challenges and Future Outlook. *J Glob Oncol.* 2018;4:1-8. doi: 10.1200/JGO.17.00117. **13.** Fok RW, Low LL, Quah HMJ, et al. Roles and recommendations from primary care physicians towards managing low-risk breast cancer survivors in a shared-care model with specialists in Singapore-a qualitative study. *Fam Pract.* 2020;37(4):547-553. doi: 10.1093/fampra/cmaa009. **14.** Kang SK. [Follow-up visits nearby to improve cancer-related fatigue]. Accessed on 11 October 2023. https://www.nccs.com.sg/news/patient-care/community-cancer-survivorship-care?fbclid=IwAR3EuzrgizhNGiz_2ZGXpx36K26CEMj3J4bRabF6RBFh_moQHMtMIvzpL6c.

Learning about Gastroesophageal Reflux Disease

Text by Dr Aung Myint Oo @ Ye Jian Guo

In line with the 24th Annual Gastroesophageal Reflux Disease (GERD) Awareness Week from 19 November to 25 November 2023, SMA organised a webinar on 18 November titled "Updates on GERD: Gastroesophageal Reflux Disease" for clinicians and primary healthcare professionals, supported by AstraZeneca. A total of 37 clinicians attended the webinar.

Presented in this article is some general information on GERD and its management for fellow colleagues' reference.

Time	Programme	Speaker
1 pm	Introduction	**Dr Aung Myint Oo @ Ye Jian Guo** Senior Consultant, Upper Gastrointestinal and Bariatric Surgery, Department of General Surgery, Tan Tock Seng Hospital (TTSH)
1.10 pm	Update on Diagnosis and Medical Management of GERD	**Adj Asst Prof Chia Tze Wei, Christopher** Senior Consultant, Department of Gastroenterology, TTSH and Woodlands Health
1.40 pm	Update on Surgical Management of GERD	**Dr Aung Myint Oo @ Ye Jian Guo**
2.10 pm	Dietary Management of GERD	**Ms Vicky Chan** Senior Dietician, TTSH
2.40 pm	Difficult to Treat GERD – What to Do?	**Dr Calvin Koh Jianyi** Gastroenterologist, The Gastroenterology Group, Gleneagles Hospital
3.10 pm	Questions and Answers	
3.30 pm	End of Webinar	

Understanding GERD

GERD is a condition where the reflux of stomach contents causes troublesome symptoms and/or complications.[1]

GERD can be classified into three different phenotypes based on the endoscopy and histopathology findings: (a) non-erosive reflux disease (NERD), (b) erosive esophagitis (EE), and (c) Barrett's esophagus (BE).[2] NERD is the most common type of GERD, followed by EE and BE.

The multi-factorial pathophysiology of GERD can be best explained by the following mechanisms:[3]

(a) Impaired lower esophageal sphincter function and transient lower esophageal sphincter relaxations (TLESRs);

(b) Presence of a hiatal hernia;

(c) Impaired esophageal mucosal defence against the gastric refluxate; and

(d) Defective esophageal peristalsis.

In 2005, the prevalence of GERD in the Western part of the world was around 10% to 20% while only less than 5% was reported in Asia.[4] However, with the increase in the prevalence of obesity across Asia, the GERD incidence rate is rising in Asian countries, including Singapore, as reported by Lim et al in 2005.[5]

Risk factors include obesity, hiatal hernias, smoking, use of non-steroidal anti-inflammatory drugs, ageing, irritable bowel syndrome, and anxiety/depression, among others.[3]

Clinical syndromes can be either esophageal or extra-esophageal (see Table 1).[1]

Table 1: Clinical syndromes of GERD

Esophageal syndromes		Extra-esophageal syndromes	
Symptomatic syndromes	**Syndromes with esophageal injury**	**Established associations**	**Proposed associations**
1. Typical reflux 2. Reflux chest pain	1. Reflux esophagitis 2. Reflux stricture 3. Barrett's esophagus 4. Esophageal adenocarcinoma	1. Reflex cough 2. Reflux laryngitis 3. Reflux asthma 4. Reflux dental erosion	1. Pharyngitis 2. Sinusitis 3. Idiopathic pulmonary fibrosis 4. Recurrent otitis media

Clinical evaluation and diagnosis

Though upper gastrointestinal (GI) endoscopy is not required to diagnose GERD, it can detect esophageal manifestations such as malignancy, Barrett's metaplasia and EE (severity graded using the LA classification system from A to D, with D being most severe). Upper GI endoscopy can also rule out other aetiologies in patients who are refractory to proton-pump inhibitors (PPIs).[6]

Esophageal manometry can help diagnose esophageal motility disorder and is useful in ensuring the ambulatory pH probes are in the correct position. It is also useful in evaluating the peristalsis function of the esophagus before anti-reflux surgery.[6]

Ambulatory esophageal pH monitoring can help confirm the diagnosis of GERD. The monitoring device can be wired (a trans-nasally placed catheter) or wireless (a capsule-shaped device affixed to the distal esophageal mucosa). Alternatively, pH impedance monitoring can be used; it is able to detect weakly acidic reflux in addition to acid reflux, and is more useful in detecting symptom-reflux correlation.[6]

Management of GERD

Lifestyle modification

Weight management, avoiding late meals (within three hours of bedtime), raising the head of the bed by six to eight inches, stress reduction, avoiding trigger foods (eg, caffeine, chocolate, spicy foods), smoking cessation, and avoiding tight-fitting clothing may help with GERD symptom relief.[7] Apart from the first three listed, the evidence supporting the symptom relief efficacy of other lifestyle modifications is weak.

Pharmacotherapy

Antacids are more effective than placebos in relieving heartburn symptoms within five minutes, but provide relief for only 30 to 60 minutes. Antacids neither prevent GERD nor heal esophagitis.

Surface agents such as Sucralfate also have a short duration of action and limited efficacy, and their use is limited to managing GERD in pregnancy.[8]

Compared to antacids, histamine H2-receptor agonists have slower onset but longer duration of action, lasting four to ten hours. Though effective in patients with mild and intermittent symptoms, their efficacy is limited in EE and ineffective in severe esophagitis.

PPIs provide faster and more effective symptom relief, as well as healing of EE. Patients with EE or BE require maintenance acid suppression with standard PPI doses. For patients without EE or BE, PPIs should be prescribed at the lowest dose for the shortest duration appropriate to the condition. A step-up approach increasing the therapy's potency can be considered in patients with recurrent symptoms, using repeated eight-week courses of acid suppressive therapy. Specialist referral can be considered if patients do not respond to one daily PPI dose (ie, refractory GERD) or cannot tolerate or are not willing to take PPIs in the long term.[8]

Additive therapy with neuromodulators for TLESR; eg, low doses of baclofen (5 mg to 10 mg twice a day before meals) may be helpful for patients with refractory or non-acid reflux GERD. The dosage can be incrementally increased while monitoring the side effects in patients who are not responding to treatment.[9]

Endoscopic and surgical treatments

Anti-reflux procedures are usually indicated for patients who are refractory to medical therapy, but not recommended in patients who have a complete lack of response to PPI therapy.

Available endoscopic anti-reflux procedures include:[10,11]

- Radiofrequency energy: Stretta procedure
- Transoral fundoplication: EsophyX procedure (transoral incisionless fundoplication); Medigus Ultrasonic Surgical Endostapler; GERDX procedure
- Mucosal resection (the most recent procedure developed): Anti-reflux mucosectomy; anti-reflux mucosal ablation

Available anti-reflux surgical procedures include:[10,11]

- Magnetic sphincter augmentation
- Minimally invasive surgery (laparoscopic/robot-assisted): Hill gastropexy; partial fundoplication (for patients with severely decreased esophageal motility); Nissen (or complete) fundoplication

According to the 2022 American College of Gastroenterology practice guidelines,[12] anti-reflux surgery performed by an experienced surgeon is recommended as an option for long-term treatment of patients with objective evidence of GERD, especially those with severe reflux esophagitis (LA grades C or D), large hiatal hernias, and/or persistent, troublesome GERD symptoms.

Finally, GERD patients with obesity who are willing to consider bariatric and metabolic surgery can undergo Roux-en-Y gastric bypass but not sleeve gastrectomy.[11] ◆

References

1. Vakil N, van Zanten SV, Kahrilas PJ, et al. The Montreal definition and classification of gastroesophageal reflux disease: a global evidence-based consensus. Am J Gastroenterol 2006; 101(8):1900-20.

2. Fass R, Ofman JJ. Gastroesophageal reflux disease--should we adopt a new conceptual framework? Am J Gastroenterol 2002; 97(8):1901-9.

3. Antunes C, Aleem A, Curtis SA. Gastroesophageal Reflux Disease. In: StatPearls Publishing. Treasure Island, Florida: StatPearls, 2024.

4. Dent J, El-Serag HB, Wallander MA, Johansson S. Epidemiology of gastro-oesophageal reflux disease: a systematic review. Gut 2005; 54(5):710-7.

5. Lim SL, Goh WT, Lee JMJ, Ng TP, Ho KY. Changing prevalence of gastroesophageal reflux with changing time: longitudinal study in an Asian population. J Gastroenterol Hepatol 2005; 20(7):995-1001.

6. Kahrilas PJ. Clinical manifestations and diagnosis of gastroesophageal reflux in adults. In: UpToDate. Available at: https://bit.ly/3ufq5Dw. Accessed 1 February 2024.

7. Yadlapati R, Gyawali CP, Pandolfino JE. AGA Clinical Practice Update on the Personalized Approach to the Evaluation and Management of GERD: Expert Review. Clin Gastroenterol Hepatol 2022; 20(5):984-94.

8. Kahrilas PJ. Medical management of gastroesophageal reflux disease in adults. In: UpToDate. Available at: https://bit.ly/4bmIMag. Accessed 1 February 2024.

9. Tutuian R. Non-acid reflux: Clinical manifestations, diagnosis and management. In: UpToDate. Available at: https://bit.ly/3vZVs5w. Accessed 1 February 2024.

10. Schwaitzberg SD. Surgical treatment of gastroesophageal reflux in adults. In: UpToDate. Available at https://bit.ly/3Ou35HA. Accessed 2 February 2024.

11. Fass R. Approach to refractory gastroesophageal reflux disease in adults. In: UpToDate. Available at https://bit.ly/4bjAG0O. Accessed 2 February 2024.

12. Katz PO, Dunbar KB, Schnoll-Sussman FH, et al. ACG Clinical Guideline for the Diagnosis and Management of Gastroesophageal Reflux Disease. Am J Gastroenterol 2022; 117(1):27-56.

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Playing a Part for Local Arts

Interview with Dr Wong Tien Hua

We have likely read and heard of the benefits the arts can bring, and how appreciating the arts can be beneficial for one's health and soul. In this interview with Dr Wong Tien Hua, past SMA President and current council member of the National Arts Council (Singapore) (NAC), we find out more about his personal experience with supporting the arts and his thoughts on how the arts truly complement medicine.

Developing an appreciation

Have you always had an appreciation for the arts? When was your first exposure?

I used to sketch and doodle in primary school, but I was not particularly gifted at it. I also played a brass instrument in the school band, and although I was not good at it, being part of a band helped me to appreciate orchestral music.

Later on, my parents sent me for watercolour classes at the studio of the late artist Liu Kang, who was a pioneer Singaporean painter known for developing the "Nanyang Style". I fondly remember Mr Liu's artist shophouse-cum-studio which was situated along Selegie Road past the old Cathay cinema, where several students were taught at a go. He would personally arrange a carefully placed drapery with objects like fruits and ceramics for still-life painting. The light streaming in from the large windows and central air well provided soft illumination to the subject. The old house was filled with dusty art material, yet was always very vibrant with students coming and going.

Which art form are you most intrigued by?

I like photography and have a good eye for subject matter, proportions, light and form. Visual arts naturally appeal to me. I did a course on Italian Renaissance art before I visited Italy a number of years ago and learnt to appreciate the paintings and sculptures from that period. The collection at the Uffizi Gallery in Florence are a must-see. Impressionism is a favourite of mine, and I could spend the whole day admiring the works at the Musee d'Orsay in Paris, France. Some of the postmodern art movements are too abstract for me, but I love large-scale installation artworks that are site specific, especially when they take into account the architecture and history of the venue. These works are often larger than life and they challenge one's perceptions while stimulating introspection. I have also recently been looking out for hyperrealism in painting and sculptures – pieces that create the illusion of reality but often with a provocative twist.

Do you have a favourite piece of art?

It is difficult to name a favourite piece, but you will always remember the impact and emotional resonance when you see a great piece of art – one that strikes you and speaks to you personally. Visiting the large-scale mural painting of *The Last Supper* by Leonardo da Vinci at the Santa Maria delle Grazie in Milan was one such experience. Watching a ballet performance of *Onegin*, to the orchestrations of Tchaikovsky at the Bolshoi Theatre in Moscow, Russia was another.

Volunteering for the arts

Why and when did you decide to join the NAC?

After I stepped down as the President of SMA in 2018, I sought to volunteer in an area unrelated to medicine. As I was interested in contributing my time

to the arts, I approached the Chair of NAC, who interviewed me over a cup of tea. She appreciated my experience as a GP – as someone who works in the community and has a good sense of the needs of the people – and thought that I would be a good addition to the NAC council. As a medical practitioner, I also pitched the benefits of arts with respect to overall wellness and health, not just for individuals but for society as a whole. I was thrilled when she put my name up to the Ministry of Culture, Community, and Youth. I was appointed to the NAC council in September 2019.

What does the NAC do, and how have you contributed to its work?

The NAC is a statutory board responsible for fostering the development of the arts in the country. Its key roles include promoting the arts, supporting artists and arts organisations, and enhancing public access to and appreciation of the arts. Board members at NAC provide governance, strategic direction and oversight to support the council's mission and goals. So far, I have mostly been involved in the NAC technology committee where we guide the NAC's strategy on technology and innovation.

In recent years, we are seeing technology make its impact on art-making, on how audiences interact with art, and on the operations and revenue streams of artists. Needless to say, we are very concerned about the impact of artificial intelligence on the arts and how it can now generate almost all forms of art with only a few strokes on the keyboard.

What is your fondest memory of your experience at the NAC?

The best thing about being involved in the NAC is being keyed in to all the major events in the arts calendar and having the opportunity to see the full spectrum of arts as they are rolled out around the country. I also enjoy meeting people in the industry, such as arts practitioners, and being able to learn of and empathise with their struggles, especially during the pandemic.

One outstanding experience was when I had a chance in 2022 to visit the Venice Biennale exhibition in Italy with my son. The trip was entirely self-funded but Mr Low Eng Teong, deputy chief executive of NAC at the time, linked me up with the gallery minders at the Singapore pavilion in Venice, who guided us through the biennale exhibits. The Venice Biennale is very much akin to the Olympic Games of the art world, showcasing the very best of art from participating countries. It is held at a historical site in the eastern part of Venice called the Giardini della Biennale; away from the usual tourist spots, it was a chance to see a quieter and more charming part of Venice. There are 30 permanent national pavilions, some of which have been around for more than a century, while countries like Singapore host temporary pavilions in and around the Biennale grounds.

Complementing effects

How do you think appreciation for the arts and/or being involved in the art community can influence one's approach to medical practice?

I believe that every doctor should learn to appreciate the arts, if not already practising some art form, be it visual, music, literary or performance arts.

A doctor who appreciates different art forms and artistic expression is likely better able to understand different perspectives and emotions. This helps the doctor to empathise with patients, improving his/her ability to connect, and thus enhance the doctor-patient relationship. This is particularly important in a multicultural society like Singapore where we live side by side with others from different ethnic and cultural backgrounds. Art is a gateway to understanding each other's cultures, and can lead to communication that improves patient understanding, compliance with treatment and better outcomes.

It is well known that artistic endeavours allow for inner expression and help relieve stress. Not only can a doctor find in art a good outlet for personal mental wellness, a better understanding of the arts also enables the doctor to recommend such activities to his/her patients.

Where should readers start if they wish to explore local art?

I would like to make a pitch for the NAC's new website called "Catch", for all things arts and culture. Catch.sg is a one-stop online arts and culture portal, launched in September 2023 as part of NAC's strategic five-year road map titled "Our SG Arts Plan".

On the website, you can find all the current arts activities, and filter based on your own preferences such that the highlighted events are tailored to your interest. The webpage is very well designed and thoughtful as you can search under specified categories for activities that are family friendly, for seniors, for wellness, or even for children. You will be amazed by the massive number of arts activities available in Singapore throughout the year. The arts scene in Singapore is very vibrant and active indeed. ◆

Legend

1. Philip Colbert Exhibition at Whitestone Gallery, at Tanjong Pagar Distripark, as part of SEA Focus / Singapore Art Week 2024

2. Venice Biennale exhibition 2022

3. At the National Gallery with Singaporean artist Ming Wong who represented Singapore at the 53rd Venice Biennale in 2009. His works are on display on the international stage, including the Tate Modern UK

Rare but Real: Singapore's Rare Disease Fund

Text by Nicholas Chieh Loh and Dr Kenneth Lyen

Nicholas is a fourth-year medical student at NUS Yong Loo Lin School of Medicine. Beyond being a contributing writer to *SMA News*, he enjoys blogging, lifting weights and simply having fun on the ivories.

Dr Lyen is a consultant paediatrician, founder of the Rainbow Centre for disabled and autistic children, and has co-authored 16 books.

Rare diseases are an important but often overlooked part of human health. They are not common, but they are still significant and can be hard to understand or diagnose. The recent story of the brave trio – Thaddeus and his twin brothers Hugard and Reynar, all suffering from a rare condition known as mucopolysaccharidosis type VI (MPS VI) – published in *The Straits Times*, underscored this paradox.[1] This article endeavours to shine a light on the lesser-known Rare Disease Fund (RDF) of Singapore, its vital role in supporting families such as Thaddeus', and how the medical fraternity can contribute to this essential initiative.

The financial burden of rare diseases

Medical professionals grapple with a myriad of health challenges, many of which are commonplace and well understood. However, lurking in the undercurrent are rare diseases that, while seldom seen, have significant impact on those they afflict. MPS VI, also known as Maroteaux-Lamy syndrome, is one such enigma.[2]

MPS VI is a rare genetic disorder resulting from the complete or partial deficiency of the enzyme, N-acetylgalactosamine-4-sulfatase, resulting in the pathological accumulation of complex carbohydrates called glycosaminoglycans (previously known as mucopolysaccharides, hence the name MPS VI). Clinical features include deafness and corneal clouding. Body growth is initially normal but comes to an abrupt halt around age 8. With progressive skeletal changes, progressive functional movement limitation is almost inevitable.[3] Nearly all afflicted with MPS VI also have cardiac complications in the form of valvular dysfunction. There is also reduced life expectancy for individuals with MPS VI. This elusive disease is presently known to afflict no fewer than four individuals in Singapore – Thaddeus, Hugard, Reynar and an adult who does not wish to be identified.

The rarity of these conditions often leads to two significant challenges. Firstly, these diseases are frequently overlooked in public health discourse due to the lower number of patients compared to more common diseases. Secondly, the dearth of research and treatment options combined with the exorbitant costs associated with the few available treatments often place these families in a precarious financial position.

Madam Yang, the mother of the three boys grappling with MPS VI, provides us with a poignant glimpse into the daunting financial reality of managing a rare disease. The good news is that enzyme replacement therapy (galsulfase [Naglazyme™]) is effective and has been approved for use in Singapore.[4] The enzyme is administered intravenously over four hours during each weekly session, and has been shown to improve walking and stair-climbing capacity. However, the bad news is that each session costs approximately $10,000 for Thaddeus and $6,000 for each twin, a sum that would only increase with body weight. With such staggering figures, treatment costs could easily surpass a median Singaporean household's annual income within a few months.[1]

However, the burden extends beyond the cost of medication. The time investment for treatment, the potential for lost income due to caregiving responsibilities, and the psychological toll of dealing with a lifelong disease further exacerbate the situation. After exhausting insurance claims and Medisave, a family like Madam Yang's would still be far from achieving financial stability without additional aid. This sobering narrative illuminates the astronomical financial strain and the subsequent urgency for support mechanisms for families battling rare diseases.

Ethical dilemma: cost of innovation vs equitable access

An ethical conundrum is evident here. Historically, new drugs or treatments like monoclonal antibodies or cancer drugs are initially expensive due to developmental costs but would eventually become more affordable. Drug companies hold onto the patent rights so that profits made can recoup their development costs. If a disease is common, the profits generated by countless patients using them will, over the course of time, result in cheaper prices. The problem with rare diseases is that the expensive development costs cannot be absorbed by the very few users.

There are historical precedents where patent rights were relinquished. When Frederick Banting and Charles Best isolated and produced insulin in the 1920s, they each sold the patent to the University of Toronto for just $1, to ensure its widespread availability.[5,6] Jonas Salk, the developer of the inactivated polio vaccine, chose not to patent it, allowing for broad dissemination.[7]

To date, such generosity has largely not occurred for the treatment of rare diseases.

The RDF

In the grim landscape of high-cost treatments for rare diseases, the RDF was established in Singapore in 2019, and it has emerged as a beacon of hope. Funding comes from donations by public companies or individuals, with the Singapore Government matching each dollar donated threefold. This means that for every $1 the public donates, the Government will donate $3, thus yielding a total sum of $4 for the fund.

Within three years of its establishment, the RDF raised $4.9 million in public donations. With the government matching scheme, the total sum raised totalled $19.2 million by 2022. This financial bolstering illustrates the collective power of societal contributions and government support in providing life-saving treatments to patients and families who would otherwise be mired in financial distress. Through this scheme, Madam Yang's twins were included under the RDF, enabling them to receive the necessary enzyme-replacement therapy.[1]

The ground reality

Despite the RDF's assistance, the everyday reality for families contending with rare diseases remains challenging. From managing hospital visits requiring "needle-poking" investigations and treatment injections, to the uncertainty of their sons' life trajectories, Madam Yang's family navigates an intricate maze of physical, emotional and societal challenges. Yet, with the RDF's support, the boys can continue their treatments, enjoy piano lessons, swimming classes, and maintain a semblance of normalcy.[1]

In short, RDF's intervention extends beyond financial relief – it bolsters hope, normality and possibility for families like Madam Yang's. It paints a brighter future where their children, despite battling a rare disease, can enjoy their favourite foods, partake in loved activities, and simply, be children. ◆

The Rare Disease Fund (Singapore)

To find out more about the fund and how you can contribute, please email development@kkh.com.sg.

References

1. Teng A. Twins with genetic disorder get help with weekly $12,000 therapy. The Straits Times [Internet]. 21 May 2023. Available at: https://bit.ly/3Se9Sre.

2. Garrido E, Cormand B, Hopwood JJ, et al. Maroteaux-Lamy syndrome: functional characterization of pathogenic mutations and polymorphisms in the arylsulfatase B gene. Mol Genet Metab 2008; 94(3):305-12.

3. NORD. Maroteaux Lamy Syndrome. In : Rare Diseases. Available at : https://bit.ly/3TWvVUH. Accessed 11 January 2024.

4. KK Women's and Children's Hospital. What is the Rare Disease Fund? In: Rare Disease Fund. Available: https://bit.ly/3TVQhNL. Accessed 11 January 2024.

5. Lewis GF, Brubaker PL. 2021. The discovery of insulin revisited: lessons for the modern era. J Clin Invest 2021; 131(1):e142239.

6. Fralick M, Kesselheim AS. The U.S. Insulin Crisis – Rationing a Lifesaving Medication Discovered in the 1920s. N Engl J Med 2019; 381(19):1793-5.

7. The Salk Institute. History of Salk: About Jonas Salk. Available at: https://bit.ly/3HeVuJ1. Accessed 11 January 2024.

Diagnosing Homesickness

Text by Melanie Chee
Photo by Nicholas Lim

To diagnose a condition, you must first be familiar with the normal physiology and basic definitions surrounding it. If homesickness were a medical condition, how would it be diagnosed? The Oxford dictionary defines home as "the place where one lives permanently, especially as a member of a family or household". How would this apply to overseas students who are constantly moving between countries, living far from their families for most of the year? How would you define home, beyond the simple confines of borders and time zones?

A somewhat surprising thought snuck into my mind last November. I had just returned from the Singapore Medical Society of the United Kingdom (SMSUK) Wider UK trip – a highly anticipated annual event where members gather in a part of the UK outside of London. That year, we explored the charming city of Edinburgh, Scotland. It was a day filled with picturesque views, a tasty lunch at the Chinese restaurant San Chuan, laughter and delightful conversations. There was even time for some educational cultivation (in a fun way) as we visited the Surgeons' Hall Museums and saw our textbooks come to life in the extensive collection of pathological specimens displayed there. I had thoroughly enjoyed my weekend in Edinburgh, but as I plopped my bags down on reaching my tiny bedroom back in Leicester, I could not help but heave a sigh of relief – *it was good to be home!*

This traitorous thought caught me quite off guard. When did this city so far displaced from Singapore become my home?

The concept of home is something many overseas students find themselves contemplating as they are faced with the strange contradiction of battling homesickness while simultaneously growing more familiar and attached to a new city. In this month's letter, Sean reflects on his own journey with the idea of home and everything that comes with being far from it.

Melanie is a Year 4 medical student at the University of Leicester and is Editor on the 29th executive committee of SMSUK.

SMSUK members in Edinburgh for the Wider UK trp on 18 November 2023

Text by Sean Lim

Prior to my arrival in the UK for my studies, home was an ironically unfamiliar concept to me. For some reason, I had trouble attributing the idea of "home" to Singapore, and I saw it merely as a place I lived in. So, when I heard that others had cried on the plane or at the airport as they were leaving the country, I began to be concerned with my lack of connection to my "home". Was Singapore really my home? If it was, why? It would be a few months before I began to answer those questions.

Characteristics of homesickness

In our first year, we were taught to ask patients for a characterisation of their pain when taking their history. Homesickness was a paradoxical pain that I could not characterise. I could feel it creeping up on me slowly, but it also hit me almost entirely at once. It had many exacerbating factors, like the ache for homemade *mee pok*, the striking absence of the calls of Asian Koels in the morning, and the sleepy, dreary weather. But it was also triggered by a single event. As I sat on a call with my family back in Singapore, my niece popped in to say hello. With the goofiest grin on her face, she held up two fingers for the Korean heart sign. That was when I really felt it hit me, welling up in my chest and settling between my bones. Looking at those two tiny fingers, I remember thinking: "Home is where the heart is, I guess."

Once I had answered the question of whether Singapore was "home", it was time for the "why". Was it the food? *Hokkien mee*, fried carrot cake, *char kway teow*, Milo with *kaya* toast, served on familiar red plates and bowls under the fan of a hawker centre. Or was it the place? The comfort of my bed and *chou chou* (term for an item of endearment one grows up with), the views from Marina Barrage, the buzz of Shaw Centre or driving down Amoy Street looking for a place to eat. It was obviously the people as well. Not just friends and family, but also everyone I had previously taken for granted. Teachers, coffee shop uncles, the cashier at the McDonald's next to my place who laughed every time he saw my special order with no vegetables. Ultimately, I could not give a single answer to the "why". The correct answer was probably just all of them.

An unfortunate by-product of brainstorming reasons for why Singapore was home was the worsening of my homesickness. Initially, I was curiously enamoured with the feeling – it felt admittedly comforting that I was experiencing the homesickness that everyone had always talked about, that I was not some lost soul with no home. I even went so far as to create a playlist consisting of songs that evoked the feeling. I wore my homesickness like a morbid badge of honour. However, as the days drew on, carrying the homesickness around became much harder. I spent the long terms counting the days until I could return to Singapore and conversely, also spent the brief holidays dreading the day I would have to make the 14-hour journey back to the UK. I felt it in every step I took up Bristol's St Michael's Hill, every layer of clothing I donned, every 4 pm sunset.

Discovering home away from home

Needless to say, my first year was definitely not what I had originally envisioned. However, this reflection does not end with gloom and doom. As novelist Cecelia Ahern wrote, "Home is not a place, it is a feeling." That was something I came to learn as I reflected on the past year. Home, in my opinion, is not something that we are born into, or even born with. It is constructed from sepia-toned memories of smiles and laughter, from fond experiences of firsts and warm feelings. While I had initially taken these for granted in Singapore, I realised I should not make the same mistake in the UK.

All it took to dull the homesickness was a change in mindset. All the makings of a home existed in the UK; I just needed to know where to look and more importantly, how to look. It took a while, but eventually the steps up the hill became my daily exercise, the layers of clothing were comfortingly warm, the cold was refreshing, and the 4 pm sunset was oddly beautiful. It has scarcely been a few months since I have resolved to this new mindset, and I have already made many fond memories. Memories of Christmas dinners, SMSUK trips and late-night studio recording sessions. It may not be enough to outweigh the promise of supper nights at Samy's Curry at Dempsey, or watching my nieces roll their eyes when I tell them a dad joke. However, I believe it may be enough to at least call the UK a home away from home and ease the homesickness, even if just for a bit. ◆

Sean is a Year 2 medical student at the University of Bristol.

Focusing Efforts for Junior Doctors: Meeting with MOHH

Text by Dr Ivan Low, Chairperson, SMA Doctors-in-Training Committee

In October 2023, SMA organised its annual meeting with Dr Liem Yew Kan (Executive Director, Healthcare Manpower, MOH Holdings [MOHH]) where a range of issues concerning junior doctors (JDs) was discussed. The meeting was attended by the SMA Doctors-in-Training (DIT) Committee members, MOHH officials, and student leaders from the various medical societies.

We share here a summary of the discussions that took place during the meeting.

National medical manpower planning

A brief overview of the principal considerations behind medical manpower planning was provided. MOHH shared that there are currently approximately 800 house officers (HOs), 3,000 medical officers (MOs; 1,500 residents and 1,500 non-residents), and 900 senior residents (SRs) under MOHH's employment. There has been a steady rise in the number of JDs from 2017 to 2022, and as of 2023, all training positions for HOs have been filled. However, the national fill rate across JD positions stands at 80%. MOHH shared that the manpower pool will continue to be expanded to meet the requirements of Woodlands Health Campus, Eastern General Hospital and Alexandra Hospital, as well as to enable the 24/80/1 work hour model (ie, a maximum stretch of 24 consecutive hours, cap of 80 hours per week, and at least one rest day per week) across the board over the next five years. MOHH acknowledged that competition for training positions (eg, residency and hospital clinician programmes) will likely increase further as a result.

Junior doctor support initiatives

SMA and MOHH both shared about the initiatives each has put in place, and the potential synergies and areas of collaboration.

Summary of the support initiatives shared

Category	SMA	MOHH
Social media platforms	• SMA JD Telegram (t.me/helpourjuniordocs) and Instagram channels (instagram.com/jrdocs.sg): provide announcements on JD advocacy and support initiatives, reducing information asymmetry and offering a balanced perspective on JD issues	• Facebook Workplace: to improve understanding of HR policies and processes, and early access to posting exercise announcements
Education and HR resources	• SMA DIT 101 mobile app: one-stop mobile resource and pocket handbook for JDs (coming soon to all MOHH-issued corporate mobile phones) • SMA HO Handbook: a guide to navigating our local healthcare system and fulfil basic roles and responsibilities as a Postgraduate Year (PGY) 1 • SMA JD workshops: bridging the gaps with the annual "Called To See Patient" workshop for HOs and "How to MO 101" workshop for first-year MOs • SMA continuing medical education (CME) programmes: provide sources of CME points, including new mandatory medical ethics (MME) component	• Corporate mobile phones: access MOHH email and HR applications without having to reconfigure personal devices' security settings (will soon include SMA DIT 101 mobile app) • Emergency Medicine textbook: procured for international medical graduates as part of their induction package • Recent increments in base salary (up to PGY6) and call/shift allowances, introduction of weekend round allowance and wellness allowance • Polyclinic doctor and SR remuneration review (in the works)

Summary of the support initiatives shared (continued)

Category	SMA	MOHH
Mental wellness and counselling	• SMA JD Helpline (t.me/smahospbot): automated chatbot to address queries from JDs, with an "Ask Me Anything" function to chat in confidence with an SMA volunteer	• Partnership with Brahm Centre: free and confidential counselling services • Independently operated whistleblowing channel to report work-related incidents
Engagement events	• End-of-year party for HOs (in collaboration with MOHH) since 2022	• JD town halls: receive feedback regarding work conditions (starting January 2024)

Transportation claims system

An independent audit revealed a high volume of erroneous transport claims in the past year, majority of which arose from commutes undertaken "just out of window" (ie, right after 6.30 am or right before 10 pm). MOHH shared that a revision to the corporate transport policy is in the works to minimise erroneous claims and also prevent abuse. While acknowledging the limitations of the current system, SMA is supportive of retaining the Grab corporate account system, as it significantly reduces the administrative overheads of manually filing for transport claims. SMA opined that the compliant majority should not be "punished" for the deeds of the wrongdoing few and highlighted that JDs ought to be given the opportunity to explain themselves before they are subject to disciplinary action for potential misdeeds.

Medical memos supporting fitness to practise

SMA shared concerns from various doctors, particularly those who had declared psychiatric conditions, who had been requested by the Singapore Medical Council (SMC) to obtain a memo from their physicians supporting their fitness to practise, which could cost up to $600, even if obtained from a public healthcare institution specialist. Given that fitness to practise is an employment matter, SMA asked if MOHH could bear the costs for these memos, for both existing and prospective (ie, fresh graduates yet to commence their contract) employees.

MOHH responded that:

1. MOHH would cover the costs of these memos, as long as doctors were willing to declare their condition to MOHH, during pre-employment checks or at earliest notice. Notification could be done using a simple memo stating the diagnosis and recommendations on fitness to practise.
2. It was important for both SMC and MOHH to be kept informed about JDs' medical conditions as it might affect whether it would be appropriate for them to be rotated to specific postings.
3. Sensitive medical information would be handled with confidentiality and shared only on a need-to-know basis. MOHH is obliged to inform SMC if it has concerns about a doctor's fitness to practise.

New MME CME requirements

In light of the SMC's new mandatory five-point CME requirement for medical ethics that can only be fulfilled by attending programmes hosted by the three professional bodies, SMA shared that it would cater to JDs through its SMA Centre for Medical Ethics and Professionalism (CMEP) programmes. From January 2024, SMA CMEP offers Mandatory Medical Ethics (MME) programmes to all SMA Members free of charge, as their Membership fees are used to subsidise the cost of running the programmes and its hosting platform, WizLearn. MME programmes will be available to non-Members, but (1) are limited to only live webinars and not asynchronous WizLearn modules due to hosting platform subscription constraints, and (2) registration for these webinars would cost approximately the same as SMA Membership. SMA and MOHH agreed that JDs could be encouraged to join SMA to fulfil their CME requirements for the practising certificate renewal process. ◆

About us

The SMA DIT Committee advocates for JDs and medical students, and runs a wide range of initiatives to support them in becoming competent, confident and compassionate healthcare professionals. The Committee has spoken up about on-call allowances, leave for National Service call-ups and the float system, among other issues. More recently, we have provided recommendations on key issues such as working hour caps, postgraduate training opportunities and JD engagement. On top of this, the Committee operates the SMA JD Helpline, publishes the SMA HO Handbook, conducts workshops for JDs and co-organises the SMA National Medical Students' Convention.

If you are keen to get involved with SMA DIT efforts, please write in to ilj@sma.org.sg. You can visit https://bit.ly/SMA-DIT to find out more regarding the SMA DIT Committee, and join our Telegram channel @HelpOurJuniorDocs to stay up to date regarding our various initiatives.

Healthier SG enrollees at GP clinics to receive more chronic medication subsidies

The Healthier SG Chronic Tier Subsidy Framework aims to provide enhanced drug subsidies for selected chronic drugs to help Healthier SG clinics support enrollees with higher medication needs.

The Healthier SG Chronic Tier, launched on 1 February 2024, enables Community Health Assist Scheme (CHAS), Pioneer Generation (PG) and Merdeka Generation (MG) cardholders to obtain selected medications for chronic conditions at their enrolled Healthier SG GP clinics, at prices comparable to those at polyclinics. These medications are commonly used to manage conditions under the Chronic Disease Management Programme (CDMP) and are similar to those from the polyclinics. Most of these medications for CDMP conditions will be available through ALPS, the procurement and supply chain agency for the public healthcare system in Singapore, and can be ordered and delivered in bulk to Healthier SG clinics to be prescribed to patients, or delivered directly to patient's homes for a fee.

The remaining drugs can be purchased from specific pharmaceutical companies under MOH special pricing agreements. GPs are also welcome to procure drugs through their own private arrangements.

Under the Healthier SG Chronic Tier, CHAS/PG/MG cardholders can receive means-tested subsidies of up to 87.5% for these selected chronic medications, with no dollar cap at their enrolled GP clinic. They can also receive subsidies of up to $360 per year for other components of their care, such as consultation, laboratory tests and other medications. More details of the Healthier SG Chronic Tier for the different cardholders can be found in the following table.

(NEW) Healthier SG Chronic Tier

CHAS Cards			CHAS Green	CHAS Orange	CHAS Blue	Merdeka Generation	Pioneer Generation
For Patients with CDMP Chronic Conditions	Simple[1]	Fixed Dollar Subsidy applicable for all services[2] and other medications[3]	Up to **$28** subsidy per visit, capped at **$80** per year	Up to **$50** subsidy per visit, capped at **$130** per year	Up to **$80** subsidy per visit, capped at **$210** per year	Up to **$85** subsidy per visit, capped at **$230** per year	Up to **$90** subsidy per visit, capped at **$240** per year
	Complex[1]		Up to **$40** subsidy per visit, capped at **$110** per year	Up to **$80** subsidy per visit, capped at **$210** per year	Up to **$125** subsidy per visit, capped at **$330** per year	Up to **$130** subsidy per visit, capped at **$350** per year	Up to **$135** subsidy per visit, capped at **$360** per year
	Simple or Complex Tier	% Subsidy applicable for selected list of chronic medications for CDMP conditions[4]	**50%** subsidy, with no dollar cap	**75%** subsidy, with no dollar cap	**75%** subsidy, with no dollar cap	**81.25%** subsidy, with no dollar cap	**87.5%** subsidy, with no dollar cap

[1] "Simple" refers to visits for a single chronic condition. "Complex" refers to visits for multiple chronic conditions, or a single chronic condition with complication(s).
[2] Services refer to healthcare services provided by the Healthier SG GP clinic, such as consultation and investigations (e.g. blood tests).
[3] Refers to all other medications which are not defined in the Healthier SG Medication List.
[4] Applies to chronic medications defined in a Healthier SG Medication List, which comprises medications which are commonly used at the polyclinics for management of conditions under CDMP.

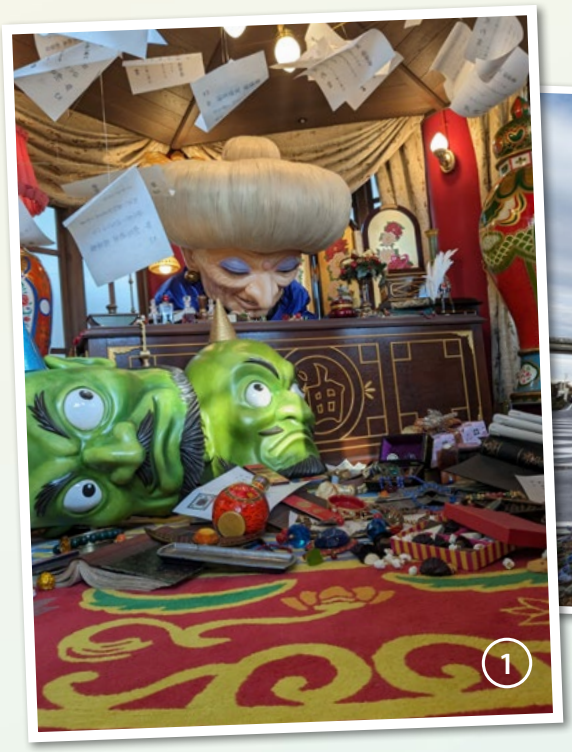
For most Singaporean patients, the cost of medications for chronic conditions at their enrolled GP clinics is already covered by CHAS. The Healthier SG Chronic Tier will benefit CHAS/PG/MG cardholders who have higher chronic medication needs and whose bills may exceed the current CHAS annual subsidy limits. For each visit, GPs should discuss with their patients and advise on whether the existing CHAS Chronic Tier or the Healthier SG Chronic Tier would best benefit them based on their medication needs.

Enrolled residents with chronic conditions under the CDMP can now use MediSave to fully pay for treatment at their enrolled Healthier SG clinics, up to the MediSave500/700 scheme's withdrawal limit, and no longer need to co-pay 15% of their bill in cash. Patients seeking CDMP treatment at clinics they are not enrolled at will still need to co-pay 15% of their bill in cash.

Interested in becoming a Healthier SG clinic?
Scan the QR code below to apply!

Where Do We Park at Ghibli Park?

Text and photos by Dr Clive Tan, Editorial Board member



"We must go very early. They say that when the car park is full, you would have to park far away and walk quite a distance," my wife explained.

"But our ticket is for 11 am. What are we going to do if we were to reach there at 9.30 am?" I thought aloud.

It turned out that our abundance of caution was unnecessary. There were ample parking lots at Ghibli Park on the two days we visited.

The magical world of Ghibli

Ghibli Park is a Japanese theme park that depicts the fictional world created by Studio Ghibli. *My Neighbour Totoro, Spirited Away* and *Howl's Moving Castle* are some of the studio's popular works, and are currently available on Netflix. We visited the park in December 2023 during winter, and it was very cold in the open areas where there was no protection against the wind. Everything about the park and its attractions was very orderly, tidy and classically Japanese.

The park features five areas: Ghibli's Grand Warehouse, Hill of Youth, Dondoko Forest, Mononoke Village and Valley of Witches. Our first stop was at Hill of Youth, an area based on *Howl's Moving Castle*. The stop was slightly shorter than expected though, as the World Emporium house exhibit there was quite small. No photography was allowed inside the exhibit, so we only took a photo outside. One insider tip I have is to wait for the *karakuri* ("カラクリ" in Japanese) clock to chime, which happens hourly or half-hourly (do check with the staff for the specific timing). True to the Singaporean and Japanese affinity for queuing, we waited in front of the clock long in advance of the chime so that the children would have a good view of the *karakuri* clock's performance.

After that, we wandered around the park and found the Cat Castle Playground. We had to buy a ticket for each child, which costs only ¥100 (about S$0.90), and they could play freely within the hourly timeslot. My three children clocked in at 12 noon, and at 12.55 pm, the signal came that their playtime was over. It was all very orderly, and the set-up kept the playground from becoming overcrowded. Meanwhile, my wife and I took the chance to have some couple time while the children had fun at the playground. We had a leisurely walk around the park and found a spot to

have lunch at after the kids were done with the playground.

We did not manage to get tickets for the other attractions on the same day, so we had to come back to the park for them another day. That was doable for us, as we drove and also stayed nearby. When we next visited, we spent about three hours in Ghibli's Grand Warehouse where there was lots to see and do. One thing that puzzled me was that the gift shop was located within the ticketed area – so it was packed! In some ways, it may have created a FOMO (fear of missing out) situation because you cannot re-enter once you leave the shop. You could see shoppers either taking their time to make calculated purchases or overbuying for those "just in case" situations. My wife generally tries to restrain herself and the kids from buying toys and souvenirs, but in this unusual situation, we agreed that everyone could have an allowance of one item each (adults included).

Potential obstacles to prepare for

For most pilgrims who are planning on visiting, there are a few challenges to consider.

Location

Ghibli Park is located east of Nagoya, between Tokyo and Osaka, so you have to plan your travel route carefully. We rented a car and started our journey from Osaka, then drove to Nagoya and stayed in the area for a few days. We met a friend who came instead from Tokyo via the Shinkansen bullet train. If you are staying in the area, you can also consider making a side trip to the Toyota Automobile Museum, which is located in Aichi prefecture as well. We missed out on visiting the museum due to an oversight, as they turned out to be closed on Tuesdays.

Planning (and sincerity)

Ghibli Park tickets are sold online and released two months before the entry date, so a certain degree of forward planning and sincerity is needed when organising your trip. Tickets to special attractions are sold separately, and we only managed to get tickets to Ghibli's Grand Warehouse, Mononoke Village and the Hill of Youth. We missed out on the tickets to Dondoko Forest, and the Valley of Witches was still under construction at the time. However, there are now day passes available, which allow you access to all five areas. Also, please bring your passport along to the park. The staff need to match it with the name on your ticket, otherwise you will not be let in (and that almost happened to us)!

Time allocation

Within Ghibli's Grand Warehouse, there were Disneyland-like queues for certain photo opportunities, and also some exhibits that are better enjoyed at a leisurely pace. The park itself is massive and provides a great opportunity to clock your daily steps. On weekends, there is a lively food market, with more than ten food trucks serving various foods like curry rice, ramen, *donburi* (Japanese rice bowls), ice cream and other desserts. We explored the park and its attractions over two days. But for most people, I believe allocating one full day to the park would be the sweet spot. ◆

Dr Tan is a father of three, and the designated travel planner for family holidays – a job that he enjoys and (based on feedback) excels at.

Legend

1. A scene from Howl's Moving Castle *in the Ghibli Grand Warehouse*

2. The carpark and train station at Ghibli Park

3. Family photo outside the Hill of Youth area

4. Mononoke Village: located in the outdoor area

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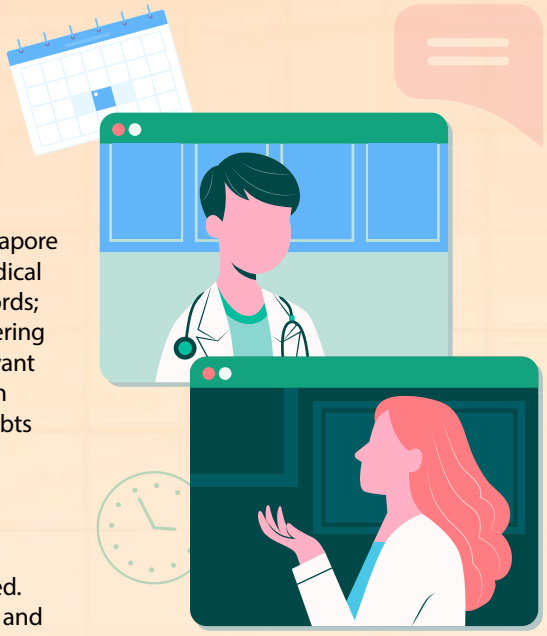

This is a five-webinar series, each lasting one hour. The topics covered will meet the Singapore Medical Council's requirements for the mandatory medical ethics (MME) continuing medical education: (1) Professionalism; (2) Informed Consent; (3) Ethics Analysis; (4) Medical Records; and (5) Privacy and Confidentiality. Each session will include a short didactic lecture covering the salient content knowledge required for the topic. Faculty will then illustrate the relevant ethical principles using case examples to provide guidance on practical application. Each session will conclude with a question and answer segment for participants to clarify doubts and raise specific cases that have troubled them.

As an example of the didactic content, the Informed Consent webinar will cover the components of informed consent: (1) Decision-making capacity; (2) Voluntariness; (3) Disclosure of Material Advice; and (4) Authorisation to proceed. Relevant legal principles from the Hii Chii Kok judgement and Section 37 of the Civil Law Act will also be addressed. Special situations such as consent in persons under the age of majority, implied consent and presumed consent will be covered as well.

Webinar | 1 MME point per webinar	Date and Time	Platform
MME 1: Professionalism COMPLETED	3 February 2024, Saturday 1.30 pm to 2.30 pm	Zoom
MME 2: Informed Consent	6 April 2024, Saturday 1.30 pm to 2.30 pm	Zoom
MME 3: Ethics Analysis	6 July 2024, Saturday 1.30 pm to 2.30 pm	Zoom
MME 4: Medical Records	7 September 2024, Saturday 1.30 pm to 2.30 pm	Zoom
MME 5: Privacy and Confidentiality	2 November 2024, Saturday 1.30 pm to 2.30 pm	Zoom

Faculty

Dr Lee Pheng Soon

Dr Devanand Anantham

Dr T Thirumoorthy

Dr Peter Chow

Dr Vishalkumar Shelat

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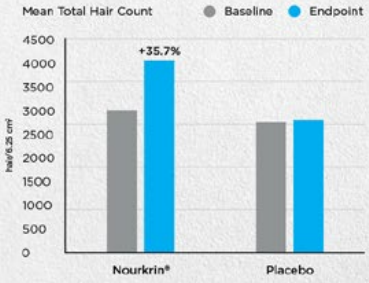

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Thom, E. (2006). Nourkrin®: Objective and Subjective Effects and Tolerability in Persons with Hair Loss. Journal of international Medical Research, 514-519.

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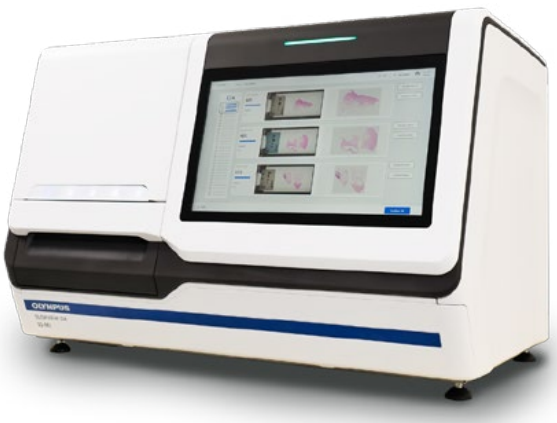

In Europe, SLIDEVIEW DX VS-M1 is regulatory compliant (under the name VS-M1) for IVDR (EU) for in vitro diagnostic use.
In Singapore, SLIDEVIEW DX VS-M1 is listed (under the name of VS-M1) as a Class A medical device in HSA Class A SMDR.
In Australia, SLIDEVIEW DX VS-M1 is included (under the name VS-M1) in the ARTG as a Class 1 IVD medical device.
In New Zealand, SLIDEVIEW DX VS-M1 is regulatory compliant (under the name VS-M1) for the Medicines Act of 1981 (NZ).
In India, SLIDEVIEW DX VS-M1 is regulatory compliant (under the name VS-M1-IVD) as a Class A medical device in CDSCO.
This product is sold under the name SLIDEVIEW VS-M1R in the U.S. as a research use only product and as SLIDEVIEW VS-M1J in Japan notified (under the name VS-M1-IVD1) as a Class I medical device.
Product currently not available in regions not specified.

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