COLLEGE OF FAMILY PHYSICIANS SINGAPORE

THE College Mirror

VOL. 47 NO. 3 SEP 2021

Happy 50th Anniversary, CFPS!

by Dr Tan Wei Beng, Council Member, 28th Council, College of Family Physicians Singapore

2021 is a memorable year for the College of Family Physicians Singapore as we celebrate our 50th anniversary. Since its inauguration on 30 June 1971, our College has been renewing our vision and defining our roles as we developed Family Medicine to meet the challenges of the time.

Our College was started by a handful of dedicated men and women, who were driven by passion to upskill the family doctor to deliver quality patient care. Our forefathers envisioned the critical role of education and training to prepare our family doctors to provide care in diverse settings and keep abreast of developments in clinical practice. 50 years later, our trained and competent family physicians are highly sought after for their opinion and expertise in medical areas, education and healthcare policies. We witnessed

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IN THIS ISSUE:

Editor's Words

by Dr Fok Wai Yee Rose, FCFP(S), Editor (Team A)

2021 marks a monumental milestone for the College of Family Physicians as we commemorate this momentous event, our 50th anniversary, with our inaugural stamps, depicting the roles of Family Physicians caring for patients in different settings from cradle to grave. In this issue, we have the privilege of our past presidents to share with us the history of the College and memorable moments. Fifty years ago, a group of farsighted family doctors got together to form the College of General Practitioners, Singapore with the assistance of more mature colleges overseas in the UK and Australia. Despite obstacles and challenges, our pioneers pursued the policy of continuing medical education and practice upgrading for its members. Subsequently, we changed our College's name to the College of Family Physicians to stress the medical care of Family ethos and patient-centred care, in the context of family and society.

In the early years, the College organised training in the evenings after work, to pursue higher learning despite all odds. The passion to teach and pursue excellence attracted even trained specialists to embrace Family Medicine as their speciality. With increasing recognition of the holistic care provided by the family doctor, there was a need to teach family medicine to incorporate the biopsychosocial aspects of care. Beyond mental health, we now appreciate the heart and science of family medicine as medical humanities. Our pioneers have impressed on us to inculcate and impart values unique to family medicine, to care for the entire family unit and to delve deeper into how we can promote health and prevent diseases. This same priority is reflected by our current government's goal to go "beyond healthcare to health".

In these fifty years, the College plays a important role in professional development of the family physician by conducting postgraduate courses such as the Graduate Diploma in Family Medicine, Master of Medicine in Family Medicine, Collegiate and Fellowship in Family Medicine. Our College also supports the training of young doctors and medical students and congratulates the winning essays of the CFPS prize on the topic of the "GP's role in achieving herd immunity against COVID-19". Dr Terence Tan interviews Dr Gyles Morrison to apply medical knowledge and problem-solving skills to improve the design of healthcare technology and services. As we accelerate digital health, we need to preserve the sacrosanct doctor-patient relationship by maintaining medical confidentiality and respect for patient's autonomy. In the midst of the pandemic, GPs continue to collaborate and innovate as a community in their 1st PCN GP Annual Grand Conference 2020 and Primary Care Grand Conference 2021. This gathering allows GPs to continue to foster online friendships and supports distress and loneliness, while maintain safe distancing measures.

Our next step is to advance family medicine beyond our shores as we look forward to host the WONCA in the near future. We are in a good position as we have garnered experience, having hosted two WONCA World Conferences by the Singapore College in 1983 and 2007. Beyond education, we can collaborate with family physicians in other countries in research, sharing of best practices, and grooming our next generation of family physicians.

Even as we celebrate our 50th anniversary, we are reminded that COVID-19 is still with us and Dr Lawrence Ng shared ethical dilemmas of the duty-to-care, duty to promote equity and equality in society and public health services. Despite our commitments, we are not Super-Heroes, but human and experience the same mental stress, uncertainty, self-isolation and increased work demands of this pandemic. We must not neglect self-care which may result in burnt-out physicians who are unable to care for our patients. As a fraternity, we need to look put for one another and show support and help in times of need. Only then, can we show resilience and find meaning to be a family doctor to our patients.

CM

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FAMILY PRACTICE SKILLS COURSE

What's New in Asthma Management

The College of Family Physicians Singapore would like to thank the Expert Panel for their contribution to the Family Practice Skills Course #95 on "What's New in Asthma Management", held on 17 July 2021.

Expert Panel:
Dr Chan Kwok Wai Adrian
Dr Akash Verma

Chairperson:
Adj Assoc Prof Tan Tze Lee

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an increasing numbers of junior doctors who aspire to be family physicians and willing to pursue a demanding discipline that covers not only breath but depth.

To celebrate our 50th anniversary, we are grateful to SingPost for collaborating with us to release this inaugural stamp collection to commemorate the contributions of family doctors. The stamp design depicts the diverse roles and settings family doctors play in Singapore. They are broadly, but not exclusively, covering 6 areas: health promotion, acute medical services, chronic disease management, community hospital care, pandemic response, continuous medical education and research.

Many patients often remember their favourite family doctor in the community providing medical care in various setting and from the very young to advanced age groups. Family doctors are often the first point of contact for patients, providing comprehensive care throughout the continuum of a person's life cycle. More notably, during this COVID-19 Pandemic, many family doctors have been actively enrolled in fighting against this pandemic. Such an united workforce is truly heart-warming and this anniversary is timely to pay tribute to our family doctors who have put the duty of care above their own health and family concerns. To mark its special occasion, we secured the

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limited edition of the first day cover of the stamp which was released to our College members. It will certainly add value to its collectability and become an envy to many collectors in the world.

This anniversary is a vital milestone for the College to reflect on past achievements, current progress and future plans to pivot family medicine to the next level. We believe that the trained family physician, backed by effective career development and professional support systems, will become an invaluable component of our healthcare system.

While we remember the proud moments of 50 years of Family Medicine, we acknowledge the dedication of our senior family doctors who have selflessly volunteered their time to "pay back" and mentor our juniors. As the veteran family physicians pass on the baton to the new generation, it is our hope that the Family Medicine fraternity humbly unite as one people and press on to pursue excellence in medical care, education and research to advance the course of Family Medicine.

CM

The College: *Present Decade and Future*

In conjunction with the 50th anniversary of College, we invited the past presidents to share their well-wishes, experiences and the future they have for the College of Family Physicians Singapore.

DR LEE SUAN YEW

President (1985-1989),
College of Family Physicians Singapore

May I congratulate our College of Family Physicians' President, Adj. Associate Prof Tan Tze Lee and his 28th Council Members for keeping up and even improving the high standard of our College's teaching and professional achievements and reputation.

We started humbly in 1971, 50 years ago, as a College of General Practitioners and we changed our College's name to College of Family Physicians to stress the medical care of Family ethos focused by our College members.

In the early years, the College used to arrange lectures in the evening. Who would believe that over the years the College arranges the lectures, training and examinations for post-graduate doctors who are planning to take different examinations for example:

GDFM, MMed(FM) and FCFP(S)

I must congratulate all the doctors who are helping the College in the planning, teaching and examining all our post-graduate candidates for the different examinations. Their dedication is outstanding.

We also have to thank the Academy of Medicine leaders for inviting the Fellows of our College to form a Chapter of Family Physicians in the Academy. Our current Academy leaders, led by Dr Teo Eng Kiong, are even supporting the Fellows of FP to be classified as specialists. Discussions are on going and it is our hope that the Ministry of Health and the Specialist Accreditation Board will accept the Fellows of Family Physicians as specialists. Apparently, the Hong Kong and Malaysian Ministries of Health have already done so. It is not the prestige that matters but it is the recognition that is important. This will attract more young doctors to undergo the FP post-graduate training and examinations and exit examinations. As our population gets older, we need more Family Physicians with specialist training to manage this important aspect.

The MOH need not fear about the Family Physicians raising their fees. ALL doctors must remember Sir William Osler's wise words:

"The practice of medicine is an art, not a trade, a calling, not a business, a calling in which your heart will be exercised equally with your head."

These words were edged on a stand at the entrance of our College. It was my Council and I who felt that those words are important throughout our career. We must practise medicine with compassion, integrity, humility, professionalism and life long learning for the good of our patients.

DR ALFRED LOH WEE TIONG

President (1993-1999),
College of Family Physicians Singapore

Fifty years ago, a group of farsighted family doctors got together to form the College of General Practitioners, Singapore (CGPS) with the assistance of more mature colleges overseas in the UK and Australia. Our pioneers had to contend with rather negative sentiments from their colleagues in the public service and even the university in those early years. Despite these naysayers, the early Singapore College Councils pursued the policy of continuing medical education and practice upgrading for its members.

All these early efforts began to pay off in these last two decades. With increasing awareness and acceptance of the important role the family doctor plays in the holistic care of the individual and the community as well as in adopting increasingly higher standards of postgraduate courses and examinations, the discipline of Family Medicine is now widely accepted here. The recognition by the Singapore Medical Council of the Graduate Diploma in Family Medicine (GDFM) and the Master of Medicine in Family Medicine [MMed(FM)] bears testimony to this. The College of Family Physicians Singapore has achieved much especially these last 2 decades.

In his recent 50th Anniversary Message, the College President Adj Assoc Prof Tan Tze Lee mentioned the hosting of two WONCA World Conferences by the Singapore College in 1983 and 2007. These reflect the standing the College of Family Physicians Singapore enjoyed in the global family medicine fraternity during those earlier years Maybe it is now timely for the College to extend its vision further afield by working in collaboration with the sister Colleges of Family Medicine especially in the ASEAN Region. Working with the Office of the Asia-Pacific Regional President of WONCA (World Organisation of Family Doctors) may be a suitable approach. The collaboration may take the form of joint research in family medicine, exchange of training materials, conduct of conjoint examinations, exchange of teaching fraternity and even joint colleges conferences in family medicine.

In doing so, the College of Family Physicians Singapore will contribute to the universality and acceptance of the discipline of Family Medicine in ASEAN and the Asia-Pacific Region. This is something I would urge the College to seriously consider as one of its future endeavours.

DR LIM LEAN HUAT

President (1999-2001),
College of Family Physicians Singapore

I was elected President of the 17th Council (1999 to 2001) of the College of Family Physicians Singapore. The outgoing President before me was Dr Alfred Loh. During my term of office, my Vice President was Dr Arthur Tan Chin Lock, and Dr (now A/Prof) Lee Kheng Hock was the Honorary Secretary.

There were several College activities in my term of office that have continued to be important to this day. These were the launch of the College Website, the graduation of the First Cohort of the College Fellowship Programme, and the launch of the Graduate Diploma in Family Medicine programme.

Launch of the College Website [1]
The College Website was first set up in 1994 and was relaunched on 22 May 1999 and the Website is now active and well today. It has presently information on College programmes, CME programmes, Events, Publications, Membership and Links.

Graduation of the First Cohort of College Fellowship Programme [2]
The First Cohort of 8 Fellows of the College successfully passed their Exit Interview on 16 September 2000. They

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received their conferment during the College's 30th Anniversary Celebrations Scientific Meeting in 2001. Today as of 2021, we have 155 Fellows.

Launch of the Graduate Diploma in Family Medicine Programme in 2000 [3]
The objective of the course is "to train FPs/GPs to practise Family Medicine at an enhanced level which is able to meet the needs of the young child, the adult, and the elderly, with emphasis on diagnostic and management skills in the various clinical disciplines." As of 31 Mar 2021, we have 1463 doctors with the GDFM qualification.

College activities in the South East Asia Region during the early 2000s [4]
The Singapore College was active in its work in "helping neighbouring countries such as Myanmar and Indonesia develop the discipline of Family Medicine in their respective countries".

We won the bid to host WONCA World Conference 2007 [5]
2001 was also a lucky year for us. We bid for the WONCA World Conference of 2007 in Orlando and we won the bid by just one vote beating Australia to it. Dr Tan See Leng led the bid. The rest is history.

The future
The is one more milestone to be reached: FM is recognised as a specialty. It will come.

References
1. College of Family Physicians, Singapore. 29th Annual Report 1999 – 2000. CFPS: Singapore, 2000. Launch of College Website: 22 May 1999. Pg 24.
2. College of Family Physicians, Singapore. 29th Annual Report 2000 – 2001. CFPS: Singapore, 2001. The First Cohort of Fellows by Assessment. Pg 28.
3. College of Family Physicians, Singapore. 29th Annual Report 2000 – 2001. CFPS: Singapore, 2001. Graduate Diploma in Family Medicine (GDFM). Pg 7.
4. College of Family Physicians, Singapore. 29th Annual Report 2000 – 2001. CFPS: Singapore, 2001. College activities in the South East Asia Region. Page 7.
5. College Mirror, Singapore. Welcome to Wonca World Conference 2007. CFPS: Singapore, 2007. Pg 1.

A/PROF CHEONG PAK YEAN

President (2001-2007),
College of Family Physicians Singapore

Innovations in FM Training
The College championed Family Medicine (FM) training in Singapore as its *raison d'etre* and thus accepted the challenges of having to develop generalist physicians grounded both in the science and the art of medicine and skilled in handling a plethora of illnesses that span various medical disciplines in breadth as well. Two aspects of the training are highlighted namely, in the teaching of medical communication and humanities (MCH), using a transdisciplinary approach and providing clinical case-based training across the breadth of disciplines.

Medical Communication & Humanities (MCH) for the Generalist Physician
This challenge of medical education and understanding of man himself was highlighted by Dr Wong Heck Sing (WHS) in 1978 in the College inaugural Sreenivasan lecture titled 'The Future of Singapore General Practitioner'. Dr Wong quoted Dr Sreenivasan, the founder president to reiterate 'that the most difficult part in the study of medicine was the study of man himself' and bemoaned the eclipse of the generalist physician (GP) and the fragmentation of care by body systems from specialisation and sub-specialisation.

Dr Wong, who succeeded Dr Sreenivasan as President of the College, noted that 'education today is essentially a study of the human body per se… (The GP) needs a broad education and should not concentrate mainly on the physical and biological sciences to the exclusion of the humanities and the arts… His understanding of people may be drawn from the reading of novels, biographies, poetry and plays and from the visual arts and this understanding will heighten his sensitivity to the feelings of his fellow men in later life'. Dr Wong observed that 'Those that do go into general practice have to learn by trial and error'.[1]

3 books on Medical Communication & Humanities

These words are prescient. When I started community practice in 1980 after completing my clinical training in Internal Medicine, I was recruited by my good friend A/Prof Goh Lee Gan, into the nascent FM teaching fraternity though I had no formal FM training. I realised the gaps in my clinical skills – that I have to be equally adept at engaging the mind, which every patient has (sic) and caring in the context of his/her family in the community. I taught FM as best I could from what learnt from patients and caught from observing my FM colleagues.

I felt inadequate. So, in 2005, I decided to learn from the psychotherapy fraternity in Singapore about mind matters, did a Masters then practiced and taught psychotherapy. My mission is to develop methods to train the family physicians into the generalists envisaged by our forefathers.

Together with A/Prof Goh and Prof Kua Ee Heok a doyen of the psychiatric community, we developed a counselling method for doctors we termed 'Brief Integrative Psychological Therapy' (BIPT)[2] as documented in a book in 2015. Though BIPT provided basic elements of counselling, we found that most doctors steeped in the biomedical paradigm of evidenced based medicine (EBM) of the body are not able to parallel process EBM and NBM (Narrative Based Medicine) and therefore still choose to refer patients with psychosocial problems to professional counsellor because they feel that they do not have enough counselling skills and training. Moreover, the limited consultation time do not allow the incorporation of BIPT routinely.

A/Prof Goh and I had the opportunity to teach the BIPT system we developed to medical students in their FM posting in concert with a team of counsellors in the Counselling and Care Centre since the 2011s, for about a decade now. We shifted the consultation paradigm of actuating both the rational and intuitive mind together to extend only parts of the usual consultation methods when needed and if needed while keeping the usual flow as default. Together with Dr Ong Chooi Peng, we wrote a second book, 'The extended consultation: talk matters!'[3] We found this approach valuable for both students and doctors. We exposed FM residents and doctors in work-shops, in the Family Practice Skills Course (FPSC). We had the opportunity to present our experience and lessons learned in the Asian Pacific WONCA Conference in Kyoto May 2019.

Dr Ong and I then wrote a third book[4] going beyond NBM to encompass Illness Experience as pictures drawn by medical students with reflections and commentaries by experienced doctors. These Illness narratives expressed in prose is used in the practice of Illness Based Medicine' (IBM). Other channels of human communication to express the illness experience are poetry, pictures and even performance. We have recently integrated the tools of the extended consultation with the Kolb's experiential learning cycle for reflective observation (extended history, examination and investigation), abstract conceptualisation (Formulation) and experimentation (Psycho-social interventions).

We believe we now have the tools to actuate Dr Wong Heck Sing clarion call made in 1978 to have a system to teach the family physicians to go beyond the body to care for the whole person and 'not have to learn by trial and error'.

Clinical FM Teaching
The other challenge in FM training is teaching using a good case-mix and real patients. GP postings for medical students started soon after the College was formed and the training was structured in 1987 when the FM was taught in NUS. Post-graduate chair-side teaching started with the MMed (FM) traineeship programme in the early 1990s. The postings included a three-week full-time attachment to private general practices. These attachments provided a vista of how community practices function and

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more important learning and catching FM precepts from experienced physicians. These clinical attachments were soon discontinued because of administrative and financial reasons after a few years.

The need to provide clinical case-based experience for private practitioners in a 2-year part-time programme that started in 1995 led Dr Julian Lim, Dr Chan Nan Fong and I to develop the ambulatory care round tutorials based on the trainees' own portfolio of patients. Use of the portfolio-based learning provided valuable clinical experience and contextual learning.

The advent of the FM residency programme in 2011 was another fillip. Clinical postings were arranged to both private and public FM clinics and hospital departments. Experienced FM physicians were attached chair-side as perceptors. Convivial interactions of young residents and matured FM physicians were documented and published.[5]

The College was founded in 1971. 50 years thence, the College has geared FM training to produce doctors who practice with both Art and Science and to span the breadth of clinical specialties as well.

References

1. Wong HS. The First Sreenivasan Oration, 1978. The Future of Singapore General Practitioner URL: www.cfps.org.sg/assets/Sreenivasan-Oration/1978-Sreenivasan-Oration-Dr-Wong-Heck-Sing.pdf. Accessed 2021, Aug 21.
2. Cheong PY, Goh LG, Ong CP. Counselling within the consultation: Brief integrative personal therapy. Singapore: Internal & Family Medicine LLP: Singapore, 2015.
3. Cheong PY, Goh LG, Ong CP, Ser JS. The extended consultation: talk matters! Singapore: Wens Holdings PL:Singapore, 2017.
4. Cheong PY, Ong CP Ed. Being Human - Stories from Family Medicine College of Family Physicians Singapore. College of Family Physicians, Singapore: Singapore, 2019.
5. Lim JLK, Cheong PY, Chan NF. Experience with Portfolio-based Learning in Family Medicine for Master of Medicine Degree. Singapore Medical Journal 1998; 39 (12) : 543-546. URL: https://scholarbank.nus.edu.sg/handle/10635/31794

A/PROF GOH LEE GAN

President (2007-2011),
College of Family Physicians Singapore

Congratulations to you, Tze Lee and your Council for being at the helm as we celebrate the Fiftieth Anniversary of the formation of the College of Family Physicians, Singapore. On an occasion like this, it is nice to reflect on the events of the day that were and may be still significant. I will like to share the experience of hosting the two WONCA World Conferences that Singapore was privileged to be given the honour to host.

WONCA World Conference Singapore 2007

I was President for the period of 2007 to 2011. The year 2007 was the year that the Singapore College hosted a WONCA World Conference for the second time. Dr Tan See Leng was the Host Organising Chairman and he was interviewed in College Mirror of the day by Dr Shiau Ee Leng. See Fig 1. It was a journey of ten years, recounted Dr Tan. Nevertheless, it was a successful Conference and thanks are due to him and his Team. We initially bided in 1997 to host a World Conference but lost to the Americans who went on to host the 2004 World Conference in Orlando. We bided again in 2001 in Durban and this round we beat Australia to host the 2007 World Conference by just one vote. In the 2007 World Conference, we also had a Trade Exhibition organised and our late Dr Paul Chan Swee Mong was the Chairman of Exhibition Committee, the second time.

WONCA World Conference Singapore 1983

The 1983 World Conference was Singapore's first foray into hosting a World Conference in General Practice/ Family Medicine and I look back at the event with a fair bit of nostalgia. I was relatively young then, in my late 30s, and

people at the helm were Drs Alfred Loh, who was Chair of the Host Organising Committee and Lim Kim Leong, Moti Vaswani, Paul Chan (deceased), Victor Fernandez (deceased), and Fred Samuel (deceased) who filled the various posts. I was given two tasks as a newly enlisted member of the Host Organising Committee – one was to help Dr Paul Chan in setting up the Trade Exhibition in Hotel Mandarin Car Park which turned out to be a huge success; we occupied all the 4 floors. The second task was to run the Publications Committee. We made a special impression of being the first WONCA Conference to have the Proceedings ready at the start of the Conference. The Proceedings were edited by Drs Patrick Kee, Lim Kim Leong, and me with help from other members of the Host Organising Committee.


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PRESIDENT'S FORUM

Welcome to Wonca World Conference 2007

by A/Prof Goh Lee Gan, President, College of Family Physicians Singapore

On behalf of the College of Family Physicians Singapore, I am pleased to welcome all our family physicians and their significant others, both in Singapore and worldwide to the Wonca World Conference 2007. The theme "Genomics and Family Medicine" is

growing numbers of people living into their 80s and 90s, there is a need for convergence of hospital specialist care with community based family physician care. We have shifted from the paradigm of learning and practising simple things to relevant and even complex things.

FIGURE 1. College Mirror Welcoming Participants to the Singapore Wonca Conference in 2007. (Source: CFPS, 2007)

The 1983 Conference was important to Singapore in introducing ourselves to the world of Family Medicine and that marked the beginning of the journey culminating in the Family Medicine postgraduate training programmes we know today. At the 1983 Conference, Dr Lee Suan Yew was our Singapore speaker in one of the Plenary sessions and he spoke on "Challenge of Family Medicine in South East Asia", a pertinent topic of the day. The rest is history: we met the challenge in Singapore and so have the countries in South East Asia.

MMED (FM) 1993, Fellowship 2000, GDFM 2002

With the WONCA Conference of 1983, General Practice/ Family Medicine as a discipline began to attract attention and in 1987, the discipline became a subject in the Undergraduate MBBS Programme. The Master of Medicine in Family Medicine was set up in 1993, Fellowship in 2000, and GDFM in 2002. The details and progression have been covered in Dr Lee Suan Yew's write-up.

Into the Future

The recognition of Family Medicine as a specialty will be the next milestone.

A/PROF LEE KHENG HOCK

President (2011-2017),
College of Family Physicians Singapore

50 Years of Nurturing Talents for Family Medicine

Why do you choose Family Medicine?

I remember the bad old days when we always had more vacancies than applicants in Family Medicine. Sitting in the "selection" panel was often a humbling experience. I remember interviewing one particular candidate more than a decade ago.

You know we always ask the standard obligatory question during selection interviews.

"Why do you choose Family Medicine?" Then we wait for the recorder to click and the standard well-rehearsed answers to play.

"I want to take up a traineeship. Oh…I like the office hours with no night calls. I want to go home in the evening to cook for my family."

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No other reasons were given when we probed. She didn't know Family Medicine from the Family Guy.

I kid you not. She didn't mince her words with euphemisms like "a better opportunity for work-life balance" or a more "humanistic career".

The moment she left the room we looked at each other in amusement tinged with sadness. She was the last few to be interviewed and we are still about 30% short of our quota. Everyone in the panel was shocked when I differed and voted to accept her into the traineeship. I told them that I respected her honesty and also pointed to the obvious fact that we need to train more family physicians and that at this rate we will never reach critical mass. Any willing candidate is precious to me at that time.

The rest of the selection panel were flabbergasted and protested, citing the usual things like the need to maintain high standards and more basic virtues like self-respect for our discipline. I dug in my heels and refused to budge. It was late in the afternoon and they were too tired to prolong the argument with me. They relented and she got in. I followed her career. She was not brilliant but she was diligent. There were a few close calls but she persevered. Today she is an outstanding clinician leader in a public institution and is a good teacher. I am glad I decided to be disagreeable at that moment so many years ago.

We have Family Medicine departments in all our medical schools where we find increasing numbers of academic Family Physicians who are making cutting edge contributions in research and education. We have gained the respect and recognition of our specialist colleagues in the Academy of Medicine Singapore.

The tide has turned

These days the tide has turned and we have overwhelmingly more candidates than training positions. Notwithstanding that the need for well-trained family physicians had gone up, I hear that we are still leaving vacancies unfilled. Now it was my turn to be flabbergasted. I hear the same old argument about having to maintain standards and our self-respect as a discipline. I personally know some of these candidates who were rejected. They may not be blessed with Winstonian oratorical skills or impressive grades. But I know that they are good doctors and if given even half a chance, will turn out to be excellent family physicians. Almost all of them were as good, if not better than the candidate that I insisted on accepting more than a decade ago.

Human capitalization rate

Recently I come to learn about the concept of human capitalization rate and suddenly I understood what was bugging me all these years. According to my favourite thinker and author, Malcolm Gladwell, human capitalization rate is the "the percentage of people in any given situation who have the ability to make the most of their potential." If you look at it this way, you can see that the human capitalization rate for family medicine is dismal. Year after year we see large numbers of doctors with good potential to become excellent family physicians drift into the practice of Family Medicine or other undifferentiated fields without reaching their full potential. Malcolm went on to explain that there are 3 reasons that may explain poor human capitalization rate.

Firstly, we wrongly assume that talent is scarce. Essentially, we search with a deficit lens on and cannot see the talent that is right under our nose. We need to adopt a more optimistic, strength-based approach and look for half full glasses rather than half empty ones. Secondly, finding talent alone is not enough. You need to put in the proverbial "10,000 hours" to become excellent. Finally, people may not have the talents that you are looking for but they have their strengths. This is the human potential that needs to be optimally capitalized. More often than not, the strengths can overcome their weaknesses with the right amount of support and training. Innate talent is overrated.

This is not a criticism of the system of training but a commentary on our natural tendency to overlook talent. We also fail to understand that talent is not everything when it comes to human capitalization. It is about maximizing potential as they are found. My take on what the College had been doing for the past 50 years is about helping Family Physicians train to the highest level that they wish to and practise at the top of their licence. This in turn had made tremendous contributions to our health care system and our nation. I shudder to think what could have happened in an alternate universe 50 years ago when the men and women of vision had not gone against the tide and created our College. Family Medicine will probably still be a non-entity and we are stuck in the 1970s mode of hardworking but untrained GPs trying their best and totally neglected.

Today, we have a better system in place thanks to the visionary leaders and passionate members of our College. The Government Outpatient Service has evolved into Polyclinics that provide state of the art care in chronic disease management. GP clinics are better organized in networks and are making critical contributions to the public sector through many government subsidy schemes that are inclusive of FPs in private practice. Community hospitals had sprung up that are staffed by Family Physicians providing inpatient care to patients with complex health and social care needs. Even acute hospitals have Family Medicine units that work on transitional care and population health initiatives. We have Family Medicine departments in all our medical schools where we find increasing numbers of academic Family Physicians who are making cutting edge contributions in research and education. We have gained the respect and recognition of our specialist colleagues in the Academy of Medicine Singapore.

Family Medicine as a Specialty in Singapore

In 2017 the College of Family Physicians Singapore was invited to assist in the formation of a Chapter of Family Medicine Physicians. We are now at the threshold of being officially recognised as a specialty. A joint workgroup of the CFPS and AMS will be presenting a formal proposal to the Specialist Accreditation Board to recognize Family Medicine as a Specialty in Singapore. This may yet be the most fitting accolade to the 50 years of contribution made by the College of Family Physicians Singapore.

CM

New Member of the 28th Council

Interview with Dr Hu Pei Lin

Interviewed by Dr Fok Wai Yee Rose, FCFP(S), Editor (Team A)

CFPS welcomes our new Council member, Dr Hu Pei Lin.

College Mirror (CM): Thank you Pei Lin for agreeing to serve in the 28th CFPS Council. What are your thoughts when you were first invited to join the Council?

Dr Hu Pei Lin (HPL): I was really honoured when invited to join the Council. Many of the Council members are role models and old friends. I was excited at the thought of being able to 'see' them virtually and work with them again. I have benefited from the College's training programmes in the past, all the way from GDFM modules to the FCFP(S), so I am also happy for the opportunity to give back.

CM: What do you envisage in your role & task in the Council?

HPL: My role is to give input on matters affecting the broad primary care community, as well as issues pertaining to the running of the College; and serve in subcommittees that may be drawn up as and when required. I work in SingHealth Polyclinics, so I hope to be able to share my perspectives based on my experiences working in the public sector.

CM: Are there any areas that you would like to advocate for?

HPL: I would like to advocate for two areas at the opposite spectrum of care. The first area is maintaining a lifestyle free from disability for the elderly and those who will be elderly soon. The other is care of the newborn and their parents, and especially follow-up of the mental and physical health of the parents. This is a topic very close to my heart.

CM: As a working Mum and clinic director of Marine Parade Polyclinic, do you have any concerns in terms of time and commitments?

HPL: I have a 4-year-old and a 1-year-old, and meetings that occur in the evenings also coincide with the busiest time in the household (dinner, bath, extreme negotiations, some warfare, and finally bedtime). Thus, I'm really grateful for the ability to "meet" virtually.

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(continued from Page 11: New Member of the 28th Council - Interview with Dr Hu Pei Lin)

CM: Can you share your goals and plans for the future?

HPL: I work as the clinic director of a polyclinic, so my immediate goal is to really get my clinic colleagues to bond and move forward as one; and strengthen our work with other partners in the community. When things are less hectic at home, I want to take up more of the graduate diplomas in important areas like mental health and palliative care. Unrelated to work, I want to learn watercolour painting and roller-blading.

Change of Censor-in-Chief

Interviewed by Dr Fok Wai Yee Rose, FCFP(S), Editor (Team A)

College Mirror (CM): Dear Dr Paul, a big thank you for being Censor-in-Chief of the College of Family Physicians since 2015, where you played a key role overseeing and setting the standards in all the training programmes conducted in the College of Family Physicians, Singapore. These include the Graduate Diploma in Family Medicine, Master of Medicine (Family Medicine), Collegiate as well as the Fellowship of the College of Family Physicians Programmes.

Dr Paul Goh

Dr Darren Seah

As you pass on the baton to the incoming Censor-in-Chief, Dr Darren Seah, we wish you all the best as you continue to contribute as Council member, CFPS and advisor to our training programmes.

Dear Dr Darren, we welcome you as our new Censor-in-Chief (CIC) of the College of Family Physicians. May we know your thoughts when you were invited as CIC?

Dr Darren Seah (DS): I was deeply humbled, honoured and occasionally intimidated by having to wear these shoes which have been filled by many well respected and illustrious family physicians before me. Frankly there are probably others more qualified than me for this as they have had more experience with the Censors board previously. But I'm happy to support the College in anyway.

CM: We understand that you are the Director, Family Medicine Development at National Healthcare Group Polyclinics. Does this experience place in a favourable position to further develop Family Medicine training as CIC?

DS: I understand that the position of CIC is fundamental in College's mission of providing postgraduate education to family physicians and I hope to serve Council and members well in this role. Hopefully my own work experiences helming medical education in NHGP will come in useful over the next couple of years.

CM: What do you foresee as the immediate task and challenges of your new role?

DS: The immediate foreseeable task is to continue the good work that my predecessor Dr Paul Goh has built. There is some urgency to ensure the smooth execution of the FCFP(S) exams in the coming few months. Once again, there is obviously the challenges of COVID safe management measures but I think we've developed a good system and know-how to run the exit interview securely over the video conferencing platform.

CM: What are your goals and plans for the future for family medicine training?

DS: I would like to think of the future goals and plans in 2 broad aspects. Firstly, faculty development especially looking at enhancing examiner training and standardisation at fellowship exam level and also developing more senior family physicians who can take on this role. This is important given our increasing number of family medicine residents and trainees in the pipeline. One can expect more of them to progress on to fellowship training in future years and we must develop our examination capacity beyond what we have currently. Secondly, I hope to work closely with our course directors of various programs to strengthen and enhance the mechanisms of the evaluation and educational quality improvement such that training in family medicine is brought to a higher standard. Given the emphasis on generalist training, it is imperative to ensure we continue to train family physicians who are mission ready and fit for purpose in all settings that we practice in.

■ CM

President's Column

SEPTEMBER 2021

by Adj Assoc Prof Tan Tze Lee, President, 28th Council, College of Family Physicians Singapore

The College held its 50th Annual General Meeting on 31 July 2021. It was a virtual meeting to comply with the Phase 2 (Heightened Alert) measures. Over 50 members were in attendance, and there was a timely start to the meeting. 2021 is an election year, and for this election the candidates were returned unopposed. We are grateful for the mandate to advocate for the Primary Care and Family Medicine community, and will continue to work hard for you in the forthcoming term. We would like to thank our two Council members who are retiring, Dr Lim Ang Tee and Dr Agnes Koong. Dr Lim represented the College in the Sports Safety Workgroup under Sport Singapore, and Dr Koong was our representative in the Asthma ACG workgroup under ACE, MOH. Their services have been exemplary, and we are indeed grateful for their good counsel, as well as all the help they have rendered to advance the mission of the College. We welcome 2 new members to our 28th Council, Dr Hu Pei Lin and Dr Grace Chiang. We are very glad that they have volunteered to join us, and look forward to their contributions for the coming term.

The College, under its previous name of College of General Practitioners Singapore, was inaugurated 50 years ago on 30 June 1971. In 2021, we will be celebrating the 50th anniversary of the College. In the early days of Singapore's modern history, a group of determined general practitioners had a vision to advance the practice of Family Medicine. Formal training in Family Medicine (FM) leading to the membership of the College of General Practitioners Singapore (MCGP) diplomate examination was started the following year, and in 1974, the Diploma was recognised by the Singapore Medical Council as an additional qualification.

Over the past 50 years, the College developed postgraduate programmes to address the need of our family doctors. Our mission is to ensure that Family Physicians in Singapore are well trained, so as to be empowered to provide good medical care for their patients in the context of the person, the family and the community that they live in.

Our trained family doctors can now be found serving in various settings, in primary care, in community hospitals and even in general hospitals. Many are in leadership positions in our healthcare system, and all have played crucial roles in our fight against the COVID-19 pandemic, providing surveillance, early detection and timely treatment.

To commemorate our 50th anniversary, we worked closely with SingPost on a series of stamps that showcase the achievements and contributions of our family doctors in Singapore. This series of 6 stamps depict our family doctors in various settings, be it in acute medical, chronic disease management, health promotion, community hospital care, pandemic response and medical education and research. We are indeed proud of the achievements of our family doctors over the past 50 years, and as a fraternity, the College looks forward to making even greater contributions to our healthcare services. We have sent a set of these commemorative stamps, together with a custom wireless charger, to all our members as part of our 50th anniversary celebrations! Do enjoy them!

In December this year, the College has also plans for an event to celebrate our 50th anniversary. We are very pleased to announce that our Guest of Honour is Prime Minister Mr Lee Hsien Loong. It is indeed a great honour for the College, and we are very grateful for his support. It is our heartfelt hope that the pandemic situation will improve such that we will be able to hold the celebration as a physical event. Do watch this space!

Early this year, we learned of the death of a Myanmese migrant domestic worker (MDW), who died as a result of maid abuse. We were all very shaken by this news; shortly after, on 24th February 2021, the Ministry of Manpower (MOM) announced that they would be reviewing how doctors report these medical examinations. On 6th August 2021, we received a circular that laid out the changes that will take effect from 29th August 2021. These changes include recording the height, weight and body mass index (BMI) of the MDW and checking for signs of suspicious or unexplained injury. Employers will no longer be allowed to be present during the examination, and these examinations must now be conducted in clinics. All results must also now be submitted to MOM, as opposed to only positive results. There have been many queries posed to the College about these new changes, and we are following up on them with an advisory which will be sent very soon to all members.

Even as I write, we are in the midst of another period of "Heightened Alert". The prolonged stresses and strains have taken their toll on our fellow professionals. A paper published in July 2021 by researchers from the Institute of Mental Health (IMH) found higher rates of anxiety, depression and "burnout" in primary care doctors than pre-COVID.(1) High levels of risks of 'burnout" were also found in a study by National University Health System amongst their staff. Several stressors were identified: the physical and mental stress of wearing personal protective equipment

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(continued from Page 13: President's Column - September 2021)

for prolonged periods of time, the changes in operating guidelines for private clinics, increased workload.[2] In an opinion piece by Dr Tina Tan in the SMA News, she wrote that we should rest well and make a conscientious effort to unwind, be aware of our own needs and talk to someone about it.[3] "If you are not coping well, seek professional help. Each institution in Singapore has peer support, and there are free psychological services for healthcare workers we can access." The psychological effects of this prolonged pandemic has far reaching implications especially in the aspects of mental health. Burnout and Post Traumatic Stress Disorder can affect all of us, and self-care and mutual care are of paramount importance. Let us support each other, and if necessary, seek help as we continue to battle the scourge of COVID-19.

1. Impact of COVID-19 on the mental health of Singaporean GPs: a cross-sectional study: Alvin Lum, Yen-Li Goh, Kai Sheng Wong, Junie Seah, Gina Teo, Jun Qiang Ng, Edimansyah Abdin, Margaret Mary Hendricks, Josephine Tham, Wang Nan, Daniel Fung, BJGP Open 20 Jul 2021.
2. Burnout and Associated Factors Among Health Care Workers in Singapore During the COVID-19 Pandemic: Tan, Benjamin Y.Q. et al. Journal of the American Medical Directors Association, Volume 21, Issue 12, 1751-1758.e5
3. https://www.sma.org.sg/news/year/2020/month/May/psychological-fallout--doctors-in-the-covid-19-pandemic accessed 09082021

CM

Interview with Dr Gyles Morrison

Interviewed by Dr Tan Li Wen Terence, Editorial Team Member (Team A)

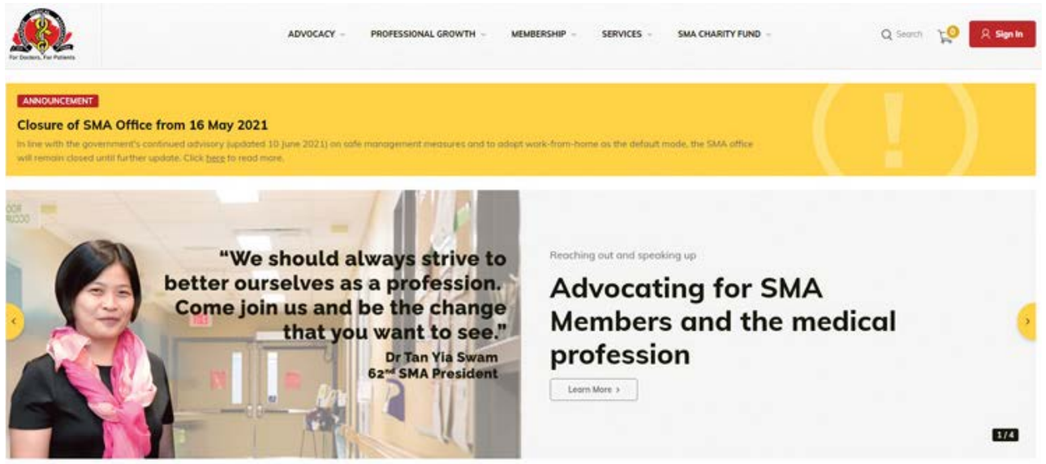
Dr Gyles Morrison has been a Clinical UX Specialist since 2014, after working as a doctor for 3 years. His role involves applying best practice UX, medical knowledge and experiences, and problem-solving skills to improve the design of healthcare technology and services. He specialises in healthcare behavioural science and digital therapeutics which are digital tools that prevent, manage and treat disease. He is also the founder of the Clinical UX Association, the world's leading authority on UX in healthcare.

User experience (UX) is how a **user experiences** and interacts with a product, system or service.

This includes user's perception of ease of use, efficacy and desirability.

Example of bad UX:

You can't tell what this website is about at first glance. Chaotic and hard to navigate.



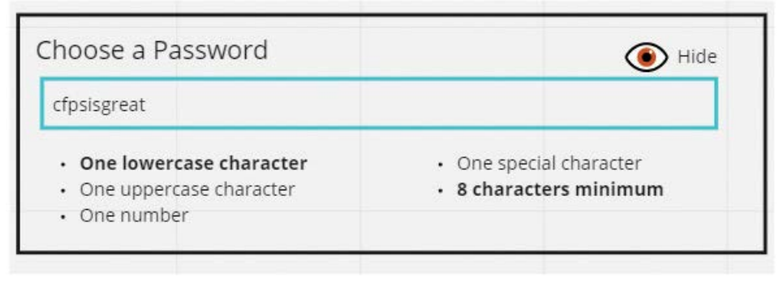
UX for SMA website is better, it is better laid out, and you can navigate with ease.

Example of bad UX:

Passwords

How often have you been asked to create a new password, only to be faced with a blank field?

In this example above, you have no idea what the requirements are, or even what you have typed in!



In this example, you know what the requirements are, which ones you have fulfilled and what you keyed in. This allows you to complete the task effectively.

College Mirror (CM): Hi Gyles, thanks for taking the time to chat! I hope you could give us a rundown on what exactly is Clinical User Experience?

Dr Gyles Morrison (GM): Sure, Clinical UX is about the experiences and interactions clinicians and patients have with healthcare technology and services, that lead to better outcomes. It requires specialist knowledge of healthcare science, services, laws and practices as well as knowledge of how clinicians and patients behave.

CM: Fantastic and can I ask how you got involved with Clinical UX?

GM: I fell into it, to be honest. When I left medicine in 2014, I had worked as a doctor for 3 years. Medicine was my first degree. And apart from a random waitering job at Wembley Stadium, I never worked nor took breaks from studying. So I didn't know about UX let alone Clinical UX.

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I took a job as a Clinical Analyst at a large hospital in London which had me working on systems changes to the Electronic Health Record System, iSoft Clinical Manager. As I worked on the briefs, I conducted research about the problem, explored solutions, then tested them in both a safe and life environment before rolling out the final changes. It was six months into the job when I was introduced to UX by a senior UX consultant training me on how to make prototypes for digital products.

It dawned on me that no one at work talks about UX let alone have UX in the job title. So I wouldn't have been able to learn more there. Therefore, I found mentors, became well-read on the topic, and even enrolled on to a Masters degree program in Human-Computer Interaction with special modules in healthcare. I also shared what I learned with others, and focused on working on healthcare projects, which further strengthened my knowledge of, and desire to work in, Clinical UX.

CM: Thank you for sharing! Given your clinical background, how would you say that UX affects clinicians and the delivery of healthcare?

GM: It affects every single aspect of healthcare, no doubt about it! UX ultimately is about the experiences and interactions people have with anything that has been designed. In other words, anything that isn't naturally occurring. All these interactions are supposed to help people achieve some sort of goal. To be entertained. To stay connected with friends and family. To cure a disease. The list is endless.

In healthcare, we are often having clinicians use technology that doesn't really help them perform their tasks. But they are forced to use the technology they are given as it's part of their job.

And because UX in healthcare is historically bad, many clinicians just expect it to remain as such.

CM: I see and could you help give us an example of maybe a bad UX design for clinicians which has been solved?

GM: Yes, I can think of a great example, although the solution, surprisingly, took a long time to be implemented. When patients need an infusion of very precise medication over a long period of time, this is generally given via an electronic infusion pump. Historically these infusion pumps would have a number pad to input the dose and time. But research has shown that people can make all kinds of mistakes pressing the wrong numbers and not noticing the error, which can harm if not kill the patient. These machines also often store the most recent settings which may not be of any use to the next patient. Again, this has led to fatal harm. The solution is simple; use arrows to change the dose and don't save the data after use! Incorrect dosing has now plummeted as a result.

CM: Thank you for sharing, Gyles. Do you think that the UX of clinician tools has been improving?

GM: Barely. There is little incentive for suppliers to improve, especially EHR vendors because there is not enough competition, the contracts can last a decade, and non-clinicians don't have "clinical UX must be great" as criteria during procurement.

CM: And what do you think we can do to improve things for the future?

GM: A few thoughts come to mind. The first is we need better regulation of digital health solutions that are not medical devices or software as medical devices. The everyday administrative software needs to be regulated too. Further to this, need people who know about UX involved in procurement, which itself should involve truly assessing if the procured products live up to the expectations of the user. Finally, we need people to speak up when they see problems with healthcare technology and services. Silence is very dangerous in this regard, and only falsely convinces suppliers and managers that everything is fine.

CM: Finally, do you think manufacturers should hold some degree of liability for errors stemming from poor design?

GM: Yes, I do. They should go through a rigorous design and testing process to prevent errors in the first place and should insist on being involved in all investigations when an error takes place. Too often error is deemed the result of human input. It's rather offensive to be honest, because if humans are not using the products and services, then we won't achieve anything with them. Products and services don't use themselves! Nor do they design themselves. So yes, the manufacturers need to step up and be involved with optimising efficiency and remove the risk of harm or failure.

CM: Thanks for taking the time to chat with us, Gyles. Would you have any message to any clinicians who are frustrated with their tools?

GM: For sure! If you are frustrated, channel that energy into bringing about change. Connect with people in positions of power to see how you can influence their decision making. Learn from others who are solving these problems that are frustrating you. Be a change maker, don't just complain and let this frustration hamper your ability to do your job. And of course, get in touch with me, I'd love to support you on your journey, as we need more clinicians in digital health and clinical UX.

■CM

The College Mirror is pleased to recognise the winners of the College of Family Physicians Singapore Prize by publishing their essays, titled, "**The GP's role in achieving herd immunity against COVID-19**" for our readers to enjoy.

The GP's role in achieving herd immunity against COVID-19

Fong En Lei, Samuel
Class of 2021
Lee Kong Chian School of Medicine, NTU Singapore

Introduction

Herd immunity is defined as the protection of susceptible individuals against an infectious disease when a minimum proportion of a population is immune against the infection, either through natural infection or vaccination.[1] This allows for protection of individuals to whom vaccination against the particular infectious agent is contraindicated, such as immunocompromised individuals or those at extremes of age.[2]

The minimum proportion of immune individuals to achieve herd immunity, known as the critical proportion, p_c, depends on how infectious a disease is, quantified by the basic reproduction number, R_0. R_0 is the theoretical average number of secondary infections generated by one infected individual in a susceptible population. They are related by the following formula:

$$p_c = 1 - (1/R_0)$$

The assumptions held in this model include that of a well-mixed population, meaning that individuals are all equally likely to come into contact with each other; and that the infectious agent has a constant infectivity with no new mutations.[4]

The COVID-19 infection, spread by the SARS-CoV-2 virus, has an R_0 value of around 2.5-4,[5] which translates to a p_c of 0.75 (75%). Accounting for variabilities such as vaccine efficacy and limitations of using R_0 to model a pandemic, a target of vaccinating at least 80% of our population would be prudent to achieve herd immunity.[6] Achieving a high vaccination rate enables gradual recovery to normality after a pandemic. The eventual goal is for the effective reproduction number, $R(t)$, the number of actual secondary infections generated from an infected individual at timepoint t, to fall below 1.[7]

Ever since COVID-19 arrived at our shoes more than a year ago, multiple strategies have been introduced to control the spread of infection, such as equipping our healthcare workers and upgrading our infrastructure to manage a surge in the number of patients. The vaccination campaign is one of the most crucial components in our arsenal to control the spread of COVID-19 infection in the community by achieving herd immunity more quickly. As compared to natural infection and immunity, vaccinations will reduce the number of unnecessary cases and deaths. Allowing an unregulated spread of COVID-19 infection to achieve natural immunity is also unsubstantiated and unethical.[8]

At time of writing, the Pfizer-BioNTech COVID-19 Vaccine and Moderna COVID-19 Vaccine have been authorised for usage by the Health Sciences Authority under the Pandemic Special Access Route.

General Practitioners (GPs) play an important role in not only engaging the population to improve the acceptability towards vaccination, but also collaborating with authorities to ensure that the rollout will be smooth. The role played by GPs can be outlined in 3 phases: before, during and after the vaccination.

Before vaccination

Screening of individuals suitable for the COVID-19 vaccination and obtaining informed consent are important prerequisites of the vaccination programme.

As our population ages, medical conditions tend to become more complex, and correspondingly the patients' medication list would compound. Certain medical conditions like immunocompromised states from active malignancy precludes one from vaccination at this moment. On the other hand, chronic conditions such as diabetes mellitus and chronic kidney disease requiring dialysis are not contraindications, per se. The GP has a holistic picture of one's health and is thus able to provide contextualised advice on the suitability of vaccination. With GPs integrated into the community setting and family members visiting the same GP as their family doctor, the trust and rapport built allows patients to be more forthcoming when revealing details about their health.[9]

GPs also have the benefit of access to past medical history and an unhurried setting to take a detailed drug and allergy history. Patients may perceive "side effects" to be equivalent to a "drug allergy", a common example being

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gastrointestinal discomfort from augmentin (amoxicillin/clavulanate). Drug intolerance or drug-infection interactions may be mislabelled as allergies especially with beta-lactam antibiotics.[10] Such patients would in turn exclude themselves from the vaccination drive. Mislabelling of a drug allergy has implications not only on COVID-19 vaccination but on one's medical treatment in the long run.[11] Patients may also be unsure about the definition of a severe drug allergy or anaphylaxis, which a family doctor could advise on. Proper evaluation and reassurance by a GP would reduce the number of individuals who "self-exclude" from the vaccination drive, allowing them to benefit as well.

As with every form of medical treatment or investigation, there are indications, benefits and risks to receiving vaccination against COVID-19. Common mild side effects such as lethargy and injection site soreness are well-established.[12] On the other hand, there are reports worldwide of supposed adverse reactions such as paralysis and cardiac arrest after vaccination, of which the causal relationship has yet to be concretely established.

GPs assist in addressing such concerns and beliefs, especially in this climate where everyone has access to a large volume of news via social media, whether true or unverified.[13] Patients would thus be able to make an informed decision weighing the risks and benefits based on information from a trusted source.[14] Having a family doctor to counsel and advise accordingly has been shown to improve the acceptability and uptake towards vaccinations.[15]

GPs are also the bridge between the authorities and patients, helping to disseminate scientific information to the laymen. Guidelines on the suitability of vaccination may vary based on new evidence available. A GP would be equipped to appraise such information and counsel patients accordingly. For example, it was recently announced that patients with a history of allergies to medications, such as non-steroidal anti-inflammatory drugs (NSAIDs), would be eligible to receive the vaccination as long as they do not have a history of anaphylaxis. This group of individuals were previously advised to defer vaccination until further notice.

GPs engage in opportunistic health promotion, one of the four areas to explore in a primary care consultation modelled by Stott and Davis.[16] For patients of which seeking advice for the COVID-19 vaccine is not the presenting problem, GPs could still discuss their suitability for vaccination after the reason for encounter (be it acute or chronic medical issues) has been addressed. This augments the ongoing nation-wide publicity efforts to promote COVID-19 vaccination.

During vaccination

GPs play an important role in the actual rollout of the vaccination programme. GP clinics are well-woven into the community and complement the expanding number of vaccination centres opening up across Singapore. They are also equipped with storage facilities to hold vaccines for a short duration of time (5 days at 2°C for the Pfizer-BioNTech vaccine).[17] The convenience of visiting one's family doctor, who could be as near as within the same HDB block, increases the accessibility of the COVID-19 vaccine especially for groups with reduced mobility like the elderly. The familiarity of someone trusted administering the jab is also a plus factor for those who may be afraid of needles.

GPs also help to resolve logistical issues surrounding the administration of the vaccine. The Pfizer-BioNTech and Moderna vaccines come in vials with 5 and 10 doses respectively, meant for administration to multiple patients within several hours of thawing.[18] It is thus crucial for vaccine recipients to turn up at their appointed time punctually to prevent the wastage of resources. However, there is still a chance of patients not turning up at the last minute, or found to be unsuitable upon final screening at the clinic (e.g. recent fever or a newly diagnosed medical condition). In such a scenario, "backup recipients" would need to be activated to replace the said individual to prevent wastage of the vaccine. A GP who maintains a detailed database of pre-screened individuals in the community would play a key role in activating backups in this situation.

After vaccination

After the vaccination procedure, there are still clinical and administrative responsibilities that GPs fulfil. Recipients are monitored for at least 30 minutes after their vaccination in case of any severe allergic reaction like anaphylaxis which requires prompt attention and resuscitation, albeit being rare. GP clinics in the community have such facilities and resuscitation capabilities. They would also be able to arrange for transfer of care where necessary, such as to the Emergency Department. The more common side effects, such as myalgia, lethargy and fever, tend to linger on for a couple more days after the vaccination. Having a GP located nearby enables patients experiencing such side effects to receive prompt evaluation and treatment, particularly to rule out other causes of such symptoms before attributing it to side effects from the COVID-19 vaccination.

Given that both the Pfizer-BioNTech and Moderna vaccines require inoculation of 2 doses several weeks apart, GPs could facilitate the follow-up for the second dose at patients' convenience while keeping to the recommended dose interval.

GPs also have a role in accurate and timely reporting of vaccination numbers and adverse reactions to the relevant authorities. This enables policymakers to receive the most up-to-date data on the vaccination programme in Singapore, which in turn influences the next steps when it comes to issuance of practice updates and guidelines. The numbers guide the pace at which the rollout of vaccines, in phases, will take place. It also enables policymakers to gradually make adjustments to the various restrictions and safe management measures as deemed appropriate.

Lastly, the psychosocial impact of the COVID-19 pandemic is well-reported in literature.[19] The disruption to our livelihoods brings about a great deal of frustration and influences the wellbeing of the population. Other than administering the vaccine, GPs play an equally important role in addressing such stressors and normalising the uncertainty that we experience as a trusted confidante. After all, GPs are at the frontline, often approached first when patients have pandemic-related concerns.

Conclusion

Herd immunity against COVID-19 is achieved not just by convincing more people to get vaccinated, but also building a supportive infrastructure that allows seamless delivery of the vaccine. It is also important to remember that equally crucial in our fight against COVID-19 are other evidence-based aspects of transmission control, such as safe distancing and mask wearing. The partnership between government agencies, healthcare institutions and the primary care sector is crucial to ensure that Singapore can gradually emerge from the pandemic, and that in our fight against COVID-19, no one gets left behind.

Summary of the GP's role during the COVID-19 pandemic Before vaccination

	Before vaccination	During vaccination	After vaccination
Patient-facing	Assessment of suitability Dispelling myths Opportunistic health promotion	Reassurance of a familiar face Reducing wastage	Monitoring of adverse events Follow-up for 2nd dose and other COVID-related health concerns
Authority-facing	Dissemination of latest information/guidelines	Increased coverage and accessibility to the population	Reporting of vaccination rates and adverse events

References

1. Randolph HE, Barreiro LB. Herd Immunity: Understanding COVID-19. Immunity. 2020;52(5):737-741.

2. Mallory ML, Lindesmith LC, Baric RS. Vaccination-induced herd immunity: Successes and challenges. J Allergy Clin Immunol. 2018;142(1):64-66.

3. Anderson R.M., May R.M. Vaccination and herd immunity to infectious diseases. Nature. 1985;318:323–329.

4. Ridenhour B, Kowalik JM, Shay DK. Unraveling R0: considerations for public health applications. Am J Public Health. 2014;104(2):e32-e41.

5. Riou J, Althaus CL. Pattern of early human-to-human transmission of Wuhan 2019 novel coronavirus (2019-nCoV), December 2019 to January 2020. Euro Surveill. Euro Surveill. 2020;25(4):2000058

6. Teo J. 80% of S'pore's population needs to be vaccinated to achieve herd immunity against Covid-19: Chief health scientist. The Straits Times. 2020 Dec

7. Nishiura H., Chowell G. (2009) The Effective Reproduction Number as a Prelude to Statistical Estimation of Time-Dependent Epidemic Trends. In: Chowell G., Hyman J.M., Bettencourt L.M.A., Castillo-Chavez C. (eds) Mathematical and Statistical Estimation Approaches in Epidemiology. Springer, Dordrecht.

8. Eckerle I, Meyer B. SARS-CoV-2 seroprevalence in COVID-19 hotspots. Lancet. 2020;396:514–515.

9. Kao AC, Green DC, Davis NA, Koplan JP, Cleary PD. Patients' trust in their physicians: effects of choice, continuity, and payment method. J Gen Intern Med. 1998;13(10):681-686.

10. Blumenthal KG, Peter JG, Trubiano JA, Phillips EJ. Antibiotic allergy. Lancet. 2019;393(10167):183-198.

11. Demoly, P., Castells, M. Important questions in drug allergy and hypersensitivity: consensus papers from the 2018 AAAAI/WAO international drug allergy symposium. World Allergy Organ J 2018;11:42

12. Meo SA, Bukhari IA, Akram J, Meo AS, Klonoff DC. COVID-19 vaccines: comparison of biological, pharmacological characteristics and adverse effects of Pfizer/BioNTech and Moderna Vaccines. Eur Rev Med Pharmacol Sci. 2021;25(3):1663-1669.

13. Loomba S, de Figueiredo A, Piatek SJ et al. Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA. Nat Hum Behav. 2021;5:337–348

14. Freed GL, Clark SJ, Cowan AE, Coleman MS. Primary care physician perspectives on providing adult vaccines. Vaccine 2011; 29:1850-4

15. Higuchi M, Narumoto K, Goto T et al. Correlation between family physician's direct advice and pneumococcal vaccination

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intention and behavior among the elderly in Japan: a cross-sectional study. BMC Fam Pract. 2018;19:153

16. Stott NC, Davis RH. The exceptional potential in each primary care consultation. J R Coll Gen Pract. 1979;29(201):201-205.

17. Pfizer-BioNTech COVID-19 Vaccine Storage and Handling Summary. Centers for Disease Control and Prevention. 2021

18. Moderna COVID-19 Vaccine Storage and Handling Summary. Centers for Disease Control and Prevention. 2020

19. Dubey S, Biswas P, Ghosh R, et al. Psychosocial impact of COVID-19. Diabetes Metab Syndr. 2020;14(5):779-788

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Introduction

The COVID-19 pandemic has tested the resolve of healthcare systems globally. In what could be described as the greatest economic and social destabilizer of this generation, General Practitioners (GPs) and other healthcare workers have had to continuously adapt to the ever-changing situation. Now slightly over a year after the first cases were confirmed, the global COVID strategy is gradually shifting toward achieving herd immunity, recovery, and emerging stronger from the global crisis. This essay therefore attempts to highlight the multitudinous roles that GPs can play in achieving these goals, particularly in achieving herd immunity. The present paper defines "GP" as any family physician who practices within an academic medical centre, polyclinic, private practice, or other healthcare institution; whose primary duties are clinical, but may choose to expand the scope of their duties beyond direct patient care. "Herd immunity" refers to achieving immunity against COVID-19 by means of authorized vaccinations, as well as any other measures which directly or indirectly result in a progressive flattening of the epidemic curve in an attempt to 'buy time' for the roll-out of mass vaccination programmes.

Methodology

To identify relevant articles for this essay, a search was conducted on the Medline and Web of Knowledge databases using the following keywords alone or in combination: "family doctor", "family physician", "family medicine", "herd immunity", "immunization", "vaccine hesitancy", "vaccine misinformation", "COVID-19", "pandemic", and "social media". To expand the literature base and diversity of opinions consulted, the Google search engine was consulted using the same keywords to identify relevant news articles and media from reputable sources.

Vaccine Advocacy and Patient Education

As the first point of contact with healthcare services, GPs are well-positioned to encourage vaccine uptake amongst their patients. Two cornerstones of the Family Physician's practice are especially useful in these pandemic times: firstly, GPs offer holistic, comprehensive care to all their patients. Similar to how patients are routinely encouraged by their GPs to receive their annual vaccines in accordance with the National Immunization Schedule, the act of offering COVID-19 vaccines to all eligible patients attending an outpatient GP clinic can be normalized. Secondly, GPs often establish strong therapeutic alliances with their patients, especially amongst repeat or long-term patients. By leveraging on the strong trust that undergirds the physician-patient relationship, GPs can begin a discussion with their patients regarding their suitability and openness to receiving the COVID-19 vaccine. Successful communication should include adequate emphasis on the benefit of vaccinations and the risks of developing severe COVID-19 if unvaccinated (1, 2). By these means, GPs can fulfil the dual roles of vaccine advocate and patient educator.

Addressing Vaccine Hesitancy

However, Vaccine Hesitancy amongst the general public is a large barrier to achieving herd immunity against COVID-19. The Strategic Advisory Group of Experts [SAGE] Working Group on Vaccine Hesitancy states that "*Vaccine Hesitancy refers to delay in acceptance or refusal of vaccination despite availability of vaccination services*" (3). Vaccine Hesitancy has become increasingly prevalent in recent years, and in 2019 was declared by the World Health Organization [WHO] as one of the ten largest threats to public health in view of a resurgence of measles amongst unvaccinated communities (1, 4). In the COVID-19 pandemic, it is expected that vaccine hesitancy will result in a gradual prolongation of the pandemic and continued strain on healthcare systems if it is not adequately addressed.

The SAGE Group acknowledges that "*Vaccine hesitancy is complex and context specific, varying across time, place and vaccines*" (3). Indeed, making the conscious choice to receive a vaccine is a complex decision-making process. The decision is not simply a cognitive one, but a process involving emotional, cultural, social, spiritual, and even political considerations (5-8). While it challenging to comprehend the full range of potential attitudes toward vaccinations, it is all the more necessary to provide tailored advice to address said attitudes if meaningful vaccine coverage is to be achieved (3, 5, 6, 9, 10). Whilst population-based interventions that encourage vaccine uptake are an essential element of the pandemic playbook, a "one size fits all" approach is unlikely to address the concerns of every vaccine-hesitant individual. Previous studies have demonstrated that the most effective interventions to combat vaccine hesitancy involve tailored interventions which addressed the specific concerns of vaccine hesitant groups (11, 12). This is the gap that GPs can attempt to fill – by offering individualized advice to meet patients at their level of hesitancy and understanding.

Combating Misinformation

A related, albeit slightly more nuanced challenge for the family physician is dealing with the wave of misinformation that has accompanied the COVID-19 pandemic. The WHO has popularized the term 'infodemic' to describe the phenomenon of "too much information including false or misleading information in digital and physical environments during a disease outbreak" (13-17). Misinformation surrounding the COVID-19 pandemic as well as the COVID-19 vaccines have been widely disseminated by social media channels such as Twitter and Instagram (13, 18). It was not uncommon to hear claims that the COVID-19 vaccine would alter one's DNA, or that the mass vaccination strategy was part of a wider conspiracy to instil microchips into the arms of vaccinated individuals (19).

Misinformation has the potential to drive the spread of COVID-19, reduce vaccine uptake, undermine trust in science and experts, and perpetuate misleading health advice (1, 20-22). An adequate response to misinformation is likely to require the involvement of multiple stakeholders across numerous fields including but not limited to healthcare, government, and mass media. On this front, GPs can serve as prominent and respected voices in their community, promoting evidence-based vaccine literature to their patients. Prior studies with other vaccines have indicated that receiving advice from healthcare providers or official health sources is an important predictor of vaccine acceptance (10, 23-28). This suggests that GPs should take an active role when promoting COVID-19 vaccine acceptance amongst their patients.

Whilst addressing vaccine hesitancy and combating misinformation appear to be a huge challenge, it also presents a unique opportunity for GPs to engage in respectful discussions with their patients on the most up to date vaccine science. Patients can clarify common doubts and misconceptions, and GPs can tackle misinformation when it arises. These conversations, if handled appropriately, can aid the physician-patient relationship and allow their patients to make an informed decision. In this manner, GPs form an important link in the vaccination chain.

The Public Physician

For some family physicians, the battle against vaccine hesitancy and misinformation is not confined to their clinic. An emerging generation of physicians are taking the firefight to its source, and are combating vaccine hesitancy and misinformation using various forms of mass media.

In the social media sphere, prominent family physicians including Dr Mikhail Varshavski, more popularly known as 'Dr Mike', have established themselves as trusted and authoritative voices on social media platforms during the pandemic. Boasting a following of 4.1 million on Instagram and 6.9 million on Youtube, Dr Mike has produced videos that addressed key concerns relating to the coronavirus pandemic and vaccines, which have reached a wide audience (29). Other family physicians such as Dr Jennifer Bacani McKenney from Fredonia, Kansas, have taken to social media to address pandemic and vaccine-related questions daily (30).

Podcasts are another way to reach audiences beyond one's daily patient load. One example is "COVID-19: Commonsense Conversations on the Coronavirus Pandemic" hosted by Dr Ted O'Connell, family physician at Kaiser Permanente Napa-Solano, California. His podcast aims to educate the public with accurate information on the COVID-19 pandemic, "to combat the spread of disease and the hysteria that may spread along with it" (31). To

(continued on the next page)

(continued from Page 21:The GP's role in achieving herd immunity against COVID-19)

this end, he has conducted interviews with notable leaders in healthcare, public policy, and epidemiology, including former CEO of The Permanente Medical Group, Dr Robert Pearl; and Virologist Dr Ken S. Rosenthal. Examples of topics he has covered include "Getting the Covid Vaccine While Pregnant" and "Vaccine Progress and Mortality Data Updates".

Although literature evaluating the effectiveness of such mass media interventions in achieving herd immunity remains sparse, social media and podcasts continue to be a potential vehicle for the delivery of informative and up-to-date content in the current pandemic (32, 33). This essay also recognizes that maintaining presence as a 'Public Physician' demands time and effort beyond what is routinely expected of a GP's job scope, and may simply not be a feasible role for many GPs to engage in. Rather than be prescriptive, this essay simply wishes to highlight the multitudinous roles that family physicians can play in the race toward herd immunity – becoming a 'Public Physician' is simply one but many of those roles.

Research and Education

Thus far we have mostly considered the roles of GPs who primarily undertake clinical duties; yet there also exists an important role for research and education. GPs practicing within an Academic Medical Centre or with a special interest in academia may be actively involved in contributing to literature on COVID-19 and vaccinations. Even GPs who see themselves in a purely clinical role have an important role to play in the accurate reporting of COVID-19 cases and vaccination data, which will ultimately contribute to public health research (34). As GPs are located in the community, they are able to keep a pulse on the overall health of those whom they serve and can feedback this data to relevant public health authorities. Sutter and colleagues even suggest that family physicians should play an active role in analysing this data together with their colleagues in epidemiology, public health, virology, data science, and relevant hospital specialities (35). Such multidisciplinary contributions have the potential to enhance our understanding of COVID-19 and future pandemics.

GPs may also be actively involved in the education of medical students and residents, holding appointments as clinical tutors or tenured faculty. Beyond sharing their medical expertise with trainees, these educators can offer their first-hand experiences and lessons learnt from dealing with the COVID-19 pandemic, in the hopes that future generations of medical professionals will be better informed and more well-equipped to respond to future exigencies.

Limitations

However, there are certain limitations to the GP's response which should be highlighted. Firstly, we must acknowledge that GPs are presently operating in dynamic and uncertain times; as such, there is some degree of uncertainty as to how primary care will continue to evolve through the course of the pandemic (34). Secondly, one may express reservations as to whether individual efforts of GPs can result in sufficient momentum to create a meaningful impact on herd immunity. However, this essay recognizes that the GP exists within larger networks of experts across a variety of disciplines, which include specialist physicians, epidemiologists, and the local government. Collectively, their common goal is to bring an end to the present pandemic. While no individual can achieve this, each member must play their individual role, to the best of their ability, if we are to effectively turn the tide on COVID-19.

Considering the limitations of the present paper: due to a dearth of information assessing the effectiveness of interventions to improve COVID-19 vaccine uptake, extrapolations were drawn based on other vaccines [which included the Influenza and HPV vaccines, amongst others]. Furthermore, many interventions to reduce vaccine hesitancy either lack compelling evidence or suffer from insufficient evaluation to demonstrate their effectiveness (5).

Conclusion

The COVID-19 pandemic has reinforced the vital role that GPs play in the race towards herd immunity. Despite having to constantly adapt to the demands of this dynamic situation, they have continued to function as the backbone of our healthcare system. Most significantly, this essay has highlighted how GPs are well-positioned to bridge the gap between public health policy and its implementation. The multitudinous ways that GPs can respond highlights their flexibility and resilience in the face of overwhelming uncertainty.

Despite an ever-changing situation, the values that underpin our profession are unwavering – service before self, continuous improvement, lifelong learning, adaptability, resilience, and professionalism. Should the path towards herd immunity become unclear, GPs can fall back on these values to guide their decision making.

Bibliography

1. French J, Deshpande S, Evans W, Obregon R. Key Guidelines in Developing a Pre-Emptive COVID-19 Vaccination Uptake Promotion Strategy. Int J Environ Res Public Health. 2020;17(16).

2. Edson C. Jr T, Hye Kyung K, Edmund W J L, Zhang Hao G. Commentary: Misinformation threatens Singapore's COVID-19 vaccination programme: Channel News Asia; 2021 [cited 2021 6/4/21]. Available from: https://www.channelnewsasia.com/news/commentary/covid-19-coronavirus-conspiracy-misinformation-fake-news-13935382.

3. MacDonald NE, Sage Working Group on Vaccine Hesitancy. Vaccine hesitancy: Definition, scope and determinants. Vaccine. 2015;33(34):4161-4.

4. World Health Organization. Ten threats to global health in 2019 2019 [cited 2021 5/4/21]. Available from: https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019.

5. Dubé E, Gagnon D, MacDonald NE. Strategies intended to address vaccine hesitancy: Review of published reviews. Vaccine. 2015;33(34):4191-203.

6. Dubé E, Laberge C, Guay M, Bramadat P, Roy R, Bettinger J. Vaccine hesitancy: an overview. Hum Vaccin Immunother. 2013;9(8):1763-73.

7. Streefland P, Chowdhury AMR, Ramos-Jimenez P. Patterns of vaccination acceptance. Soc Sci Med. 1999;49(12):1705-16.

8. Hobson-West P. Understanding vaccination resistance: moving beyond risk. Health, Risk & Society. 2003;5(3):273-83.

9. Jarrett C, Wilson R, O'Leary M, Eckersberger E, Larson HJ. Strategies for addressing vaccine hesitancy - A systematic review. Vaccine. 2015;33(34):4180-90.

10. The Lancet Child & Adolescent Health. Vaccine hesitancy: a generation at risk. The Lancet Child & Adolescent Health. 2019;3(5).

11. Fiks AG, Grundmeier RW, Mayne S, Song L, Feemster K, Karavite D, et al. Effectiveness of decision support for families, clinicians, or both on HPV vaccine receipt. Pediatrics. 2013;131(6):1114-24.

12. Mouzoon ME, Munoz FM, Greisinger AJ, Brehm BJ, Wehmanen OA, Smith FA, et al. Improving influenza immunization in pregnant women and healthcare workers. Am J Manag Care. 2010;16(3):209-16.

13. Zarocostas J. How to fight an infodemic. The Lancet. 2020;395(10225).

14. World Health Organization. Infodemic: World Health Organization; 2021 [cited 2021 6/4/21]. Available from: https://www.who.int/health-topics/infodemic#tab=tab_1.

15. van der Linden S, Roozenbeek J, Compton J. Inoculating Against Fake News About COVID-19. Front Psychol. 2020;11:566790.

16. The Lancet Infectious D. The COVID-19 infodemic. The Lancet Infectious Diseases. 2020;20(8).

17. Orso D, Federici N, Copetti R, Vetrugno L, Bove T. Infodemic and the spread of fake news in the COVID-19-era. Eur J Emerg Med. 2020;27(5):327-8.

18. Zhao Y, Xu H. Chinese Public Attention to COVID-19 Epidemic: Based on Social Media. medRxiv. 2020:2020.03.18.20038026.

19. Carmichael F, Goodman J. Vaccine rumours debunked: Microchips, 'altered DNA' and more: BBC World; 2020 [cited 2021 6/4/21]. Available from: https://www.bbc.com/news/54893437.

20. Shahi GK, Dirkson A, Majchrzak TA. An exploratory study of COVID-19 misinformation on Twitter. Online Soc Netw Media. 2021;22:100104.

21. Garrett L. COVID-19: the medium is the message. The Lancet. 2020;395(10228):942-3.

22. Pennycook G, Rand DG. Who falls for fake news? The roles of bullshit receptivity, overclaiming, familiarity, and analytic thinking. J Pers. 2020;88(2):185-200.

23. Yaqub O, Castle-Clarke S, Sevdalis N, Chataway J. Attitudes to vaccination: a critical review. Soc Sci Med. 2014;112:1-11.

24. Bish A, Yardley L, Nicoll A, Michie S. Factors associated with uptake of vaccination against pandemic influenza: a systematic review. Vaccine. 2011;29(38):6472-84.

25. Chung Y, Schamel J, Fisher A, Frew PM. Influences on Immunization Decision-Making among US Parents of Young Children. Matern Child Health J. 2017;21(12):2178-87.

26. Schmitt HJ, Booy R, Aston R, Van Damme P, Schumacher RF, Campins M, et al. How to optimise the coverage rate of infant and adult immunisations in Europe. BMC Med. 2007;5:11.

27. Cooper LZ, Larson HJ, Katz SL. Protecting public trust in immunization. Pediatrics. 2008;122(1):149-53.

28. Leask J, Kinnersley P, Jackson C, Cheater F, Bedford H, Rowles G. Communicating with parents about vaccination: a framework for health professionals. BMC Pediatr. 2012;12:154.

29. Topf JMW, P. N. COVID-19, Social Media, and the Role of the Public Physician. Blood Purif. 2021:1-7.

30. Chiu A. These doctors and nurses battle covid all day. Then they go online and fight misinformation 2021 [cited 2021 6/4/21]. Available from: https://www.washingtonpost.com/lifestyle/2021/02/24/doctor-nurse-online-vaccine-rumors/.

31. Media AL. INTRODUCING COVID-19: Commonsense Conversations on the Coronavirus Pandemic [Internet]: The Ars Longa Group LLC; 2020 17/3/20 [cited 6/4/21]. Podcast: 3:37. Available from: https://open.spotify.com/episode/5qEWNpFBmQbyNFBSvH4Mpv?si=VzkogwF1SEqrxXeSxk-fuQ

32. González-Padilla DA, Tortolero-Blanco L. Social media influence in the COVID-19 Pandemic. Int Braz J Urol. 2020;46(suppl.1):120-4.

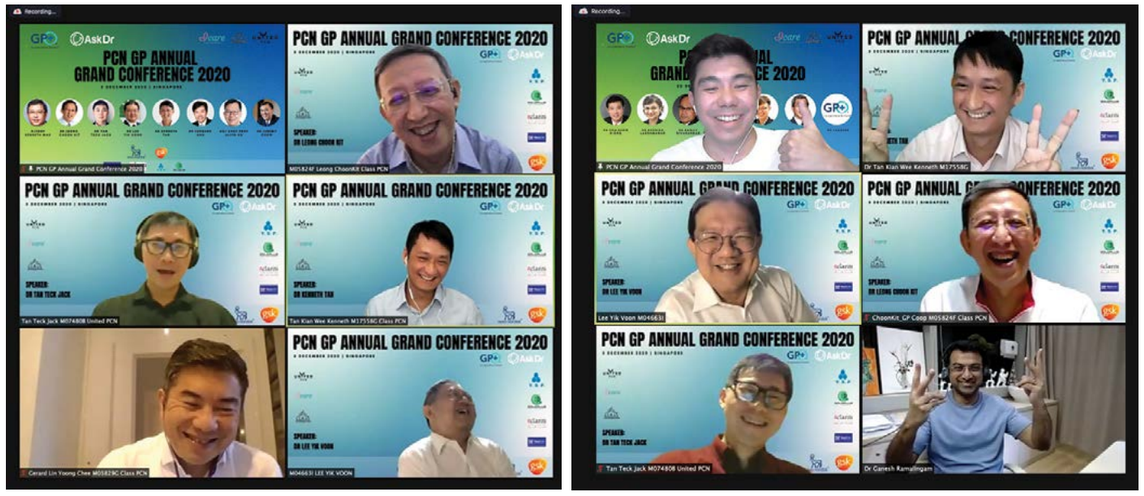
33. Venegas-Vera AVC, G. B.;Lerma, E.V. Positive and negative impact of social media in the COVID-19 era. Rev Cardiovasc Med. 2020;21(4):561-4.

34. Huston PC, J.;Russell, G.;Goodyear-Smith, F.;Phillips, R. L., Jr.;van Weel, C.;Hogg, W. COVID-19 and primary care in six countries. BJGP Open. 2020;4(4).

CM

PCN GP Annual Grand Conference 2020 and Primary Care Grand Conference 2021: Collaboration and Innovation as a Community

by the Organising Chairperson of PCN GP Annual Grand Conference 2020 (Dr. Kenneth Tan) and Organising Chairperson of Primary Care Grand Conference 2021 (Dr. Dinesh VG)



Last year, one of the key events in my calendar was the PCN GP Annual Grand Conference 2020. This inaugural conference was organized for GPs by GPs and held online over 3 weekends in December 2020. Over 30 speakers spoke on a range of topics relating to primary care and this was well attended by Primary Care Network (PCN) GPs.

The idea to organize a conference for GPs by GPs came about from informal discussions between the PCN leaders from Class, i-CARE and United PCN. During the pandemic, GPs received many kind invitations to attend talks and webinars organized by our specialist colleagues. However, there was no conference with a focus on primary care, organized by GPs that covered comprehensively the conditions we manage on a daily basis.

The PCN leaders agreed that GP+ Co-operative would organize the conference, and I was supported by the GP+ Co-operative committee and members in coordinating it. GP+ Co-operative also engaged the health education platform AskDr to help with the event.

Given the rapid changes in the healthcare landscape during the COVID-19 pandemic, including a reduction in clinic capacity due to safe-distancing measures, there was a pressing need for doctors to do more with every patient interaction and optimize patient care.

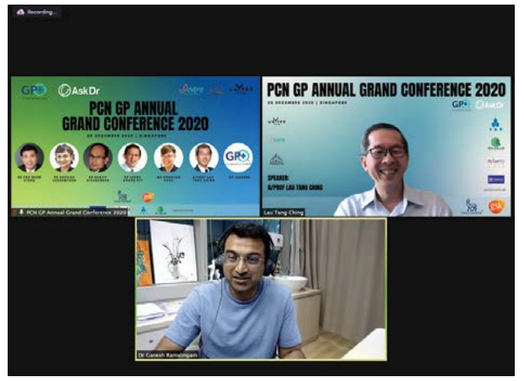
The vision was to create a conference platform for cross-sharing of best practices for patient care. Primary care practitioners and specialists could come together to provide comprehensive, coordinated and team-based care for their patients. For greater relevance to existing ecosystem priorities, conference topics were aligned to conditions listed under the Chronic Disease Management Program (CDMP).

As PCN members were mainly private GP clinics, we sought expert speakers in the private sector that had an interest in closer collaboration with GPs. Many of these specialists are also members of GP+ co-operative or interested in joining GP+ co-operative. We also invited expert speakers from the public sector to share about their initiatives involving collaborations with primary care.

The highlights of this conference were listening to our experts share about how GPs play a key role in the early diagnosis and management of disease, and how we can link our patients with the community resources, allied health professionals, GPs with special interests, and specialist colleagues to improve quality of care.

Within the disease-specific ecosystem, close communication between GPs and specialists can enable co-management of patients, and referrals that go both ways. Improved access to specialized investigations and point of care testing at the GP clinic helps GPs manage patients more effectively and coordinate the patient's journey.

Continuing the conference series, the Primary Care Grand Conference 2021 was held on 24th July which focused on Innovations in Primary Care. Speakers presented the latest developments in digital health, pharmacogenomics and novel therapeutics relevant to primary care. This opened many new conversations and potential collaborations between primary care practitioners and the providers of these innovative solutions, for the betterment of patient care during COVID-19 and beyond.



One of the challenges we faced was improving engagement among participants and bridging the distance of the virtual format. Aside from keeping updated on latest developments, attending CME events often provides treasured opportunities to catch up with old friends and interact with new colleagues to form collaborations for patient care.

We sought to create a virtual experience that provided attendees with similar opportunities by developing new modules with AskDr to facilitate forum-style interactions between the attendees and speakers in the lead up to the event as well as during the event. These were organised in virtual micro-forums along with an asynchronous poster presentation portal for health innovations submitted from researchers and start-ups participating in this conference. These innovations served to catalogue discussions and extend the long-tail impact of CME sessions through continued access, opportunities for interactions, and partnerships post-events.

As the pandemic rages on, many of us in primary care have started to see patients present as a result of the impact of prolonged social restrictions on mental health and wellness, with the latter extending to individual fitness given the closure of gyms and other facilities, women's health as well as men's health. In the next iteration of the conference, GP+ co-operative plans to curate topics that will address these challenges, for sharing of best practices in primary care to address them. We hope this will be in the interest of our fellow colleagues and we look forward to your continued support!

CM

Difficulties and Ethical Issues during COVID-19 Pandemic: *A FP's View*

by Dr Ng Chee Lian Lawrence, FCFP(S), Editorial Team Member (Team A)

Aim: To stimulate readers to think about ethical aspects of care, especially during the early days of the pandemic in 2020. Articles such as this do not make conclusions for the reader. It can only point the direction and it is up to the student or reader to think through the issues and the reasoning. He can then make his own decisions and form his own views. Secondly, it is a starting point for research ideas in Singapore about our experiences, solutions and public health policies related to COVID-19 and future pandemics.

Abbreviations
HCWs: healthcare workers
GPs: general practitioners
PPE: personal protective equipment
Swab: refers to swab for diagnostic testing of COVID
PHPC: Public health preparedness clinics

In Singapore, as GPs, we are located in housing estates, polyclinics or shopping centres. Unlike hospitals, we are much closer to the ground. We don't have layers of bureaucracy to shield us from the unhappiness of the public on the ground. It can be stressful when unhappy things happen unexpectedly in the clinic. (1)

As in the movie Wizard of Oz (1939), during the past 18 months, we have been caught up in a whirlwind with many things changing every day. Even while we cannot travel anywhere, the cheese has moved and carpets pulled from

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under our feet. Things are being torn apart by the winds of change and we wake up to realise that "We are not in Kansas anymore".

ETHICAL DILEMMAS

Especially in the early days of the pandemic, when there was uncertainty in patient care, doctors were told to "just do the best you can " without any help in ethical reasoning. (2)

As suggested by Sese, the priorities of HCWs seem to be torn between 2 competing ethical obligations which needs to be held in balance:

1. Duty to care. Relief of suffering, respect for rights and preferences of patients.
2. Duty to promote Equity and Equality in the distribution of the provision of care in society and the focus of public health services. (3)

Many of the issues encountered in this pandemic involve the balancing of rights, principles and values. In a French Cancer Centre, this conflict has been described as the Deontological vs Utilitarian approach. More than ever, we need greater ethical clarity in the decision-making process. Perhaps, a kind of "ethical watch" can help promote collegiality by meeting with ethics units for, say, each Primary Care Network of GPs or each polyclinic cluster. This may help in dealing with isolation, with the greater need for collegiality & interaction with fellow doctors. (4)

Traditionally, English-language biomedical ethics consists of 4 principles with autonomy being the crux of most ethical discussions since freedom of the individual is most highly cherished in the west and western literature dominates the world medical landscape. The other three principles are often not as contentious and are less attractive and less volatile but no less important: beneficence (do good), non-maleficence (do no harm to others) and, particularly relevant in a pandemic, social justice. As found in an Ethiopian nurses' review article, these traditional 4 basic principles of biomedical ethics, when challenged by the severe stresses of the COVID-19 pandemic, seem to create more ethical difficulties compared to during normal times or in less infectious disease situations. (5)

THE ASIAN ETHICAL APPROACH - A VIABLE ALTERNATIVE

Person-centred approach seems to have been overtaken by population-health approach. The (utilitarian) approach of "greatest good for the greatest number" seems to blanket over the approach that "everyone has the right to the best healthcare". It seems these 4 principles need to be balanced by another principle of relational ethics which is commonly found in East Asian Confucian societies, which does not emphasize autonomy. One author (Li) has "criticised Western discourses for their one-dimensional emphasis on individual autonomy and the idea of free choice… in which individuals can be separated from social context, relationships and even from… the human condition that is vital to human life, such as mutual care". Rosker went on to describe the relation between different models of ethics and their impact on crisis solution strategies against current and future pandemics, some ethical models from Confucian philosophy. (6)

All over the world, the once-inviolable patient-centred medicine is being prioritised below the health of the community. This change is taking place even while we are unwilling to admit it. (7)

Most Asian HCWs are less disturbed by this change as compared to Westerners. Traditionally, Asians give priority to family and society, giving social harmony and societal wellbeing a position equal to or even above the interest of the individual self. This is a topic for another article, but it is a wonder how the western priority of autonomy crept into Asian medical ethics and took top position on the totem pole. In fact, how did the 4 pillars of Beauchamp and Childress stealthily crept into and subjugated our Asian biomedical-ethical thinking which used to be family-centric (medical decision-making used to be a family-oriented affair) and the individual as a unit of society, rather than as an island unto himself. This has a great impact on how we approach end-of-life issues and on how Advance Care Planning is to be conducted and recorded. In a pandemic where so many are hospitalized, where relatives are not allowed to be present at the bedside of a loved one dying of COVID, this is longer an academic exercise but a matter of great relevance and urgency. No one knows who is the next victim of COVID even with vaccinations completed. Anyone of us can be the next person to die with a confused mixture of medical ethics, neither here nor there.

Another term which helps in ethical reasoning amidst the clash of traditional ethical principles is the ethical "lens of solidarity. Solidarity arises from a recognition of similarity in mutual vulnerability and interdependence and manifests as shared practices that reflect a collective commitment to carry costs to assist others for a common good. (8)

In fact, Solidarity is the name of one of the supplementary budgets in one of the relief budgets by the Singapore government. (9)

DO ETHICAL PRINCIPLES APPLY TO THE PUBLIC AS WELL?

The member of the public also has ethical duties. They may carry and spread the virus and, hence, are active players in a pandemic. Before falling ill, they are not passive recipients of care. They can go out there and do some damage unwittingly. We need to recognise that anyone's behaviour or refusal to behave has implications for their health and that of others. Hence, it is no longer "live free or die" but rather "live free with the consequences to the health of others". If we apply the traditional principles of ethics, it will look something like this:

1. Beneficence: individuals acting for greater good by practising social distancing, accepting travel restrictions and wearing a mask.
2. Non-maleficence: individuals preventing harm from coming to others by not breaching stay-at-home orders
3. Autonomy: there are limits to an individual's freedom. In accepting these limits, individuals allow others to have greater freedom in the long run.
4. Justice: by practising the above, individuals are acting justly for the common good. (Goh LG. Personal communications 2020-07-03)

WILLINGNESS TO WORK

(Beesan Maraqua)

In a Palestine study about the willingness of HCWs to work, the author states that it is a common belief that those delivering healthcare have a strong obligation to perform, often in the face of personal danger. It is a duty that is enshrined in the professional code of conduct. (10)

However, in any emergency event involving contagion or contamination, as in the COVID19 pandemic, there is the potential to alter HCWs willingness to work for reasons such as increased workloads, shortage and low-quality PPEs, fatigue, ambiguous work settings, rapidly changing guidelines, fear of catching infections themselves or infecting their families and psychosocial burdens of the pandemic. Hence, there is an ethical dilemma in balancing their ethical duty to care against their fears and concerns of catching COVID-19 and spreading it to their patients and families, as well as coping with constantly changing recommendations which can increase such concerns. (10)

Some doctors refuse to see certain patients e.g. putting up a sign at their doors to tell patients with ARIs to go elsewhere to seek care. They discharge themselves from such work, causing others to carry the increased workloads. Fortunately, in Singapore, due to the past experience with SARS, we have a huge network of PHPC (outbreaks-prepared) clinics who have committed themselves to stay open to manage cases during an outbreak. Part of the agreement is that the government will provide them with essential resources such as PPE which helps to reassure and boost the morale of HCWs.

LEARNING FROM SOCIAL WORKERS ABOUT STRESS REACTIONS

In an article about ethical challenges to social workers (involving 54 countries), support from employers is vital and they need to monitor the levels of stress among staff.

Like GPs who have to deal with psychosocial issues of patients, during this pandemic, social workers have to listen to a lot of people crying. Closing of social work offices led to increased working from home which led to greater use of telephone counselling. However, clients may not have handphones or are unable to use technology. There is the loss of touch as a gesture of caring and reassurance. Social workers have expressed the need to engage in ethical reasoning in each case. Some have said that there was no colleague immediately available to consult or seek advice and support. (11)

PERCEIVED STRESSORS

In the Palestinian study, 72% of HCWs had increased anxiety and stress, due to many factors such as long gruelling hours and fear, lack of availability of nurseries during country-wide lockdowns, sick elderly parents at home who need home care. Women need special mention as they do the delicate balancing of work and family obligations, taking care of children and elderly parents at home. Some HCWs harbour feelings of being exploited due to long working hours, a lack of appreciation and recognition, "not even a word of thanks". (10)

It is important for employers and government bodies to note that there needs to be a recognition of HCWs with chronic or immunosuppressive disease who could or should have been relieved from certain duties since they are more vulnerable to severe illnesses if infected. (10) This is something older GPs and those with chronic diseases wished to express when all PHPC clinics were invited to participate in "swab-and-send-home" (SASH) testing which increases the risk of contracting the virus at work.

Most felt the duty to work but raised concerns about their safety, raised questions about their allegiance to the Hippocratic oath and principles under which HCWs generally conduct themselves. Most HCWs wanted support during COVID-19; "(we need you to) hear me, protect me, support me, care for me". (10) Those with a lower perception of stress were more willing to work. Emotional turmoil is mitigated by support and institutional programs which address HCWs mental health issues and focus on their psychosocial well-being to build their resilience and reduce the magnitude of expected stress on the quality of healthcare services (WHO recommendation).

In the article about spiritual, moral and ethical dilemmas, the author wrote about doctors who face the predicament of confusion of their roles as doctors, the duty of following orders vs following conscience, what is right and what is wrong, what is one's role in this situation? (12)

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In fact, one may ask what is one's purpose in life and in work? Feelings of frustration and demoralization may set in. What is expected from the system? HCWs tend to indulge in ruminations about the conflicts and dilemmas, leading to a sense of helplessness and lack of motivation, loss of meaning, indecisiveness, fatigue and burnout. (12)

WE NEED SUPPORT BECAUSE WE ARE NOT SUPER-HEROES BUT HUMAN

Writing about professional life during the pandemic, the author said people tend to see medical staff as "tireless". Repeatedly working in isolation for long durations "created a sense of collective hysteria and a sense of disappointment". Uncertainty about the virus, increased workload, longer working hours, lack of PPE, all add to the psychological pressure. We use words like "heroes", implying a sense of invincibility, as an appreciation or a mark of respect. But these selfless acts can have long term negative consequences and sequelae. (13)

We are only human and, as humans, we have limits to our physical and psychological capacity for overloading. In the long term, this can lead to fear, frustration and exhaustion. As the pandemic drags on, and post pandemic, we need to plan and provide for a) mental healthcare b) for the backlog of serious cases now needing care c) for an exhausted and disheartened medical workforce. (14)

Here in Singapore, collegial support is available such as from Primary Care Networks (PCNs) which are island-wide loose support groupings of private GP clinics coordinated by Agency for Integrated Care (AIC), informal WhatsApp chat groups and College of Family Physicians Singapore (CFPS) Wellness Webinars, held via Zoom app in the evenings. With such online support, it is possible for GPs working in relative isolation to have positive experiences: "huge sense of cooperation, we would work together as a team and support each other". It engenders a sense of "working together" vs "feeling alone and unsupported". (10) Hence, it is vital that GPs, especially the older and technophobic ones, avail themselves of a smartphone or a mobile device such as a tablet to stay in touch with their fellow doctors and Government and governmental agencies.

DEFERMENT OF NON-COVID CARE

Attention, time and resources have been diverted away from patients with chronic diseases, non-communicable diseases and palliative care for terminally ill patients, vaccinations, non-emergency etc. It seems that we could have been neglecting other persons' suffering and ignoring their needs. This questions the values and compassion of the professional. Living with such stress at work can lead to depression, anxiety, sleep deprivation and post-traumatic stress disorder. In doing their job, they hope not to be exposed to legal liability and that they still have the public's trust. (5)

During a severe lockdown (called "circuit breaker" in Singapore) in 2020, the provision of non-critical, non-COVID care had to be deferred. The intention of placing these cases after COVID-19 cases is to preserve resources (PPE, ventilators and un-infected HCWs). Areas of care affected include diagnostic, therapeutic and supportive care. The deferment of non-emergency care led to the hastened implementation of alternative forms of delivery of care such as teleconsultation and medication home delivery. (14)

PRIVATE CLINICS FINANCIAL SUSTAINABILITY

Many healthcare organizations (HCOs) such as clinics and hospitals are privately-owned and funded. Ironically, its services are considered essential to the public. Like any other private businesses, they need revenue to function at normal operating levels. This has been affected in 2 ways: a) to control the spread of COVID-19, especially during the Singapore-styled lockdown called "circuit breaker" in 2020, clinics and hospitals have to reduce or cease "non-essential" services they provide; these impacts negatively on their revenue and operating budget b) reduced ability of patients to pay due to loss of income from unemployment which gives them their healthcare coverage and insurance. Patients may be unwilling to seek care. They worry that they won't be able to afford the copay or deductibles. (14)

HCOs are expected to remain open to manage outbreaks despite high operating costs.

However, HCOs are at financial risk of having to shut down due to loss of revenue. Government needs to consider how to help HCOs survive and stay open to serve the community during a pandemic. However, HCOs are at financial risk of having to shut down precisely because of the pandemic causing financial distress. (14)

GP CLINICS AS A RING OF PROTECTION FOR GOV POLYCLINICS AN EMERGENCY DEPARTMENTS

Let's use the analogy of the sea. Without private GP clinics, the tsunami of sick people and those seeking testing will quickly overwhelm the polyclinics and emergency departments of the government. Overcrowding would be like overheating, causing the system to buckle under undue pressure. GP clinics are like the cooling towers of the damaged nuclear reactors of Fukushima. Knock out the cooling towers and the nuclear reactor will overheat and explode, adding the nuclear fallout as a second layer of damage to the first destruction inflicted by the tsunami. This is something all governments need to plan and prepare for: the long-term financial sustainability and support of private clinics and hospitals to prevent them from being knocked out even before the true fight against an outbreak takes place. In Singapore, we are fortunate that the government had the funds to support the one thousand-strong GP-PHPC clinics with a substantial SGD$10,000 grant per clinic in 2020. (15)

Private clinics need to be seen as a resource to the nation just like government polyclinics. Private GP clinics form a protective ring around the government healthcare resources, saving these from being overrun. Governments should not play favourites, funding and supporting one and not the other. GP clinics should be seen as part of the defence at the coastline and they protect the nation inland. In the 16th century, Korea learnt this the hard way when the advisers to the king focused on the army inland but neglected the navy which had severely shrunken due to prolonged lack of funding. By the time a powerful and lethal enemy defeated the navy and landed on the coast, it was too late to rely on the land forces to repel the invasion. (16)

CONCLUSION

The fight with COVID is far from over but we have gained considerable experience and insights into the ethical and other difficulties so far. Over the past 18 months, in Singapore, the people, HCWs, health systems and government have all done extremely well.

While our response has been robust, quick to adapt to changing situations, we realise that more can and should be done to support one another and that includes our own government bodies and agencies who also come under great pressure.

"(We will be) remembered as frontline workers who risked (our) lives and those of (our) families to save as many as possible." (7)

REFERENCES

1. Yahoo News, Cases of harassment or abuse of healthcare workers rose to 1,300 last year. 21 Feb 2021. https://sg.news.yahoo.com/cases-healthcare-workers-harassment-abuse-rose-1300-last-year-143001438.html
2. Kramer, Jessica. Ethics in the Time of Coronavirus: Recommendations in the COVID-19 Pandemic.J Am Coll Surg 2020.04.004
3. Sese D. Ethical considerations during the COVID-19 pandemic. Cleveland Clinic J of Med. 26 May 2020. doi:10.3949/ccjm.87a.ccc038
4. Blot, F, Dumont SN, Vigouret-Viant, et al. Ethical Issues related to the COVID-19 pandemic in patients with cancer: experience and organisations in a French comprehensive cancer centre. BMJ Supportive & Palliative Care. doi: 10.1136/bmjspcare-2020-002504
5. Gdiom Gebreheat. Ethical challenges of Nurses in COVID-19 Pandemic: Integrative Review. J of Multidisciplinary Healthcare. 2021:14 1029-1035. Published 6 May 2021
6. Jana S. Rosker. Chinese philosophy of life, relational ethics and the COVID-19 pandemic. Asian Philosophy. 2021, vol 31 no. 1,64-77
7. McKenna Hugh. Covid-19:Ethical Issues for nurses. Guest editorial. Int J of Nursing Studies.110 (2020) 103673
8. Fong JM, Anantham Devand. Health ethics in COVID-19: no better time for solidarity
9. Ministry of Finance Singapore. Solidarity Budget. https://www.mof.gov.sg/singapore-budget/budget-2020/solidarity-budget-booklet-(english)
10. Beesan Maraqua. Mixed method Study to Explore Ethical Dilemmas and Healthcare Workers' Willingness to Work Amid COVID-19 Pandemic in Palestine.Frontiers in Medicine Jan 2021 vol 7 article 576820
11. Banks, S., Cai, T., de Jonge, E., Shears, J., Shum, M., Sobočan, A. M., Strom, K., Truell, R., Úriz, M. J., Weinberg, M. (2020) Ethical challenges for social workers during Covid-19: A global perspective, Rheinfelden, Switzerland: International Federation of Social Workers 29 June 2020
12. Chaturvedi, Santosh K. Spiritual, Moral and Ethical Dilemmata for Healthcare Professionals During Covid-19 Times. J. Psychosis. Rehab Met Health (2020) 7:197-198
13. Maryam C. Professional Life During COVID-19 Crisis: An Emotional and Ethical Dilemma for Medical Staff. Soc for Disaster Medicine and Public Health. https://doi.org/10.1017/dmp.2020.394
14. McGuire, Amy. Ethical Challenges Arising in the COVID-19 Pandemic: An overview from the Association of Bioethics Program Directors (ABPD) Task Force.The Am J of Bioethics, 20:7, 15-27, DOI: 10.1080/15265161.1764138
15. https://www.straitstimes.com/singapore/health/10000-grant-each-for-over-900-designated-clinics-in-covid-19-battle
16. https://en.wikipedia.org/wiki/The_Admiral:_Roaring_Currents

CM

Family Practice Skills Course #96 (1 Day)

Updates in DM and CKD management: Is SGLT2i the answer?

Sat, 2 October 2021: 2.00pm - 5.30pm

In view of the current COVID-19 situation, FPSCs will be conducted on the online platform "ZOOM".
A Zoom registration link will be sent to participants who have registered.

TOPICS

Unit 1: Are the current Singaporean T2DM patients sufficiently protected from Cardio-renal complications?
Unit 2: Acting on latest SGLT2i evidence today to treat your CKD patients in Primary Care
Unit 3: How can we Halt-CKD in Primary Care?: Clinical Care Paths to manage CKD

WORKSHOP

Case Studies:
1. DM Elderly; Age > 65
2. Non-DM CKD, hypertension

SPEAKERS

Dr Goh Su-Yen
A/Prof Teo Boon Wee Jimmy
Dr Yeo See Cheng
Dr Kwek Jia Liang

All information is correct at time of printing and may be subject to changes.

- SEMINAR (2 Core FM CME points)
  DAY 1 • Unit 1 - 3: Sat, 2 Oct (2.00pm - 4.00pm)
- WORKSHOP (1 Core FM CME point)
  DAY 1 • Sat, 2 Oct (4.30pm - 5.30pm)

*Registration is on first-come-first-served basis.
Please register by 27 Sept 2021 to avoid disappointment.

- DISTANCE LEARNING MODULE
  (3 Core FM CME points upon attaining a minimum pass grade of 60% in online MCQ Assessment)

• Read 3 Units of study materials in The Singapore Family Physician journal and pass the online MCQ Assessment.

This Family Practice Skills Course is sponsored by **AstraZeneca Singapore,** organised by **College of Family Physicians Singapore.**

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*Registration is confirmed only upon receipt of payment.
The College will not entertain any request for refund due to cancellation after the registration is closed OR after official receipt is issued (whichever is earlier).

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Scan the QR code or access the link below to register online

http://cfps.sg/fpsc-96/

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Successful applicants will be confirmed by email.

Life as a Doctor in SingHealth Community Hospitals

SingHealth Community Hospitals
Bright Vision • Outram • Sengkang

Patients who are transferred to us usually stay around 2-4 weeks, hence there is time to get to know them better and understand what matters to them.

In her own words about SCH

"At SCH, I help patients, who are mostly elderly, in their recovery process to allow them to transit back to the community and daily life with ease. SCH complements the acute hospitals and works closely with them to ensure smooth transition and continuation of treatment for the patients.

The healthcare staff at SCH work as a team. We support each other and create a pleasant environment to work in. Within the office, the doctors often discuss clinical questions and share difficulties with each other, to learn and capitalise on each person's varied experiences and perspectives!

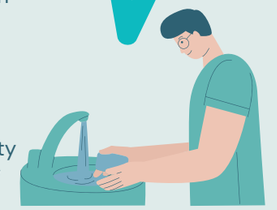
This is also a place where we crack jokes, discuss what bubble tea to order, lend a listening ear and emotional support to each other"

-Dr Charmaine Tan, Senior Staff Registrar
Outram Community Hospital

About SCH

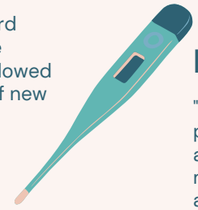
SCH provides continuous medical services and transitional care for patients who have been discharged from the acute hospitals.

It comprises of Bright Vision Hospital, Sengkang Community Hospital and Outram Community Hospital. Being Singapore's only cluster of community hospitals allows us to shape the way we deliver person-centred care to patients.



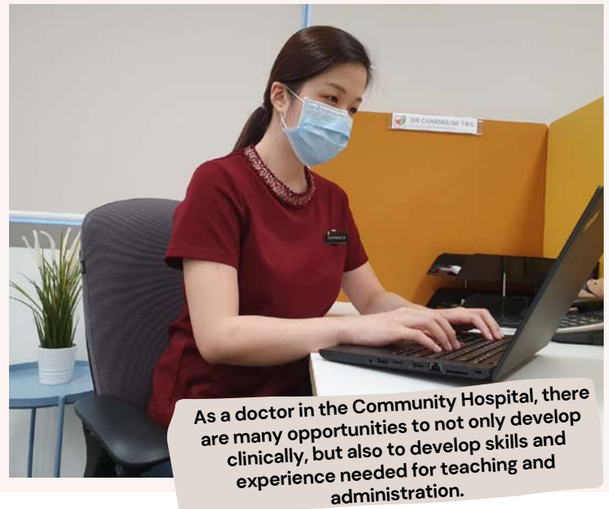
In the Morning

"We have ward rounds in the mornings, followed by clerking of new admissions"



In the Afternoon

"We follow up on our patients' progress, speak with families, attend department teachings, meetings and settle administrative duties"



As a doctor in the Community Hospital, there are many opportunities to not only develop clinically, but also to develop skills and experience needed for teaching and administration.

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Anoro Indication: ANORO ELLIPTA is indicated for maintenance bronchodilator treatment to relieve symptoms associated with chronic obstructive pulmonary disease (COPD).

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COPD: chronic obstructive pulmonary disease, LABA: long acting $ß_2$-agonist, LAMA: long acting muscarinic antagonists

References: 1. Anoro Ellipta Singapore Prescribing Information GDS07/IPI08SI; **2.** Feldman GJ et al. Adv Ther. 2017; **3.** Maleki-Yazdi MR. Advances in Therapy 2016; 33(12): 2188-2199

For reporting of adverse events, please write to sg.drugsafety@gsk.com. Full Prescribing Information is available on request.
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Anoro Ellipta Inhalation Powder
Active Ingredient: Each pre-dispensed dose contains 62.5 mcg of umeclidinium, containing 55 mcg umeclidinium and 25 mcg vilanterol (as trifenatate). Indications: Anoro Ellipta is indicated for maintenance bronchodilator treatment to relieve symptoms associated with chronic obstructive pulmonary disease (COPD). Dosage and administration: Inhalation only. One inhalation once daily of Anoro Ellipta. Children: Use in patients less than 18 years of age is not relevant given the indication for this product. Contraindications: Hypersensitivity to the active substances or to any of the excipients (lactose monohydrate and magnesium stearate), patients with severe milk-protein allergy. Warnings & Precautions: Anoro Ellipta should not be used in patients with asthma. Treatment with Anoro Ellipta should be discontinued in the event of paradoxical bronchospasm and alternative therapy initiated if necessary. Cardiovascular effects may be seen after the administration of muscarinic receptor antagonists, therefore Anoro Ellipta should be used with caution in patients with severe cardiovascular disorders, particularly cardiac arrhythmias. Anoro Ellipta should be used with caution in patients with urinary retention or narrow angle glaucoma. No dosage adjustment is required in renal or mild to moderate hepatic impairment. Anoro Ellipta is not indicated for acute episodes of bronchospasm. Patients should seek medical advice if short-acting inhaled bronchodilator use increases, a re-evaluation of the patient and of the COPD treatment regimen should be undertaken. Interactions: Avoid co-administration with other anti-muscarinic-containing drugs as this may lead to an increase in anti-muscarinic adverse effects. Effects on Ability to Drive and Use Machines: No studies available. Pregnancy and lactation: No available human in vivo data. Balance risks against benefits. Adverse Reactions: Common (≥1/100 to <1/10): Nasopharyngitis, upper respiratory tract infection, urinary tract infection, sinusitis, Cough, Headache, Pharyngitis, Constipation, Dry mouth, Oropharyngeal pain. Uncommon (≥1/1,000 to <1/100): Atrial fibrillation, rhythm idioventricular, supraventricular tachycardia, supraventricular extrasystoles, Tachycardia, Rash, Tremor, Dysgeusia, Palpitations, Muscle Spasms. Rare (≥1/10,000 to <1/1000): Anaphylaxis, angioedema, Urticaria, Vision blurred, Glaucoma, Intraocular pressure increased, Paradoxical bronchospasm, Dysphonia, Urinary retention, Dysuria. Overdosage: If overdose occurs, the patient should be treated supportively with appropriate monitoring as necessary. Please read the full prescribing information prior to administration, available from GlaxoSmithKline Pte Ltd, 23 Rochester Park, Singapore 139234. Tel: +65 6232 8338 Fax: +65 62919737.