SMA news

For Doctors, For Patients

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INTEGRATING COMPLEMENTARY MEDICINE INTO CLINICAL PRACTICE:

FACTS, MYTHS AND WOES

TCM in **Cancer Management**

Vaccination: Some Notes

We invite Family Medicine Physicians, Resident Physicians and Generalists to join the medical team at Jurong Community Hospital.

The Post-acute & Continuing Care (PACC) team at Jurong Community Hospital (JCH) comprises physicians with postgraduate training in family medicine, geriatric medicine or internal medicine, providing inpatient care to patients that require sub-acute care or rehabilitative care after an acute illness or surgery. You will work with a multi-disciplinary team of nurses and allied health professionals to provide holistic care to JCH patients. You will also work in close partnership with community health service providers to enable care re-integration into the community.

REQUIREMENTS

Candidate must possess a basic Medical Degree and postgraduate qualifications registrable with Singapore Medical Council. Those who have MMed (FM), FCFPS or MMed (Int Med) or other postgraduate qualifications recognised by College of Family Physicians Singapore (CFPS) or Specialist Accreditation Board (SAB) will be considered for Senior Physician or Specialist positions.

JurongHealth Campus is a part of the National University Health System (NUHS) group, serving the community in the western region.

JurongHealth Campus comprises the integrated 700-bed Ng Teng Fong General Hospital (NTFGH) and 400-bed Jurong Community Hospital (JCH) which were designed and built together from the ground up as an integrated development to complement each other for better patient care, greater efficiency and convenience. NTFGH and JCH were envisioned to transform the way healthcare is provided, and together with the National University Hospital, National University Polyclinics, Jurong Medical Centre, family clinics and community partners, to better integrate healthcare services and care processes for the community in the west.

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We regret that only shortlisted candidates will be notified.

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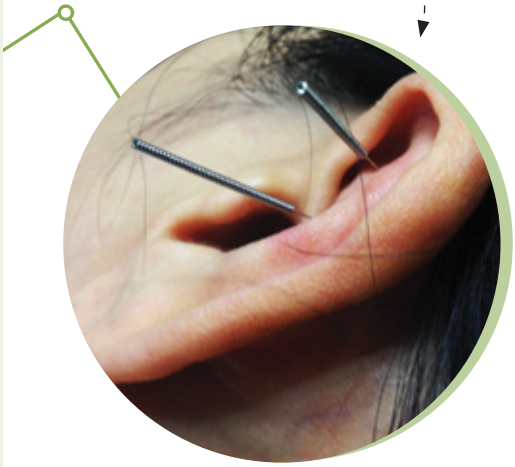

The EDITORS' MUSINGS

Tan Yia Swam

Editor

Dr Tan is thankful to KK Women's and Children's Hospital, Department of Breast Surgery, especially her head of department and the division chairman, for the past five years' experience and opportunities. Starting May 2019, she will be venturing into private practice. Meanwhile, she still juggles the commitments of being a doctor, a wife, the *SMA News* Editor and a mother of three. She also tries to keep time aside for herself and friends, both old and new.

Does 2019 mark the death of the doctor-patient relationship?

Unless you have been completely off the grid, you must have some inkling why.

I hear of disillusioned, jaded doctors. I hear friends sharing how disheartened they are. I see keyboard warriors. I see opportunists rising up and taking credit for others' work.

Yet, there is still hope – we have doctors who genuinely care and doctors who speak up. There also seems to be some kind of leadership and some form of engagement. By the time this comes out in print, there would have been several town hall meetings held by the review workgroup appointed by the Ministry of Health. I hope that interested doctors have made time to attend and participate in the discussions.

Let's not hide behind anonymity or allow apathy to set in.

However, work life is not all bleak. The overwhelming majority of patients still have trust and faith in us healthcare workers. As healthcare gets more complicated, it behooves us to know the system well and be the guide for our patients. **Know when to refer, how to refer, and where to refer to**. If we are lost in the complexity of the various electronic platforms versus paper forms, and all the various subspecialty departments, just imagine how much more bewildering it is for our patients.

For this issue, we have decided to have a closer look at complementary medicine – how can we provide good advice for our patients when we know so little about alternative treatments? Know the facts and the myths, and guide our patients in their journeys to getting well.

Chie Zhi Ying

Guest Editor

Dr Chie is a family physician working in the National Healthcare Group Polyclinics. She enjoys freelance writing and singing. She writes for *Lianhe Zaobao*, *Shin Min Daily News* and *Health No.1*. She can be contacted at chiezhiying@gmail.com.

When the term "complementary medicine" is mentioned, what comes to your mind? Do you think of traditional methods such as Traditional Chinese Medicine (TCM), *Jamu* and *Ayurveda*, or other systems such as homeopathy and naturopathy?

As a family physician seeing patients in the polyclinics, I witness first-hand the widespread use of complementary medicine, and discussing its use with patients requires tact and professionalism. I have patients who choose to take TCM tablets in the management of chronic conditions like diabetes mellitus and hypertension (some regrettably forgoing the medications that have been prescribed by their doctors). On the other hand, patients inflicted with severe and potentially fatal medical conditions such as cancers or organ failure could also turn to complementary medicine in a bid to cure their conditions.

In this issue on integrating complementary medicine into clinical practice, we have put together an exciting array of articles to shed light on complementary medicine, a topic so commonly encountered in daily clinical practice yet remains shrouded in mystery.

In the Feature, we are privileged to have Dr Linn Yeh Ching, senior consultant haematologist at Singapore General Hospital, share her insights on the perceived and real adverse effects of TCM. Dr Lambert Low, consultant psychiatrist with the National Addictions Management Service at the Institute of Mental Health, writes about his unique experience on the use of acupuncture in managing addictions. Revolving around the topic of pain management, Dr Bernard Lee MK, consultant anaesthesiologist and pain physician at the Singapore Paincare Centre, provides insights on pain management and its various strategies.

There is a Chinese saying that goes, "医者父母心", which suggests that practitioners of medicine should care for and regard their patients just like how parents would for their children. This quote constantly reminds me to give my best to my patients. With that, sit back and enjoy this issue! ◆

Did the Herb Cause This?

Myths and Facts about Chinese Herbs

Text by Dr Linn Yeh Ching

Introduction

Reflecting on my years of involvement as a clinician, clinical teacher and investigator in Traditional Chinese Medicine (TCM) studies and information service, I venture to address something fundamental but of great concern to all of us in this article.

The training of medical students and junior doctors has deeply indoctrinated in them the routine of asking "Do you take any traditional medicine?" during history-taking, which is a good practice. However, that would lead nowhere as most will not know what to do if the patient indeed produces a list of recently ingested herbs. The simplest reaction is then, "you better stop taking them".

I would thus like to share here some facts and also dispel some myths in the safety of TCM herb consumption.

Does that stuff contain steroids?

In Singapore General Hospital (SGH), a Traditional Medicine Information Service (TMIS) was established in 2011 as an extension to the Drug Information Service of the Department of Pharmacy, ceasing operation in 2015 when funding ended. TMIS handled enquiries on traditional medicine from healthcare professionals and provided evidence-based information. One of the commonly asked questions was whether the herbal formulation or product contained steroids. We in the service conducted a comprehensive search of medical literature from PubMed, China National Knowledge Infrastructure and the Health Sciences Authority's (HSA) websites for evidence of herbs or herbal products that have been studied for their potential glucocorticoid, mineralocorticoid, androgenic or oestrogenic activity.[1]

Liquorice root (*Radix glycyrrhizae*, 甘草) is a commonly used herb in many TCM formulations. Pseudoaldosteronism has been caused by liquorice consumed at high doses; unfortunately, a safe dose is elusive due to the highly variable glycyrrhizic acid content in the different preparations, and the wide interindividual susceptibility to its side effects.[2] Contrary to common belief, ginseng (*Radix Panax ginseng*, 人参) – which is widely used even in the west and hailed as the panacea by some, has not been reported to cause Cushing's syndrome, even though some of the ginsenosides are ligands of glucocorticoid receptor.[3] In fact, a comprehensive search of the literature failed to find good evidence of glucocorticoid activity in any commonly prescribed herbs used in TCM.[1]

Deer musk (*Moschus*, 麝香) and deer antler (*Cornu cervi pantotrichum*, 鹿茸) contain naturally occurring androgens.[4,5] Both ginseng and Chinese angelica (*Radix Angelicae sinensis*, 当归) have been implicated to cause gynaecomastia in case reports.[6,7] However, when studied in placebo-controlled, double-blind clinical trials for post-menopausal symptoms, both did not demonstrate clinical estrogenic activity of inducing menstruation.[8,9]

In contrast to the paucity of evidence of corticosteroidal effect in raw herbs, glucocorticoids have been reported time and again as one of the several adulterants added to herbal formulations and sold as Chinese proprietary medicine (CPM). In Singapore, the import and local sale of CPM is subjected to testing and pre-marketing approval by the HSA,[10] but consumers may obtain products with various health claims from overseas and local black markets. A list of those investigated can be found in the HSA's Illegal Health Products Database (http://bit.ly/2Trjey9), as well as press release archives. Besides glucocorticoids, nonsteroidal anti-inflammatory drugs, antihistamines, sedatives and sex-enhancing drugs are commonly found adulterants in such products.[11]

Did that herb cause the bleeding?

Another question frequently asked involves the potential antiplatelet or anticoagulant effects of herbs with "blood activating" activities by their traditional indications. While the antihaemostatic function of some herbs, such as red sage root (*Radix Salviae miltiorrhiza*, 丹参) and notoginseng (*Radix notoginseng*, 三七) were studied and proven,[12,13] such knowledge on many other commonly used herbs, including the innocent herb Cordyceps (*Cordyceps sinensis*, 冬虫草) implicated for fatal post-operative bleeding not so long ago, is still seriously lacking, as most were based on in vitro or mice data which cannot be extrapolated to actual clinical effect. Between 2013 and 2014, we at SGH conducted a randomised, double-blind, placebo-controlled study on the antihaemostatic effects of three common health supplements: turmeric (*Curcuma longa*, 姜黄), ginseng and Chinese angelica. Based on in vitro studies, the reputable *Natural Medicines Comprehensive Database* assigned these herbs with a "moderate" and "high" severity risk of bleeding when used with anticoagulant or antiplatelet.

In the 25 healthy volunteers studied for each herb, there was no derangement in platelet count, coagulation and platelet function (with a few exceptions for the latter) with these herbal products used as single agent alone for three weeks, neither did they further aggravate the effect of aspirin when consumed together with aspirin. There was no bleeding observed in the 75 participants studied.[14] This provided level 1 evidence on the lack of antihaemostatic effect of these commonly used herbs and more importantly, testified to the fact that in vitro observations cannot be extrapolated to clinical effect.

Can herbs cause haemolysis?

The topic of herb and haemolysis brings to memory the 30-year ban on two commonly used herbs, coptis root (*Rhizoma coptidis*, 黄连) and phellodendron bark (*Cortex phellodendri*, 黄柏), as the berberine content was implicated in neonatal jaundice (NNJ) based on circumstantial evidence.[15] There is conflicting data on the potential of these berberine-containing herbs in causing haemolysis. G6PD-deficient red cells become susceptible to haemolysis when incubated with coptis root extract.[16] Paradoxically, the prevalent Chinese folk tradition of feeding boiled coptis root to neonates for reducing NNJ enabled a retrospective analysis on 122 G6PD-deficient neonates admitted for NNJ. The 62 with history of post-natal consumption of coptis root had a significantly delayed onset of NNJ of 3.2 days (likely due to displacement of bilirubin from protein binding) compared to 2.07 days in the 60 without herbal exposure, with one and two cases of death due to kernicterus respectively.[17] In a clinical study from Taiwan comprising 22 neonates in the study group and 23 in the control group, where three and four were G6PD deficient respectively, feeding with coptis root liquid as a single agent for three days from 20 hours of life for the study group did not result in acute haemolysis or any other adverse effects.[18] In 2013, HSA concluded that there are no major safety concerns with appropriate use of both herbs and lifted the ban, but cautioned that it should still be avoided in infants, G6PD-deficient individuals, and pregnant and breastfeeding women (http://bit.ly/2YjZC2J).

As for other herbs, haemolysis has been reported with the intravenous administration but not oral ingestion of pueraria root (*Radix puerariae*, 葛根),[19] a herb commonly used in cold remedies. Cases of haemolysis after ingestion of CPM containing lead and arsenic have also been reported. In this regard, the readers can be assured to know that heavy metal (arsenic, copper, lead and mercury) content of CPM is tightly regulated by HSA.[10]

Are herbs toxic to liver, kidneys or other organs?

Organ toxicity can be caused by the inherent toxicity of the herb, improper usage, idiosyncratic response, unintentional contamination, substitution or adulteration. "Chinese Herb Nephropathy" is the unfortunate term coined after the substitution of aristolochia fruit (*Aristolochia fangchi*, 广防己) for tetrandra root (*Stephania tetrandra*, 汉防己) in slimming clinics in the Europe in the 1990s, which led to interstitial nephritis, renal failure and urothelial carcinoma.[20] There are other herbs that contain aristolochic acids,[21] but we can be assured that these herbs are banned by HSA locally and in many other countries. One other well-recognised herb with renal toxicity is thunder god vine (*Tripterygium wilfordii*, 雷公藤), used for its anti-inflammatory activity to treat nephritis, lupus and rheumatoid arthritis.[22] Heavy metals present in plants and minerals can potentially cause nephrotoxicity too.

Liver toxicity has been repeatedly reported for the commonly used herb fleeceflower root (*Polygonum multiflorum*, 何首乌),[23] which is used for its purported anti-ageing effect. Dioscorea tuber (*Rhizoma Dioscoreae bulbiferae*, 黄药子), a herb used for inflammation, oncology and thyroid disease, is known to cause hepatitis.[24] Xanthium (*Fructus Xanthii*, 苍耳子) is a common herb used after processing for rhinitis and sinusitis, but its raw form in large quantity results in acute and chronic systemic toxicity, including hepatotoxicity.[25] Certain herbs contain pyrrolizidine alkaloids which can cause veno-occlusive disease.

Other well-studied toxicities include aconitine in unprocessed aconite root (*Aconitum carmichaelii*, 附子) used for its analgesic and cardiotonic properties. Aconitine poisoning resulting from overdosing or inappropriate processing of herbs before consumption can cause cardiovascular, gastrointestinal and neurological toxicities.[26] Unprocessed bitter almond (*Semen armeniacae amarum*, 杏仁) can cause cyanide poisoning. Abuse of ephedra (*Herba Ephedrae*, 麻黄) for its thermogenic and stimulatory effect has been reported to cause sudden cardiac death.[27] As with any drugs, herbs may also cause allergic rash.

Therefore, most of the toxicities as illustrated above are avoidable when herbs are prescribed with correct identification and consumed in properly processed form, at recommended dosage and duration. Some are unavoidable due to idiosyncratic reaction. A busy clinician is understandably unable to spend additional effort going in depth into such issues. This is an area of unmet need where an information service such as TMIS could serve to provide valuable information and help solve clinical puzzles.

Similar to the case of steroids, in contrast to the infrequent toxicity attributable to the inherent pharmacological activity of herbs, of much higher prevalence is adverse reaction due to adulterant present in formulation, as mentioned above. A review by the HSA on adverse events associated with complementary and alternative products revealed serious events due to adulterants mostly consumed for sexual performance enhancement, pain relief and slimming purposes.[11] Strictly speaking, these should not come under adverse effect of TCM, but unfortunately in the local context, this has to be brought to the readers' attention and emphasised to rectify misconceptions.

Is it safe to take herbs together with drugs?

Drug-herb interaction is an area of great concern for doctors and patients alike. However, while drug-drug interaction is well studied, the knowledge in drug-herb interaction, especially TCM herbs (in contrast to herbs used in Western folk medicine), is seriously lacking. The usual advice of taking them "two hours apart" (or even four hours) instructed by most TCM practitioners addresses only interaction in the stomach. However, besides absorption, there are downstream processes of distribution, metabolism and excretion which are subjected to pharmacokinetic interaction with other drugs. In addition, pharmacodynamic interaction that may potentiate or antagonise the pharmacological activity needs to be considered too.

One common question on drug-herb interaction that TMIS received concerned warfarin. The lack of readily available references on its interaction with commonly used herbs and health supplements prompted the TMIS to embark on an ambitious project to compile a warfarin-herb interaction database. Not unexpectedly, high-level evidence is lacking for most herbs due to lack of well-conducted randomised controlled trials (RCT). Ginkgo leaf (*Ginkgo biloba*, 银杏叶)[28,29] and ginseng,[30] despite anecdotal reports, were shown in RCT to not affect International Normalised Ratio (INR) in patients on warfarin. On the other hand, other similarly popular herbs such as Chinese angelica root, glossy privet fruit (*Ligustrum lucidum*, 女贞子), wolfberry fruit (*Fructus Lycii*, 枸杞子), red sage root or cordyceps are severely lacking in clinical studies on their interaction with warfarin, with only case reports or animal/in vitro

studies available. The simplest solution to address potential drug-herb interaction is to stop the herb, but a more scientific approach is close monitoring if there are measurable drug levels (eg, anti-epileptics and calcineurin inhibitors) or therapeutic effect (eg, INR in warfarinised patients). Regardless, a non-judgemental attitude to encourage honest declaration by patients on their use of herbal medicine is the first step towards safe combination of drug and herb.

Cytochrome P450 3A4 (CYP3A4), as an important metabolising enzyme, is responsible for many known drug-drug interaction and even food-drug interaction. Compounds within grapefruit with CYP3A4 inhibitory activity may increase the level of CYP substrates, such as calcineurin inhibitors and tyrosine kinase inhibitors. The commonly used fruit and ripe peel of bitter orange (*Citrus × aurantium*, 枳实, 枳壳) have similar chemical composition as grapefruit and therefore potential for interaction with these drugs too.[31]

In our clinical trial on TCM herbs for cytopenic haematological conditions,[32] we observed the aggravation of hyperkalemia in two patients with diabetic nephropathy on angiotensin receptor blocker after ingestion of customised TCM formulations which returned to baseline upon stopping TCM, likely due to the high content of potassium in some of the plant-derived components.

Conclusion

TCM herbs, in their raw forms or as finished products, are neither totally safe nor totally responsible for all unexplained clinical observations. A medical practitioner will gain more trust and respect from his/her patients if he/she keeps an open mind and adopts an objective and scientific approach towards this matter. An information service to address herb-related enquiries will contribute greatly towards the safety and well-being of our patients. ◆

Dr Linn is a senior consultant haematologist at the Singapore General Hospital. She specialises in haematopoietic stem cell transplant and does research in cellular immunotherapy. Her passion for Traditional Chinese Medicine (TCM) involves its safety and evidence-based approach to study its efficacy. She has conducted clinical studies on TCM related to haematology.

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The Way Forward:
Building a Strong Doctor-Patient Relationship

Text by Dr Lee Yik Voon

This is the month of showers, though some days it not only rains but pours.

We have yet another petition. The previous number of petitioners stood at 6,000. This petition to support the psychiatrist who breached patient confidentiality has hit 8,788 at time of writing this column. Our medical community is reacting with an unprecedented visceral response.

I am of the opinion that the solution to the concerns of the doctors lies in building a good doctor-patient relationship. The doctor-patient relationship dates back all the way to the time of Hippocrates. It's the cornerstone of all the care we give. This relationship allows us to gather meaningful information, make proper diagnosis and management plans, and enable compliance so that patients are supported and can heal.

On the contrary, when a patient does not trust you, he/she may not provide complete information; may be so anxious and fail to comprehend your questions; or may not understand or retain what you have tried to communicate. You are also unlikely to modify their behaviour in adopting a healthy lifestyle and compliance with medications.

Developing trust

The lack of trust in a doctor-patient relationship also casts doubts on whatever is said and suggested to the patient. They will be confused no matter how many medical opinions they have sought. In some countries without recourse, it has led to so much uncertainty that the patients and their families have resorted to acts of violence on the medical professionals.

Hence, the doctor-patient relationship is paramount and directly affects the quality and completeness of the information gathered from history-taking. It also determines the patients' understanding when we explain management plans that require their cooperation and ownership. A good interview with the patient also encourages questions that allow them to have greater participation in their care. We should learn how to improve our communication, such as interviewing patients, breaking bad news and denying patients' requests for unnecessary tests and demands.

Creating a caring environment

The doctor-patient relationship not only affects the patient but will also affect the doctor emotionally in terms of job satisfaction in his/her medical practice. This, to some extent, will help to reduce burnout in physicians. Other factors that enhance the doctor-patient relationship include accessibility of the doctor, the doctor's demeanour, waiting time and comfort in the waiting area. Our clinics' frontline staff can provide comfort with their familiar, friendly and approachable manner, granting the patients a sense of security, care and concern.

Continuity of care is another important factor in the doctor-patient relationship. A stable healthcare ecosystem will create a positive impact, while the switching of providers year after year will create barriers and hurdles in building long-term relationships. Continuity of care in family practice fosters a very strong doctor-patient

relationship and this trust enhances the treatment outcome for the patient. For example, a family physician who knows and understands the preferences of his/her patient will know how to convey information such that the patient understands, remembers and acts on it. He could also customise treatment for individual patients to achieve the best compliance and outcomes. Trust is at its highest when there is history of reliability, advocacy, beneficence and goodwill. In complicated, difficult and potentially embarrassing situations, patients will feel comfortable seeking clarification from the GP whom they have been seeing for years. Often, their entire extended family and clan would have been seeing the same GP as well.

This helpful relationship is even more important to vulnerable patients who have a greater reliance on physicians' competency, bedside manners, skills and goodwill. With these vulnerable patients, we are held to the highest standard to act in the patients' best interests. On the other hand, when patients are referred to doctors in the large hospitals, though the system may be well oiled, it may sometimes be less personal. The patient may not feel as ministered to and often finds it hard to find answers to their queries.

Being patient-centric

Patient centricity should be the focus of our approach to the medical care of our patients regardless of the payer or mode of payment. There should be no distinction between employer-paid or insurance-paid fees. We need to protect the interests of our patients, their preferences and autonomy. We need to design and decide on policies that are morally neutral in utilisation management, standardisation, guidelines and other cost-containment efforts. Physicians must also take note of both the financial and non-financial incentives that may result in any conflict of interest in making decisions for individual patients. Patients are vulnerable as they are sick people needing care, compassion and special attention. Thus, it is important that physicians consider their patients' good first, ahead of profit, politics or bias of any form.

Medical practitioners must also carefully scrutinise the various influences that impact patient care, such as finances, peer pressure, leisure time, the threat of deselection and sense of fulfilment from work.

We must realise too that standardising treatments is systemically sound but must be flexible to allow customisation with attention to context. This is necessary as there is a rich variety of human illness and most diseases come in different spectrums of severity. We need to build an atmosphere of openness and honesty between the doctor and the patient, so as to build a climate of trustworthiness, such that patients' expectations can be met. This can be done without inculcating a sense of entitlement among the public and thus resulting in disenchantment and distrust in the medical profession to their detriment.

Safeguarding privacy and confidentiality

Emphasising patient privacy and confidentiality is an important aspect of the doctor-patient relationship that leads to development of trust. This is not the sole responsibility of the attending physician but the entire team of support staff of the clinic or hospital. All the staff of the clinic or hospital should be trained and reminded regularly on the measures to keep patients' information private. Institutions should also constantly review their policy on these issues. Larger institutions with frequent staff changes should also have refresher briefings from time to time.

We must allocate adequate consultation time for patients. Our local practice is characterised by large crowds, high volumes and high throughput of patients, resulting in short consultations and frustrated patients. This erodes the patients' trust in the doctor. When consultations are not rushed, patients will feel more at ease. This will lead to less complaints and better clinical outcomes.

The authorities and companies should avoid implementation of measures that disrupt continuity. Ideally, workers' healthcare benefits should be made portable. That way, workers will be cared for by the same doctor whether they are retired, resigned or retrenched.

When all the stars are aligned, all these goals are achievable. The patient will feel your care, empathy, positive regard, congruence, respect and understanding. The actual time spent may not be as important as your effort spent in focusing on your patient and actively listening to what they have to say. After all, we are here to serve our patients. Without our patients, we would certainly be lost and bereft of all the goodwill that keeps us going on a daily basis. ◆

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Dr Lee is a GP practising in Macpherson. He is also a member of the current National General Practitioner Advisory Panel. He is a pet lover at heart who is the proud owner of a dog, and regularly feeds neighbourhood community cats. He also enjoys playing online war games and thinks that playing Pokemon Go is a good form of exercise.

HIGHLIGHTS

FROM THE HONORARY SECRETARY

Report by Dr Lim Kheng Choon

Dr Lim is the Honorary Secretary of the 59th SMA Council. He is currently an associate consultant at Singapore General Hospital.

SMA's participation in a workgroup to review informed consent and SMC's disciplinary process

The Ministry of Health (MOH) has announced the formation of a workgroup to review the Singapore Medical Council's (SMC) disciplinary process as well as taking of informed consent following the controversial Disciplinary Tribunal case involving Dr Lim Lian Arn. SMA, together with the Academy of Medicine, Singapore (AMS), and College of Family Physicians Singapore (CFPS), has been invited to participate in this workgroup.

Following MOH's announcement, the three professional bodies issued a joint statement, offering their full cooperation to MOH. The formation of the workgroup is a positive step to ensure that the environment is conducive for the practice of good medicine and to ensure the safety of patients.

More details can be found at http://bit.ly/2U0E6AI.

Meeting with Medical Protection Society on informed consent

As a result of the above case, SMA has received many queries from doctors-in-training (DITs) on how detailed the consent they would need to take for common minor procedures done daily, such as venepunctures and the setting of intravenous plugs.

In an attempt to get some clarity, SMA and the Medical Protection Society (MPS) organised a discussion on 15 March 2019, named "Informed Consent for Common Procedures: Principles and Practice". The aim was to find consensus on practical advice to junior doctors. Representatives from AMS, CFPS, SMC and SMA DIT Committee attended the discussion.

SMA hopes that the discussion has helped to move the issue forward, with DITs highlighting the issues they face daily "at the coalface". Clarifications/reassurances regarding the SMC complaints/disciplinary process offered may have helped, but it is clear that some of the practical difficulties can only be directly addressed after the MOH workgroup releases their recommendations.

Passing of Dr Chow Kheun Wai

On behalf of the SMA Council, we wish to express our deepest sympathy and condolences to the family of the late Dr Chow Kheun Wai, who passed away on 26 February 2019 in the US.

Dr Chow was a former SMA Honorary Secretary (1963-64) and SMA Council Member (1964-66). SMA published a condolence message in the 8 March 2019 edition of the *Straits Times*.

Presentation to Indiana University Physician MBA programme

On 26 February 2019, SMA 1st Vice President Dr Wong Tien Hua delivered a presentation to physician MBA students from the Indiana University's Kelley School of Business. His presentation covered an overview of health trends in Singapore and recent measures to keep healthcare sustainable.

Attendance at the 18th MASEAN Mid-Term Meeting

An SMA delegation comprising Drs Tan Tze Lee, Lim Kheng Choon, Tammy Chan, A/Prof Mahesh Choolani and the secretariat team attended the Medical Association of South East Asian Nations (MASEAN) Mid-Term Meeting held in Cebu, the Philippines, on 15 March 2019. The delegation participated in a symposium on Crisis in Non-Communicable Diseases, and provided an update on SMA's activities for the year. ◆

SMA 60 Years

It's time to tee off at the...

SMA ANNUAL GOLF TOURNAMENT 2019

17 July 2019, Wednesday | Sembawang Country Club

Registration starts from 12 pm (Shotgun will start at 1.30 pm)

Calling all SMA Members!

Join us at the SMA Annual Golf Tournament 2019 and look forward to a fun-filled day of golfing at Sembawang Country Club.

Don't miss out on the chance of winning the hole-in-one prize – a Mercedes-Benz E 200 AVANTGARDE – in addition to other exciting golfing and lucky draw prizes. *Jio** your friends to compete in this year's tournament too; those who are not doctors can also vie for the "Friends of SMA" trophy! You can also look forward to goodie bags, and a sumptuous lunch and dinner.

Wait no longer – round up your golf *kakis*# and sign up now at: http://bit.ly/SMAGolf2019

Registration closes on **5 July 2019**.

See you there!

Yours sincerely,

Dr Adrian Tan

Convenor, SMA Annual Golf Tournament 2019

Who will emerge champion in "The GP versus Specialist" competition this year? Will Team GP defend their title? Or will Team Specialist steal the win?

*Hokkien for invite
#Hokkien for buddies

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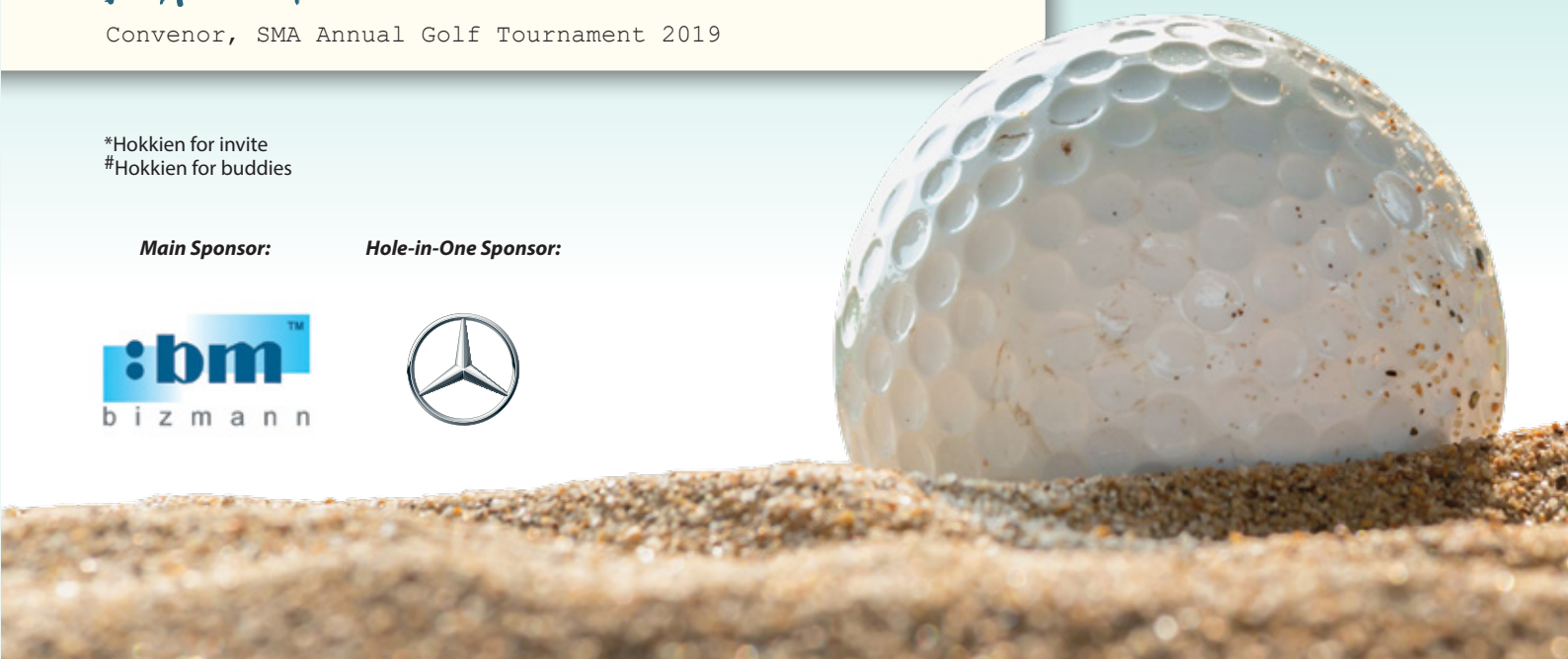


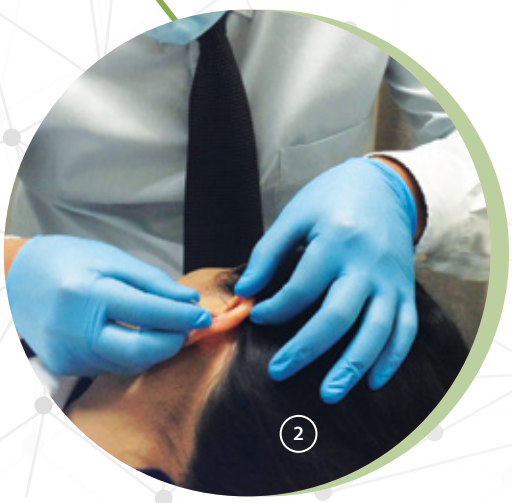
ACUPUNCTURE *in the Management of* ADDICTIONS

Text and photos by Dr Lambert Low

1

Acupuncture is a branch of Traditional Chinese Medicine (TCM) and the practice originated from China where it has been practised for over 2,000 years. Generally, thin filiform needles are inserted into acupoints found along meridians (energy pathways of the body) and this is coupled with manipulation of the needles via various techniques to improve the flow of "Qi" along various meridians or channels.

In TCM theory, the needling of an acupoint releases the stagnation of "Qi". "Qi" is a life force present in everyone and it flows in meridians in the body. This flow of "Qi" is important to the well-being of the body and serves many functions. According to TCM theory, "Qi" helps in the circulation of blood in the body as well as in the formation of a defence system against external pathogens. The needling of the acupoints helps to ensure the smooth passage of "Qi", and is thereby said to strengthen all the functions of this life force.



2

Acupuncture is arguably the most well-researched aspect of TCM, particularly for its analgesic properties. Research has shown that acupuncture is efficacious in reducing cravings and withdrawal symptoms, as well as improving engagement in long-term treatment programmes. When used as an adjunct treatment for the management of addictions, acupuncture helps to improve both physical and mental health aspects, thereby facilitating recovery from addictions. The most talked-about mechanism is the regulation of endogenous opioids such as endorphins, but the involvement of the Gamma Amino Butyric Acid system has been discussed as well. Acupuncture has also been shown to stimulate the immune system and other physiological processes that help in recovery.

Acupuncture in treatment plans

The use of acupuncture for the management of addictions began earnestly in the 1970s, when a Hong Kong neurosurgeon by the name of Dr HL Wen fortuitously used acupuncture to anaesthetise his patient prior to a brain surgery for treatment of his opium addiction. Because he noted the abatement of withdrawal symptoms with acupuncture, the operation was eventually cancelled.

Since then, there has been a proliferation of centres in America and Europe which have incorporated acupuncture into their treatment programmes for drug and alcohol addiction. In fact, the National Acupuncture Detoxification Association, based in the US, has come up with a standardised auricular acupuncture protocol for the treatment of addictions.

Since 2013, the National Addictions Management Service (NAMS) located within the Institute of Mental Health has run an outpatient Acupuncture

Clinic as part of its multi-disciplinary approach to the treatment of addictions. Acupuncture is used as an adjunct treatment to complement and enhance existing treatment programmes. These include medical treatment, individual counselling, family therapy, psychoeducation and support groups for patients and their families, as well as inpatient detoxification and rehabilitation. Using a combination of theories on addiction disorders derived from both Western medicine and TCM acupuncture, an integrative acupuncture treatment plan is then drawn up for the patient.

The acupuncture service at NAMS is offered only to patients with a primary diagnosis of an addiction disorder. Patients who are pregnant, on blood thinning medications, or those who have a history of seizures should not undergo acupuncture. A consultation session takes place before the acupuncture session, during which a psychiatrist cum certified addictions acupuncturist will assess the individual's suitability for acupuncture.

The acupoints used in acupuncture for addictions treatment are largely found on the scalp, the ears and the four limbs, and a minimum of ten half-hour sessions over six weeks is recommended. Only pre-packaged sterile disposable needles are used for each session. At the end of the ten sessions, the patient's progress will be assessed and the patient will be advised as to whether further acupuncture sessions would be beneficial.

Importantly, however, acupuncture should not be used as a standalone treatment for addictions. Patients should first seek consultation from a doctor for a proper diagnosis of an addiction before they seek out complementary acupuncture treatment. Addiction is a multi-faceted illness involving psychological, social and biological factors, and each of these aspects should be addressed as part of the patient's holistic recovery. A multi-disciplinary team of diverse professionals, such as doctors, counsellors, pharmacists and medical social workers, can help to ensure that the patient's addiction is managed comprehensively. This, together with adjunct treatments, such as acupuncture, can help to boost an individual's recovery from an addiction. ◆

Legend

1. Close-up view of an auricular acupuncture

2. Performing auricular acupuncture

Dr Low is a psychiatrist with the National Addictions Management Service at the Institute of Mental Health. He completed his MSc in Addiction Studies at King's College London. Dr Low holds a Graduate Diploma in Acupuncture and is a registered acupuncturist withthe Traditional Chinese Medicine Practitioners Board.

SMA EVENTS
MAY–JUL 2019

DATE	EVENT	VENUE	CME POINTS	WHO SHOULD ATTEND?	CONTACT
CME Activities					
4 May, 29 Jun and 6 Jul Sat	Medical Expert Witness Training 2019	Academia, Furama City Centre Hotel, Family Justice Courts	6	Doctors	Mr Roland Lim 6593 7884 mewt@ams.edu.sg
7 May Tue	Mastering Adverse Outcomes	Sheraton Towers Hotel	2	Family Medicine and All Specialties	Terry/Siti Athirah 6223 1264 mpsworkshops@sma.org.sg
11 May Sat	Mastering Difficult Interactions with Patients	Novotel Singapore on Stevens	2	Family Medicine and All Specialties	Terry/Siti Athirah 6223 1264 mpsworkshops@sma.org.sg
16 May Thu	Building Resilience and Avoiding Burnout	Sheraton Towers Hotel	2	Family Medicine and All Specialties	Terry/Siti Athirah 6223 1264 mpsworkshops@sma.org.sg
25 May Sat	Privacy Awareness	Novotel Singapore Clarke Quay	2	Medical Practitioners, Aspiring and Current Practice Owners, Clinic Managers and Staff	Denise 6540 9195 denisetan@sma.org.sg
29 May Wed	Mastering Your Risk	Novotel Singapore on Stevens	2	Family Medicine and All Specialties	Terry/Siti Athirah 6223 1264 mpsworkshop@sma.org.sg

PAIN MANAGEMENT *in General Practice*

Text by Dr Bernard Lee MK

Dr Lee, MBBS (Singapore); FPM ANZCA (Australia); FAM (Singapore), is an associate professor at the Faculty of Medicine and Surgery, Santa Tomas University, and a consultant pain physician and consultant anaesthesiologist at the Singapore Paincare Center.

What is pain management?

The term "pain management" gives an impression that the persistent pain reported is coming from a difficult patient who does not respond to standard treatments that are available, making the suggestion that it may be fictitious or psychological. Within the medical circle, many opine that pain management is not to get rid of pain but rather just to palliate the pain. This gives rise to the patient's pain not being taken seriously, or worse, being trivialised and ignored.

While pain may be a symptom of a disease, such as headaches in brain cancer cases or chest pain in a heart attack, the term "disease" requires an underlying explanatory abnormality identifiable by laboratory and other investigative procedures. When we find no underlying disease explanation for a symptom – say, pain or fatigue or loose stools – the descriptive term "unexplained symptoms" is presently the best we can do in medicine. Unexplained symptoms are common. Over three quarters of all physical symptoms have no explanatory disease.[1] Indeed, who has not had some symptom without a disease, such as a minor headache or light-headedness? The spectrum of unexplained symptoms extends from minor, for which we don't even seek care or are easily reassured if we do, to very severe and disabling. Chronic pain is at the most severe end of the spectrum.[2]

In certain chronic pain syndromes, pain can be the sole or leading complaint and would require special treatment and care. In conditions such as fibromyalgia or non-specific lower back pain, chronic pain may be conceived as a disease in its own right. In other persistent pain states, due to our poor clinical acumen or lack in medical knowledge, this pain may be secondary to an underlying disease: chronic neuropathic pain (eg, complex regional pain syndrome), chronic secondary visceral pain (eg, chronic pelvic pain, interstitial cystitis), chronic posttraumatic and postsurgical pain (eg, post amputation, phantom limb, post thoracotomy pain), chronic secondary headache and orofacial pain (eg, trigeminal neuralgia), and chronic secondary musculoskeletal pain (eg, plantar fasciitis, frozen shoulder,

chronic knee pain). These conditions are summarised as "chronic secondary pain" where pain may at least initially be conceived as a symptom.[3]

It will not be pain management but resolution of pain once we can identify those reversible secondary pain syndromes with new perspective of pathophysiological mechanism, rather than just inflammatory nociception for some of those chronic pain conditions.

Pain as more than just a symptom

Pain is no longer just a symptom but it is being considered as a disease in itself. As stated by John J Bonica, the founding father of the discipline of pain medicine, in 1953 on pain: "in its late phases, when it becomes intractable, it no longer serves a useful purpose and then becomes, through its mental and physical effects, a destructive force."[4] Thus, in these circumstances, the peculiar nature of pain is revealed in its complexity, particularly because of the double value of the phenomenon; that is, pain is biologically a protective tool, but it can also lose its adaptive function and become a pathologic condition severely impacting the quality of life.

The development of a universally accepted definition of pain and its related concepts was indicated as main narratives by the International Association for the Study of Pain (IASP).[5] Among the first proposals of the association were the definition of pain and the classification of chronic pain syndromes. These first efforts have contributed to stimulate a worldwide debate on pain terms and classification, which continues till today.[6]

In his 2004 Bonica lecture, John D Loeser recalls Encyclopedia Britannica's definition of **disease** as "an impairment of the normal state of an organism that interrupts or modifies its vital functions" and concludes that since "chronic pain certainly does modify functioning, in many different ways", it has to be recognised as a disease in its own right.[7]

The efforts in providing specific biologic characterisation of pain as a disease are shown through aberrations in neurophysiology. Neuroimaging has shown compelling evidence that functional, structural and chemical changes occurring in the brain in association with chronic pain were reported in a 2009 review by Tracey and Bushnell.[8] In the authors' view, these findings support the idea that chronic pain should be put "in the realm of a disease state" as a condition characterised by a disordered nervous system.[9] In the same year, the American Academy of Pain Medicine put forward a position paper recommending to distinguish between two categories of pain and proposing new terminology for pain: eudynia and maldynia, literally meaning "good pain" and "bad pain".[10] While the first term refers to pain as "a symptom of an underlying pathological disorder, either an illness or an injury", maldynia denotes instead "'pathological pain', referring to pain as a neuropathological disorder or disease process that occurs due to changes at cellular and molecular levels".

Nowadays, it is recognised that persistent pain entails a pathologic reorganisation of the neural system.[11] This process can be due to several factors, such as a genetic predisposition,[12-14] central sensitisation mechanisms,[15] as well as many other factors. However, Cohen et al challenge the view of pain as a disease, by claiming that scientific findings showing pathologic changes associated with persistent pain are not sufficient to define pain as a disease.[16]

What types of pain are there?

Broadly speaking, there are acute pain, chronic non-cancer pain and cancer type pain.

Acute pain is associated with acute tissue damage or potential damage, or as described in such terms. There is usually a pain generator secondary to injury of tissue or structures resulting in inflammation, damage and pain; for example, a fall on the knee and a fracture of the knee. There is usually a direct relationship between stimulus event and pain response (ie, a pain source and a pain response). It acts as an alarm to draw attention to the painful area, to receive treatment and to allow for healing. Once the source is removed, healed or recovered, the pain should resolve. Such acute pain conditions are very responsive to standard painkillers and simple treatment modalities, such as rest and immobilisation.

Chronic pain is an often misunderstood condition. It is defined as pain lasting beyond expectation or beyond nociception. Temporally, this is taken as more than three months of daily pain. It can affect any part of the body and it may not go away despite traditional models of assessment and treatment. A eudynia pain model of a chronic pain generator, an inflammatory source, is arthritis of the knee. But in other chronic pain states, the pain generator may be less obvious (eg, lower back pain, chronic neck pain). The maldynia model would be the perseverance of pain despite the lack of pain source/generator, such as persisting pain in the ankle after an innocuous twisting ankle sprain.

Neuropathic pain is an example of chronic pain syndrome. This nerve type pain can arise from different conditions. It can happen in either the central nervous system (within the brain; eg, post-stroke pain), or it can happen in the peripheral nervous system (outside spinal cord; eg, diabetic nerve pain, trigeminal neuralgia and postherpetic neuralgia). Nerve pain is very different from inflammatory pain/somatic pain. The mechanism of pain is not mediated by the same pathway. Medications that treat inflammatory pain (eg, trauma, fractures and contusions) are usually not able to treat nerve type pain.

Joint pains can be inflammatory, neuropathic or non-mechanical. When a patient complains of knee pain, we have to exclude the inflammatory cause of the knee pain. Any mechanical causes such as arthritis will also be investigated. Hence, an X-ray would be done to assess the integrity of the knee joint. Only when that is satisfied would we look for other causes, such as neuropathic or pain-memory conditions. Chronic knee pain may be both inflammatory and neuropathic, thereby requiring multi-modal approach to the problem. In certain situations, all of the above approaches may not be useful for the chronic knee pain, such as a phantom type pain. An example of that would be post-amputation pain of the leg. While the pain generator has been removed by surgery, the nerves continue to remember the pain signals that were sent previously, despite the tissue having healed or the source removed.

Example 1.

Mrs Goh (not real name): 50-year-old lady. No medical problems. Developed shingles attack over left chests wall extending to her back in January 2009. Pain started one week after the blisters appeared. Six months later, she was still having the shingles pain – very distressing pain – and unable to lie down. Clothes over the area will trigger off a pain flare. She was very sensitive to touch and pressure. She described her pain as a shooting pain with current-like flare ups. The background pain is burning in nature, like a hot iron.

The peripheral nerves have been infected and damaged by the latent chicken pox virus (herpes zoster). These patients have intense and severe pain over the shingles blister without relent. Instead of conducting electrical signals, the nerve becomes sensitised and starts to have ectopic firing. These aberrant signals are perceived by the brain as painful impulses. When examined, there is no ongoing tissue destruction or inflammation. The damage has occurred and now, only the post-damage effect remained. Standard painkillers, such as paracetamol or anti-inflammatory painkillers, do not have an effect on shingles pain. Treatment would be anticonvulsants (eg, Carbamazine or Lyrica) instead.

Example 2.

Mrs Lim (not real name): 40-year-old woman. She complained of leg pain while walking that has occurred for more than one year; back pain with pulling leg pain whenever she was standing or walking; and difficulty walking upslope. While lying or sitting down, the pain improves and settles down. The deep ache in the leg is constant, with sporadic pain flares of intense pulling nerve pain. Anti-inflammatory medications were marginally helpful in controlling the pain, though without abolishment. There is a need for anti-neuropathic drugs such as anticonvulsants or/and antidepressants, not to treat her depression but to stabilise the hypersensitised nerves.

Back pain with leg pain (nerve compression by slipped disc) is another condition of neuropathic pain. The prolapsed disc will compress on the surrounding nerve, causing pain in the legs. The pain in the legs will get progressively worse when one walks. This is called claudication pain. The pain is due to the stretching of the impinged nerve. This type of pain has two components – inflammatory and neuropathic pain. Hence, it is a mixed pain condition.

Persistent neuropathic pain commonly seen in general practice

1. Disease specific: Patients who are suffering from the following conditions (nerve injury)
   A. Shingles (viral zoster infection)
   B. Diabetes neuropathy
   C. Nerve compression from slipped disc or any external causes
   D. Cancer treatment using certain chemotherapy and radiotherapy
   E. Trauma and post-surgery
   F. Post-stroke syndrome
2. Intense refractory pain during an acute condition that was not properly treated and progressed to chronic neuropathic pain (eg, painful arthritic knee)
3. Poor sleep and poor rehabilitation status

Types of pain management strategies

The first and primary aim in pain treatment is to identify and eradicate the source of pain generator. In chronic pain conditions, the mechanism of pain and its maintenance are often not obvious. While the pain generator may be elusive, we have to arrive at a diagnosis that accurately represents the patient's condition, rather than loosely labelling it as degenerative pain. If the pain generator is not amenable to eradication, we can still reduce the pain and effectively control it.

Understanding chronic pain and its difference from an acute pain model will have an impact on the principles of treatment. In acute back pain relating to trauma or acute inflammatory condition, it would require patients to rest, be immobilised and apply cold compress, as well as use painkillers such as NSAIDs. In chronic back pain of more than three months, the opposite instructions would have better outcomes. The patient should not undergo further prolonged bed rest but gentle mobilisation and exercise instead. We should not only rely on anti-inflammatory but also anti-neuropathic agents.

Pain medications

The usual treatment of chronic pain using the standard painkillers, such as paracetamol, ponstan, voltaren, arcoxia and celebrex, are ineffective. Chronic neuropathic pain cannot be treated like the usual type of inflammatory pain. The pain will not be controlled even with morphine. Based on the new understanding of this type of pain (nerve pain), we need to stabilise the nerve with special medications such as anticonvulsants (used to treat seizures) and antidepressants (to treat depression). The doses we use to treat patients are far lower than those needed for treating seizures and depression. These patients with nerve pain are not suffering from depression or seizures, but the combination of these drugs independently or together is effective in the treatment of nerve pain by membrane stabilising the over-excited painful nerves. I have sent many chronic pain patients to psychiatrists for evaluation and they returned with a note saying that they are not suffering from any mood disorders or "imagination" of pain.

The group of antidepressants with the most extensive research experience would be the tricyclic antidepressants (TCAs; eg, amitriptyline and prothiaden), with a fairly good number needed to treat (NNT) for painful conditions such as shingles, trigeminal neuralgia, diabetic neuropathy and post-stroke pain (ie, NNT 2–3). However, they also have

poor numbers needed to harm (NNH) for medication-related complications. There are other medications such as selective serotonin reuptake inhibitors (SSRI; eg, lexapro and fluoxetine) and serotonin and norepinephrine reuptake inhibitors (SNRI; eg, effexor and duloxetine) that showed promises in the treatment of these chronic painful conditions. However, some of these side effects of medication can be potentially problematic, such as suicide risk and depression, even at low doses.

Anticonvulsants, such as lyrica, gabapentin and carbamazepine, have good NNT 2 for chronic painful conditions too. They potentiate the descending inhibition pathway of pain via GABAergic and calcium antagonist receptors, thereby blocking the ascending pain signals. Similarly, some common minor side effects have to be noted (eg, blurring of vision, constipation, weakness, giddiness, nausea and low mood).

Multimodal analgesia has established its role in the treatment of chronic pain. While we target the inflammatory condition with NSAID/COXII inhibitor and/or opioid, we need to consider the concurrent use of anti-neuropathic agents for the treatment of central sensitisation of central nervous system.

Pain procedures (minimally invasive procedures)

Taking an example of chronic low back pain, evaluation of this pain may point to mechanical spinal conditions such as prolapsed disc (slipped disc), spinal stenosis (spinal canal narrowing), facet joint arthritis, and inflammation of the nerve and disc. However, myofascial pathology is much more common, accounting for up to 70% of all back pain.

Many bedside injection procedures can be used in general practice to treat common chronic secondary musculoskeletal pain conditions (eg, back pain, neck pain, shoulder pain, foot pain, leg and foot pain, and upper limb pain). The accurate identification of myofascial trigger point and its injections into the painful area can reduce the inflammation and the hypersensitised muscle and ligaments, as well as to stop the pain. Even mechanical compressive spinal conditions can be managed as such by GPs.

Only when these conditions progress to numbness and weakness of the legs, signifying nerve compression, then is there an impetus to refer onward to a specialist to aim for removal of the underlying compression. Currently, this alternative to open surgery has established itself within the pain medicine specialty. Percutaneous (+/- endoscopic) decompression of the disc using a specialised needle/drill to suck out excess herniated disc material or percutaneous dilatation of the canal space with a ballooning catheter (neuroplasty – likened to ballooning of blocked blood vessels of the heart) and radiofrequency ablation (injections to desensitise and/or denervate the hypersensitive injured or impinged nerve).

These minimally invasive procedures target removal of the pain source (eg, disc decompression and bone spur decompression) with little complication and downtime. With the guidance of radiological fluoroscopy, these procedures can be performed safely within a day surgery facility.

Conclusion

Once we have addressed the Cartesian model of pain transmission and perception, and look beyond the limitation of cause and effect by applying new models of transmission of pain signals to the "chronic pain" conditions, we can possibly give rise to pain resolution rather than just pain management. It should be pain treatment rather than just managing of pain, with complete abolishment of pain as the final goal.

There may be other chronic pain conditions needing longer-term medications. This is similar to using long-term medications to treat hypercholesterolemia and hypertension. With a good understanding of pain pharmacology, we can achieve good pain control with the least possible complication and side effects.

Pain treatment of various chronic pain conditions can be achieved with great efficacy without needing to bear with or tolerate ongoing pain. Rehabilitation, together with cognitive behavioural therapy, may be utilised in certain refractory painful conditions (eg, Fibromyalgia). It should no longer be managing pain but treating pain at source. ◆

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Vaccinations VS The Anti-Vax Movement

Text by Dr Hsu Li Yang

Origin of vaccination

The term "vaccination" describes the administration of a vaccine, which is a "biological preparation that improves immunity to a particular disease."[1] This term was coined by Dr Edward Jenner after "variolae vaccinae" (Latin for "smallpox of the cow"), a story that is reasonably well known.[2] Dr Jenner, however, was neither the first person to discover vaccination nor even the first to use cowpox to protect against smallpox. Grinding up the dried scabs from smallpox survivors and inoculating these into uninfected persons (variolation) had been practised for centuries in China, India and the Middle East; Lady Mary Wortley Montague is credited for her advocacy in establishing the practice of variolation in England.[3] Variolation was not exactly safe – the mortality was estimated to be 2%, which was nonetheless approximately seven times lower than the fatality rate of smallpox.[2]

Others before Dr Jenner had observed that cowpox infection protected against smallpox, and it is widely acknowledged that farmer Benjamin Jesty from Dorset, England was the first to inoculate cowpox into his wife and two sons in 1774, protecting them from the smallpox outbreak that occurred in his region.[2] However, this does not in any way reduce Dr Jenner's achievement on 14 May 1796 and afterwards, as he was the first to study the phenomenon scientifically and to publicise the results. Many – most notably the great Louis Pasteur – have stood on his shoulders to pave the way for the study of immunology and the discovery of even more vaccines.

"Anti-vaxxers" or vaccine hesitancy

The World Health Organization (WHO) listed vaccine hesitancy as one of the top ten threats to global health for the first time in 2019.[4] Vaccine hesitancy refers to "delay in acceptance or refusal of vaccines despite availability of vaccination services",[5] and this issue has been around probably for as long as there has been vaccines. Rev Cotton Mather, a preacher who had advocated variolation in Boston, had a bomb hurled through his window in November 1721 with the following note: "Cotton Mather, you dog, dam you! I'll inoculate you with this; with a pox to you." The bomb fortunately did not detonate.[6]

Sir William Osler, who is still venerated today as a father of modern medicine, issued a challenge to "anti-vaxxers" that bears recounting, and which also hints at the shape and scale of the anti-vaccination movement of his day: "I would like to issue a Mt Carmel-like challenge to any ten unvaccinated priests of Baal. I will go into the next severe epidemic with ten selected, vaccinated persons and ten selected unvaccinated persons – I should prefer to choose the latter –

three members of Parliament, three anti-vaccination doctors (if they can be found), and four anti-vaccination propagandists. And I will make this promise – neither to jeer nor jibe when they catch the disease, but to look after them as brothers, and for the four or five who are certain to die, I will try to arrange the funerals with all the pomp and ceremony of an anti-vaccination demonstration."[7]

Vaccine hesitancy has at its core conflicts within the relationships between humans, science, the power of the state and public health practice. Two primary themes have threaded through the "anti-vaxxer" movements of the past and present: firstly, vaccines cause more harm than the diseases they are supposed to prevent; secondly, the issue of freedom of choice (conscientious objections) versus compulsory vaccination.[8] There have always been doctors, unfortunately, that are part of the "anti-vaxxer" movements, the most infamous of recent times being Dr Andrew Jeremy Wakefield who published a fraudulent *Lancet* paper in 1998, claiming to link the measles, mumps and rubella (MMR) vaccine to autism and gut disease. His work has been discredited multiple times and he has been struck off the UK medical register, but his "alternative facts" have not come unstuck and he remains very much a hero to the anti-vaccination movement.

The ease of access to information via the Internet and social media appears to have made matters worse rather than better, as confirmation bias has led to the formation of online communities and "echo chambers" where selective sharing of scientific research and experiences have created greater uncertainty around the safety of vaccines.[9] What is new today, relative to the past, has been the exploitation of this issue on social media by malignant "state actors" (to borrow a recently popularised local term) to amplify social discord, which in turn erodes public trust and consensus on vaccination.[10]

Unfortunately, the way forward is not straightforward. WHO did not find a single intervention that addressed all instances of vaccine hesitancy, recommending instead multi-component strategies that target specific under-vaccinated groups, including interventions that enable vaccination behaviour.[5] One recent tragedy of vaccine hesitancy is the ongoing measles epidemic in Philippines that began at the start of this year, with more than 20,000 cases and 300 deaths as of March. The Filipino authorities have attributed this outbreak to the loss of trust in the country's immunisation programme following the Dengvaxia scandal in 2017, with a steep plunge in vaccination rates of measles and other diseases as a consequence in 2018.[11]

Local context

In Singapore, at this time, we are fortunate that the anti-vaccination movement is not as organised as in other countries, with our vaccination rates for the mandatory childhood measles and diphtheria vaccines holding out at 95% of the eligible population yearly. It is important today to have an effective communication strategy involving mainstream and social media channels around the topic of vaccines, even though it is understood that the most rabid "anti-vaxxers" will not be swayed by any amount of scientific evidence. On a perpetual basis, we should continue to publicly commit to the safety of our vaccines (and drugs), as well as to implement the vaccination programmes – particularly the mandatory vaccines for children – in an even-handed and responsible manner. ◆

Dr Hsu is currently Head of the Infectious Diseases Programme at the Saw Swee Hock School of Public Health and Clinical Director of the National Centre for Infectious Diseases.

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A TCM PERSPECTIVE ON CANCER MANAGEMENT

Text by Sun Hui Li

Translated by Ong Yan Chun and Wong Yuet Chang Milissa,
Physicians, Bao Zhong Tang TCM Centre

In recent years, the number of cancer patients has been increasing worldwide and cancer has since become a common disease in today's society. Cancer can occur in various organs of the human body and its incidence gradually increases once one passes middle age. Throughout the years, Western treatment for cancer has also evolved, with surgery, chemotherapy and radiotherapy being the three main arms of cancer treatment. The main objectives of these treatments are to eliminate cancer cells and shrink tumours in the body as much as possible. However, these treatment processes are frequently accompanied with side effects that could harm the body, affecting the patient's quality of life.

At present, the pathogenesis of cancer has not been fully elucidated. Traditional Chinese Medicine (TCM) emphasises on a holistic concept, where the body's systems are perceived to be one integrated and balanced whole. Therefore, in TCM, the fundamental cause of cancer is believed to be a deficiency in the body's vital energy (Qi) which makes the body more susceptible to the invasion of pathogenic "evils" and "toxins". This results in stagnation of Qi, blood stasis and coagulation of "phlegm" and "toxins". When accumulated over time, this leads to the formation of tumours. Hence, cancer is regarded as a systemic disease that affects the whole body with the tumour manifesting as a localised symptom; it is a disease that presents with overall deficiency of the body with localised "excess evil/toxin".

Therefore, the TCM approach to cancer treatment focuses on both the systemic and local aspect of the disease and is not limited to target only the tumour. Clinically, TCM physicians diagnose TCM syndrome patterns based on the symptoms and dynamic balances of the patient while applying various TCM diagnostic theories. These TCM syndrome patterns provide guidelines for physicians to select appropriate treatment methods and herbal formulas, as well as predict the progress of a disease. In the case of cancer, treatment is categorised into two broad principles: strengthening the body and eliminating pathogenic factors. Methods to strengthen the body include invigorating Qi, nourishing blood, replenishing Yin and warming Yang. These general tonifying methods are selected after analysing individual body constitutions and they aim to improve the body's ability to fight cancer. Supplementing blood and dissipating blood stasis, dispelling toxic heat, and dispersing "phlegm" to soften lumps are some ways to eliminate pathogenic factors, which is necessary to control disease progression. Strengthening the body is a basic requirement to carry out the elimination of pathogenic factors and getting rid of these pathogenic factors will further protect the body's vital energy. These two principles complement one another to achieve the ultimate goal of treating the disease and increasing the chances of survival.

Complementing cancer treatment

TCM treatment can be used to complement all stages of cancer treatment. After an operation, the use of anaesthetics, or other conditions such

as excessive bleeding, surgical trauma and fasting before or after surgery, could cause gastrointestinal functional disorders and weakening of the body constitution. Herbal medication can then be used to nourish and supplement Qi and blood, and regulate and balance the nutritive and protective Qi, to aid in the recovery of the body after surgery. Chemotherapy and radiotherapy often cause greater damage to the body's internal environment, such as depleting vital energy, exhausting body fluids and disrupting blood and Qi production in the spleen and stomach, resulting in dysfunction of the digestive system and disharmony in the liver and kidneys. (In TCM, these organs are considered functional units of the body and are not to be confused with the actual anatomical organs.) In this case, the prescription of herbal medicine should focus on strengthening the body, revitalising Qi, replenishing body fluids, regulating the liver and invigorating the spleen and kidneys. This aims to reduce the extent of the toxic side effects of chemotherapy and radiotherapy to increase tolerance for the treatment, so that efficacy can be improved and patients can successfully complete their course of treatment.

Upon completion of conventional treatment for cancer (eg, surgery, chemotherapy and/or radiotherapy) and being declared cured or in complete remission, it is recommended for the patient to regularly consume herbal formulas that focus on nourishing Qi and invigorating the spleen, nourishing and supplementing the kidneys and liver, enriching Yin and replenishing Qi, complemented with herbs that have anti-cancer and detoxification properties as prescribed by a licenced TCM practitioner. More commonly used herbs with anti-cancer and detoxification properties include *Hedyotis diffusa* (白花蛇舌草) and *Sculellaria barbata* (半枝莲). These aid in maintaining the stability of the body's internal environment and achieving the goal of prolonging survival.

If the cancer is in the advanced stage, the patient would experience a decrease in immune function, deficiency and depletion of vital energy and an increased accumulation of pathogenic toxins. Herbal medicine is then prescribed to support and boost the body's vital energy and/or dispel pathogenic factors so as to regulate functions and correct disharmony of the organs and viscera. This strengthens the body's ability to fight cancer and slows down disease progression, improving the quality of life to hopefully increase chances of survival.

Ensuring emotional well-being

Cancer is now widely known as the "number one killer", inducing psychological fear in many people. However, one should not panic and develop a psychological burden. In TCM, emotions are a major internal cause of disease. Excess emotional activity or burden can cause severe internal imbalances, impairment of vital organ functions, disruption of the flow of blood and Qi, and blockages in the meridians. This negatively impacts the immune system, making one more susceptible to diseases. Thus, to strengthen one's body, one should maintain emotional balance and keep a positive outlook. Many cancers may be prevented, treated and controlled. The crux lies in early detection, early diagnosis and early treatment. Patients diagnosed with advanced-stage cancer should maintain a positive outlook, to aid in the ultimate goal of "survival with the tumour". ◆

Ms Sun graduated from Shanghai University of Traditional Chinese Medicine in 1995. She specialises in using TCM to complement Western treatment for various kinds of tumours, to improve quality of life and reduce side effects of chemotherapy and radiotherapy. She is a medical director and senior consultant physician at Bao Zhong Tang TCM Centre.

SMA EVENTS
MAY–JUL 2019

DATE	EVENT	VENUE	CME POINTS	WHO SHOULD ATTEND?	CONTACT
Non-CME Activities					
4 May Sat	SMA Annual Dinner 2019	Regent Hotel	NA	SMA Members and Guests	Mellissa/Azliena 6223 1264 dinner@sma.org.sg
5 May Sun	45th SMA Inter-Hospital Soccer Tournament 2019	The Cage Sports Park @ Turf City	NA	SMA Members	Rita 6223 1264 membership@sma.org.sg
17 Jul Wed	SMA Annual Golf Tournament 2019	Sembawang Country Club	NA	SMA Members	Azliena/Mellissa 6223 1264 golf@sma.org.sg

Art in MEDICINE

Text and photos by Prof Christopher Cheng

It was a simple watercolour painting of the lily pond in front of the main entrance; done as part of an introductory class on watercolour that we had organised for staff, patients and public. In all honesty, it was not a very good painting at all, but the technical quality mattered little to her – one of the staff of Alexandra Hospital.

"I remember this place," she said when she saw the painting reproduced in the calendar. "I often went there to cry when I was upset. I'll keep this precious gift for a long time." The blurry watercolour resonated with her, bringing back hidden emotions buried for a long time, as well as tears of sadness and joy. The scene touched her deeply because it transported her far, far away.

1

Art is not merely a display of the artist's technical mastery or a decoration on the wall to brighten up a dull place. The artist wants to tell a story to connect with the viewer at the deepest level. When a singer brings the house down with a long-held high note, it has more to do with bringing the emotions to the audience than how high a note the singer can hit.

We were at a nursing home one mooncake festival to bring some cheer and music to the residents. After a few rounds of traditional favourite tunes where residents joined in, clapping and singing, one Indian grandma got up from her wheelchair and started singing in Mandarin and dancing. The love song about the moon momentarily transported her to a place of love – without her arthritic pain or the boredom of a care facility. The fact that we were all singing out of tune didn't

seem to matter at all. For that brief moment she was 16 years old again. Singing, dancing and drawing are the most instinctive and natural forms of human expression. There were cave paintings going back 30 thousand years. Art may be the language of humanity.

Art in medicine

Hospitals are frightening places; ambulances rushing around with sirens blaring, gates everywhere keeping people out and patients in. In the wards, alarms go off incessantly; everyone seems to be busy with their computers. Even when doctors and nurses do come round, they are forever in a hurry to go somewhere else. A patient is stripped of his/her normal routines and deprived of the simple dignity of carrying out their bodily functions in privacy. That's even before taking into account the worries and suffering arising from the illness in the first place.

Hence, the question is: "Is there a way to ease this suffering through art?"

If the investment into visual art in hospitals around the world is anything to go by, there seems to be a growing recognition that art plays an important role in healing. In the Netherlands, 7% of hospital development budget is allocated for art.

Hospital architects strive to bring some nature into the wards. Modern hospitals have windows to the "outside world", bringing in natural light even to the intensive care units. Connection to greenery and nature certainly helps us to orientate to time and space, but plants are not human. What patients yearn for is the human touch, but sadly that's a luxury we seem to have scarcely time for. How often do we say "Hi madam/sir, here is a nice cup of Milo to make you stronger.," when we serve beverages? It certainly did not happen when I was a patient in the hospital last year. While high-touch medicine is what we strive for, safety regulations and automation are constantly putting up more and more barriers, threatening to make robots out of caregivers. Can art help to bridge this gap?

Similar to sunlight and greenery having healing properties, art can help transcend the fearful experience of a hospital stay to some place filled with hope, love and peace. For that to happen, the artist has to abandon his/her ego and instead strive to tell the story to connect with the patient. The artist has to be sensitive and open to the needs of the sick. This applies to visual artists, singers and dancers in the same way.

Art of medicine

In fact, the art in medicine is also the art of medicine. We have often lamented the erosion of the art of medicine. The failure to communicate and form trusting relationships with our patients has often been cited as the root cause of medico-legal issues. Perhaps doctors also need to think like a healing artist. Doctors need to be sensitive and brave to bare his/her soul and be available to the patients' deepest needs. This may be frightening at first; there may be doubt of whether the doctor can cope with all the dimensions of the patients' emotional needs. Many in our profession strive to be experts in the technical aspects, but become cautious when dealing with real humanity needs, even as we trumpet the virtues of being compassionate and holistic. The technical wizardry can be a distraction to the deeper needs for both the doctor and the artist. It takes away the focus to connect with the soul.

When we connect with our patients, life is full of hope. Like the dancing lady in the nursing home, for that brief moment everything feels right, radiating possibilities. We can help transcend the daily mundane chore and pain to the sublime, where there is no suffering. There is enough to be happy about at any moment. Pain and suffering is still there but temporarily alleviated. Art helps the person look at suffering in another way.

In summary, art in medicine is a window to humanity for both the suffering patient and the compassionate doctor. For the patient, art transcends the suffering to hope and acceptance. For the doctor, it encourages our return to be the healer of more than physical pain but also of the soul. When done well, it is most fulfilling for both the artist and the doctor. ◆

Legend

1. Sacro Monte, Italy

2. Morning stroll

Prof Cheng graduated in 1982 and obtained his FRCS (Surg) in 1986 and FAMS (Urology) in 1993. He was appointed Chief Executive Officer of Sengkang General Hospital Pte Ltd, Singapore Health Services, in July 2015. He is also a Member of Board of Directors of Bright Vision Hospital from 1 September 2014. Prof Cheng is currently a senior consultant in the Department of Urology, Singapore General Hospital.

PROFESSIONAL SUPERVISION

Text by Dr Luke Toh and Cleo Ngadimin

For centuries, medical professionals have enjoyed the privilege of practising the art-science of healing, and patients who seek treatment expect a competent level of care. Professional accountability necessitates a system of quality control that ensures that appropriate professional standards are maintained.

Professional supervision

According to the 2016 edition of the Singapore Medical Council (SMC) Ethical Code and Ethical Guidelines (ECEG), "Teaching, supervising and mentoring junior doctors and other healthcare professionals are an integral part of professional life and form part of our professional obligation to improve the care of patients in the community."[1]

Much like Chinese kung fu, the teaching of medicine has historically followed the "master-apprentice" model, where the expert of the art formally assumes the role of moulding a novice through role modelling, mentorship and support, imparting knowledge and skill, and closely scrutinising the novice's progress before teaching skills at the next level. Too rapid a progression from one stage to the next may result in setbacks that could incapacitate the novice.

In professional supervision, the parallel to this would be *"...the formal provision, by approved supervisors, of an intensive relationship-based education and training that is work-focused and which manages, supports, develops and evaluates the work of colleague(s)"*.[2] This addresses functions of quality control, maintaining and facilitating the supervisee's competence and capability, and helping supervisees work effectively within a safe and supportive environment. Such an environment enables reflective critical analysis of the supervisee's performance. In addition, while supervision is often linked to the training of budding practitioners, the rehabilitation of impaired senior practitioners is another aspect that is under-recognised.[2]

Professional standards

Established by a body of expert practitioners, professional standards attempt to set the desired "minimum" level of competence that will be expected of one who practises medicine. In Singapore, these experts are represented by the various colleges that constitute the Academy of Medicine, Singapore, supported by their respective Residency Advisory Committees and the Joint Committee on Specialist Training. They assist the SMC and the Specialists Accreditation Board of the Ministry of Health to determine professional standards required of doctors for licencing. In legal cases alleging negligence, the professional standard is set by reasonable and responsible peers (ie, the Bolam standard).

Standards are continuously evolving, driven by new technology and quality improvement. These benchmarks may be used as a tool to evaluate clinical proficiency and safety of practice. They also ensure that medical practitioners are accountable for clinical decisions and actions, and maintain competence during their careers.

Setting clear objectives

The aims for supervision include improving competency, recognition of boundaries and limitations of skill, communication skills, workload management, commitment to professional improvement, as well as development of self-awareness and self-esteem. Accreditation bodies need to list a clear set of objectives expected of a training system. The bar needs to be set appropriately to the level of expertise desired. The entrustable professional activities programme has also been implemented in some systems.

Competent supervisors

According to the 2016 SMC ECEG, "if you teach or supervise other doctors or healthcare professionals… you must ensure that you are able to do so competently, diligently and responsibly."[1]

Competence as a supervisor may not come automatically with seniority. The best practitioners of a field may not necessarily be the best teachers. Recognising this, there are courses that focus on the different aspects of teaching and supervision. These courses range from understanding the residents' needs and developing assessment tools, to objectively giving feedback. The excellent supervisor is one who regularly improves one's own abilities to better reach out to the supervisee.

Feedback and reflection

It is important for timely feedback from the supervisor so that the trainee is made aware of his/her strengths and weaknesses. Given the pace of practice and heavy clinical load, this awareness may fade away before it can be used constructively. Time for reflecting on the evaluation given to the supervisee and revisiting the key points together with the supervisor is necessary.

Well-being of the supervisee

Medical practice and training are fast-paced and highly stressful activities, with increasing reports of physician burnout globally. With mental health becoming an increasing concern among healthcare professionals, clinical supervision should incorporate, as part of a holistic programme, emotional support for issues arising from working in a stressful professional environment.

Balance of risks to patient

The supervisor must constantly weigh the benefits of training against the risks to patient safety and comfort. The supervisor frequently walks a tightrope; to enable trainees to achieve a level of competence commensurate with th eir future roles as primary clinicians, and to ensure that clinical procedures are performed safely and comfortably.

When flying a kite, the control of the string tension has to be calibrated according to the circumstances. Similarly, the supervisor needs to determine: (1) whether the junior is suitably competent to attempt the task, or if they should remain an observer until they have demonstrated adequate understanding of the task; (2) the appropriateness of the situation for hands-on training (some patients may be uncomfortable with a trainer talking a junior through a procedure when the patient is conscious); and (3) the learning style of each trainee. Remote supervision may be acceptable under some situations, provided that the supervisor is able to render timely assistance when problems arise or if the complexity of the case should unexpectedly increase beyond the competence of the supervisee.

Scheduled supervisor reviews

A suitable supervision review schedule is important for the optimal effectiveness of the system. Routine periodic reviews highlight issues before they become problematic, give the supervisee timely feedback necessary for development, and assure that necessary changes will be implemented in a timely fashion.

Formal appraisals and references

Supervisors should be required to comment on the level of competence of their supervisees. These should be objective, fair, honest, justifiable and accurate assessments with respect to trainees' competence, performance and conduct. Feedback from other colleagues should be obtained as necessary.

Culture change

A "blame culture", where the emphasis is on punitive correction, can result in the loss of many learning opportunities.[3] The concept of a "just culture" is gaining acceptance; this is where the emphasis is placed both on the learning from mistakes and on implementing corrective measures instead of identifying who was wrong.

In conclusion

Supervision is an essential part of medicine and understanding the fundamentals enables the training of future talent. The experienced master, through active role-modelling, mentoring and teaching, takes on the responsibility of ensuring the apprentice achieves the desired and attainable level of performance before embarking on independent practice. ◆

Dr Toh is an interventional radiologist based at KK Women's and Children's Hospital and is a visiting consultant at Singapore General Hospital. His interests are in women's and children's intervention, medical education, professionalism and medical ethics issues, particularly in professional communication and informed consent.

Cleo is a second year medical student at Imperial College London. She has a background in BSc Psychology and BSc Neuroscience, and has a keen interest in plastic and reconstructive surgery. She is the incoming president of the Imperial College Plastic Surgery Society and is currently involved in surgical education and microsurgery training research.

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EQUIPPING CLINIC ASSISTANTS FOR YOUR CLINICS

Text and photos by Terry Teong, Senior Executive

The first intake of the SMA Place and Train Clinic Assistant (CA) Introductory Skills Course 2019 kicked off on 6 March. During the four-day course, we saw 13 participants picking up foundational skills in monitoring vital signs, operating an ECG machine and effective communication skills in order to competently assist doctors and manage daily clinic operations.

SMA has been working with the Employment and Employability Institute (e2i) since the programme's inception to assist clinics in training their newly employed CAs, especially those who have no prior experience in the healthcare sector, and with funding support of up to $2,470. The funding consists of a 90% subsidy on the $800 (before GST) course fee, as well as a 70% subsidy on the CA's one-month salary (capped at $1,750). The funding criteria by e2i are as follows:

- Trainee must be Singaporean or Singapore Permanent Resident;
- Trainee must be employed as a CA by the clinic after 27 September 2018;
- Trainee must be offered a starting salary of $1,500/month and above (full-time) or at least $8/hour (permanent part-time, with minimum 80 hours clock-in per month); and
- Trainee must complete the three weeks on-the-job training assessment with the clinic after the four-day course.

The next intake of the SMA Place and Train CA Introductory Skills Course will be held from 3 to 6 July 2019. For more information, please contact Terry at tel: 6540 9172 or email: placeandtrain@sma.org.sg. ◆

Course Content

- Understanding the essential role of a CA
- Managing infection control
- Understanding workplace safety and health policies
- Appreciating common healthcare schemes and clinic systems
- Understanding healthcare law and ethics
- Performing ECG
- Managing health screening
- Measuring and recording vital signs
- Collecting and despatching biological specimens
- Understanding basic skills in good drug dispensing practices
- Managing drug processing and packing prescriptions
- Understanding receptionist duties and phone techniques
- Implementing effective communication skills
- Managing conflict management and service recovery
- Understanding common medical procedures and conditions

Legend

1. Group photo of the March cohort with the instructors

2. Learning to operate the blood pressure monitor

Groundhog Day

Dr Tan graduated from the National University of Singapore in 1990. She is married with a daughter and runs her own general practice.

Text by Dr Tan Su-Ming

I don't know if you have ever watched that 1993 movie where Bill Murray played a weatherman who woke up every day to relive the same day over and over again.

Sometimes, I think my patients with Alzheimer's disease do that too, or at least seem to have that experience.

One caregiver related how his father with Alzheimer's would call him frantically every morning to report that his car had been stolen. He had to be reminded that the car had actually been sold and the money deposited in his bank account.

I thought it was quite funny, but his family members probably don't think so.

Mr H is 90 years old and his Alzheimer's has gotten increasingly worse. He is doddery but can still walk with a cane and minimum assistance. He lost his wife of nearly 70 years very recently.

"Oh, how is dad? Is he aware that mom is gone?" I asked their son K, who is Mr H's main caregiver now.

K then related how every morning, his father would walk up to his wife's room and peer in, looking for her.

When they tell him that she is gone, his smile fades and he looks like he wants to cry.

After a moment, he forgets and goes happily about his day, till he passes her room again the next morning, and goes through the whole drill once more.

There isn't a happy ending like in the movies.

Like Seeing For the Very First Time

Text by Dr Tan Su-Ming

A regular patient of mine who is a sweet Malay lady of 70 years came for her usual blood pressure check and mentioned that she had just had her cataracts removed.

"Oh... I didn't know. Has your vision improved?" I asked.

"Oh. Very much! I can see clearly now!"

At this point, she glanced around my consultation room that she has visited countless times before and exclaimed, "Wow! Your office is so nice!" She then looked at me, with her eyes widening in surprise, and exclaimed again, "Oh! This is how you look, doctor! You are so *cantik**!"

I was a little taken aback and could only blush sheepishly. I had no idea that all this time, she didn't know what I looked like. All this time she probably had seen my face as a blur and knew me only by my voice and touch.

She was seeing me for the very first time.

She behaved like a person who had been looking through a veil all along. And now, that veil had been lifted.

Everything to her was now fresh, new and exciting. Now there are details instead of a blur.

Wow!

**Cantik* means pretty in Malay

REMEMBERING Emeritus Prof Chia Boon Lock

(1939-2017)

On 27 December 2017, Singapore and the medical fraternity lost an outstanding cardiologist, teacher, mentor, friend and much-respected member of our community with the passing of Prof Chia Boon Lock, Emeritus Professor at the National University of Singapore (NUS) Yong Loo Lin School of Medicine (NUS Medicine).

Emeritus Professor Chia is regarded as Singapore's "Father of Cardiology", for his pioneering work in this field. He was one of the first to introduce echocardiography and the first to introduce 24-hour ambulatory blood pressure monitoring locally. He was best known for his novel electrocardiographic findings in acute inferior myocardial infarction.

Those of us who had the privilege of working with or learning from him during his illustrious career saw him bring his hopes and visions for the field to life. He led by example as the Head of the National University Hospital's (NUH) Division of Cardiology, Department of Medicine from 1986 to 1989 and the Chief of the Cardiac Department from 1996 to 1999. He was formerly President of the Singapore Hypertension Society and the Singapore Cardiac Society, from which he received the Inaugural Lifetime Achievement Award in 2014. He was named an Honorary Member of the SMA in 2008.

Beyond his professional achievements and accolades, Prof Chia will be remembered as a teacher par excellence, a favourite of NUS medical students and cardiology registrars, and someone always willing to listen and unstinting with his advice. Every cohort from 1972 to 2016 would remember how Prof Chia brought the Introduction to Cardiac Examination lecture to life with his masterful vocal simulations of every conceivable cardiac murmur, which earned him standing ovations and lifelong fans among his innumerable students. Indeed, he once remarked that his greatest contributions were in teaching and "although many regard me as a good clinical cardiologist, people remember me best for my teaching."

A graduate from the University of Singapore medical school, his illustrious academic career began in 1972, when he joined his alma mater as a faculty member. He was appointed Professor of Medicine in 1981. Prof Chia was awarded the title of Emeritus Consultant by NUH in 2005 and was conferred the title of Emeritus Professor by the University in 2006. He continued to teach, mentor and practise until 2017 when he retired.

Prof Chia was an inspirational figure in the field of cardiology and a prolific teacher who has touched the lives of so many medical professionals in Singapore. Despite being diagnosed with Stage 4 nasopharyngeal cancer at the age of 43, his illness did not detract him from seeing his patients and continuing to impart his wealth of knowledge and experience until his passing at age 78.

Prof Chia will be remembered as a pioneering cardiologist and remarkable colleague, but above all, a generous teacher and mentor. ◆

The Chia Boon Lock Memorial Fund was established at NUS Medicine in 2018 to honour Emeritus Prof Chia and to perpetuate his passionately held beliefs about the practice of medicine and the education of Singapore's doctors.

The proceeds from the fundraising will be used to advance medical education and research. A committee at NUS Medicine will oversee the final use of the gift sums raised.

To find out more about or to support this initiative, please visit http://bit.ly/ChiaBoonLock_SMA. Should you have any queries, please do not hesitate to contact the School's Development Office at giving_med@nus.edu.sg.

PUTTING YOUR PATIENT FIRST

By Agency for Integrated Care

As the main and first line of healthcare, GPs like you are in the best position to support patients in ageing well in place and having a better quality of life. Starting timely Advance Care Planning discussions can uphold your patients' respect and dignity, making sure their care is always patient-centric. Also, having such end-of-life conversations with your patients and their families helps build trust and a sense of teamwork, which is crucial to providing good care.

In cases where patients do not have the mental capacity to make decisions, doctors are within their rights to exercise clinical judgement on what would be an appropriate course of treatment. But what is also important is what the patient would have chosen if he was able to. Advance Care Planning empowers your patient to consider, nominate, and document a proxy decision maker so that your patient still has a voice when needed. This benefits all parties involved in medical care - patients, their proxies or family members, and health care providers, especially doctors.

Other common documents that are usually brought up in this situation are the Lasting Power of Attorney (LPA) and Advance Medical Directive (AMD). An LPA nominates a legally recognised proxy to decide issues pertaining to personal welfare and/or property and affairs. The AMD documents one's decision to not use extraordinary life-sustaining treatments to prolong the dying process of a terminal illness. Whilst an LPA states who can legally make decisions, and the AMD can inform the doctor when to stop life-sustaining treatment, there remains a lot unsaid between the purview of the LPA and the AMD. Advance Care Planning fills this gap by addressing the patient's preference for or against issues such as extent and limits of medical intervention, place of care, and place of dying amongst others.

Dr. Irwin Chung is Director, Primary Care Academy of the National Healthcare Group Polyclinics. He has over 20 years of experience as a clinician. During his time at Agency for Integrated Care, he was instrumental in establishing the practice of Advance Care Planning in Singapore. As a practicing GP, he shares with us the value of Advance Care Planning to the clinician.

How has Advance Care Planning helped you to make informed decisions about your patients' care?

As a rather idealistic medical student and even as a young doctor, it would not be odd to hold to the belief that one has the answers to a myriad of healthcare challenges presented by my patient. There are always diagnostic tests, treatment options, procedures, medicines, etc. to call upon to uncover and manage a patient's ills. What we often forget as medical practitioners is that the ills are not ours to own; they belong to the patient. As doctors, our role is not to claim them for our own and get at them come what may, as the patient is ultimately the master of his own destiny. That's recognising personhood and autonomy. Being familiar with the principles and practice of Advance Care Planning has definitely helped in building that awareness. Today, I always ask, after presenting my opinion to a patient, "*Will that be alright with you?*" or "*Do you have any concerns?*"

How has Advance Care Planning changed the way you doctor?

It has made me realise that there is much more to a person in the form of a patient than merely disease (or sometimes the apparent lack thereof). I remember when I was younger, I would get really exasperated and impatient when patients stubbornly refused proposed treatment. "*You will surely die/be miserable/suffer a lot/regret not taking my advice!*" would often resound in my head or even fly out of my lips at times. Today, I make sure I do my best to present the most appropriate and commensurate options to the patient, hear their views, empathise with their concerns, and reassure with a "*Okay, I hear you. We'll make the best of that decision.*" With an Advance Care Plan, we can be assured that we, and the patient's loved ones, will continue to hear the voice of the patient for as long as it is necessary. That is the essence of care.

Sometimes, Advance Care Planning is seen as part of palliative care, when treatment is no longer effective for the patient. Rather than signaling a path of non-curative treatment, Dr. Chung offers the opinion that an Advance Care Plan focuses on "*making sure the patient is able to exercise his autonomy in decisions on his care options*". While it is typically thought to only apply to those with chronic illness or in a terminal stage of life, an Advance Care Plan is a personal life decision that every patient, even healthy ones, can begin today.

Everyone can play a part, whether you are working in a hospital or in primary care. If this has piqued your interest, and you would like to receive more information, training, or discussion materials, please contact the Primary Care Engagement team at **gp@aic.sg** or **6632 1199**, or visit Primary Care Pages (www.primarycarepages.sg)

PUT YOUR *Aprons* ON!

TEAM BUILDING THROUGH COOKING

Text and photos by Dr Chie Zhi Ying,
Editorial Board Member

It was that time of the year again when we had to brainstorm and organise our annual team-building activity for the clinic. As members of the Workplace Health Promotion team, we are in charge of everything that promotes health, wellness and team spirit among the staff of Woodlands Polyclinic. Hoping to get our hands on the most popular team-building activity, we decided to conduct an online vote to see what our staff's preferences really were.

As I scrolled through the long list of suggested activities, "cooking" struck me. I never thought that cooking could actually be a team-building activity and although I do not cook, I was keen to try something hands-on and also learn some recipes.

Out of sheer curiosity, I voted "cooking" as my first choice. After about two weeks of voting and debating, the verdict was out. And guess what was voted as the most popular team-building activity?

Just as the old Chinese saying goes, "民以食为天" (the common people regard food as their most essential want), what better way is there than to bond people over a good meal?

(1)

(2)

Assembly for action

So on a sultry Saturday afternoon, 80 of us found ourselves in the middle of Culinary On's studio, greeted by the spacious and sunnily lit studio overlooking the serene surrounding urban scenery. We met our friendly chefs who quickly divided up the large thronging crowd into three teams – orange, green and blue – each sharing a large kitchen. Each large kitchen is further divided into ten counters where seven to eight people would share the space for cooking.

Alas, it was two o'clock when the teams were sorted and lunch beckoned. To our delight, we found delicious snacks served on cosy looking wooden kitchen counters and everyone made a dash for them. As we wolfed down bite-sized snacks such as puffs, pizzas, Danishes, Vietnamese spring rolls, chicken waffles and prawn crackers, and sipped on piping hot beverages, it was truly relaxing to catch up and mingle with our colleagues and friends. Upbeat pop music blared in the background, hyping everyone up for the upcoming action.

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The menu for the day was salmon pasta with zucchini or vegetarian pasta (to take into account everyone's dietary preferences), and for dessert, we were going to make our very own chocolate lava cakes!

Donning our cheery orange aprons, we all crowded around one of the counters to watch Chef Daniel demonstrate how to make pasta from scratch. With grace, dexterity and a wry sense of humour, he showed us how to beat and mix the eggs with the pasta flour to make pasta dough mixture. After kneading repeatedly, he passed the dough through a pasta maker and the pasta became flatter and flatter with each pass. Finally, the flattened dough was cut up into nice neat strands by the machine and our own handmade pasta was ready!

It was soon our turn to get our hands dirty! As we kneaded the dough mixture repeatedly, adding flour bit by bit, we held our own competition to see which counter could get the longest pasta dough without breaking it. My team kept on passing the dough mixture through the pasta maker until it was really wafer thin. Once there were holes, we would fold the dough a little and pass it through the machine again until everything was pressed smoothly like a piece of cloth. Eventually, the pasta lengthened to an extent where our team of eight had to space ourselves out to each carry a portion of the long pasta dough, taking extra care not to break the pasta. With absolute determination and teamwork, our group won the challenge of having the longest pasta that spanned over ten metres with no breakages at all!

Next up, we made our very own chocolate lava cake! We had to first powder the aluminium cups with flour after brushing butter on top, before making the chocolate mixture. We heated Haagen-Dazs chocolate chips over a pan and a nice aroma wafted through the air. It was tedious and tiring to stir the viscous melted mixture and we took turns to whip it. Finally, we poured the thick fragrant chocolate mixture into the cups, filling each about three-quarters full.

While waiting for the chocolate lava cake to bake in the oven, we crowded around the chef's central counter to prepare our salmon. To our pleasant surprise, the fellow male doctors in my team took the lead to slice the salmon, and they looked every bit professional and unfazed like master chefs. A few younger guys in my clinic, who were cooking amateurs, were "nominated" by friends to cook on behalf of all of us. Amid boisterous cheers and roaring laughter, the "chefs" danced to the beat of the music, stirring the big pots of pasta with cream sauce, fresh salmon slices and zucchini. Of course, to ensure quality control, our Chef Daniel tasted the dishes to make sure that everything was prepared to the right standards.

Fulfilling meal

Finally, it was time to feast! With great anticipation, our master chef professionally dished out the salmon pasta onto individual plates. Our long-awaited chocolate lava cake was finally ready as well! We all sat at the tables savouring the mouth-watering fruit of our labour, and I was very full after downing the salmon pasta. It was rich, tasty and truly filling. Yet, I did not want to miss my enticing chocolate lava cake topped with vanilla ice cream so I gobbled it down nevertheless.

The saying that "a full stomach is a happy stomach" holds very true indeed. We posed for photos with our chef who presented us with certificates for completing our master culinary course and that marked the end of our fun-filled session. As we prepared to leave the studio, with recipe books in hand, everyone was patting their stomachs in contentment and beaming excitedly. There was already a buoyant and lively chatter about doing cooking again in the coming year since everyone enjoyed it so much. It was thumbs up all around for this enthralling team-building experience!

Next time, when you cannot decide what to do for an outing with friends or family, do consider cooking – you would never imagine how fun it is to cook, feast and catch up all at the same time!

Legend

1. Mouth-watering chocolate lava cake with vanilla ice cream and raspberry sauce

2. Tasty salmon pasta with zucchini

3. My team and I preparing the pasta dough

4. Our team won the challenge of having the longest pasta among all the teams!

Dr Chie enjoys freelance writing and singing. She writes for *Lianhe Zaobao, Shin Min Daily News* and *Health No. 1*. She can be reached at chiezhiying@gmail.com.

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• SALE/RENTAL/TAKEOVER •

Clinic/Rooms for rent at Mount Elizabeth Novena Hospital. Fully equipped and staffed. Immediate occupancy. Choice of sessional and long term lease. Suitable for all specialties. Please call 8668 6818 or email serviced.clinic@gmail.com.

Gleneagles Medical Centre clinic for rent. 400 sq ft. Waiting area, reception counter and consultation room. Immediate. SMS 9680 2200.

Fully furnished clinic room with procedure room for rent at Mount Elizabeth Novena Hospital. Suitable for all specialties. Please call 8318 8264.

Buy/sell clinics/premises: Takeovers (1) D02 near Chinatown, MRT (2) D10 Bukit Timah, established (3) D20 Ang Mo Kio, heartland practice with shophouse (4) D16 Bedok Reservoir, near MRT (5) D01, practice in People's Park. Clinic spaces (a) D19 Serangoon Central, HDB shop (b) Novena Medical Centre D11, 451 sq ft (c) D06 Peninsula Plaza 400+ sq ft (d) D19 Kovan, share with dental. Call 9671 9602 Yein.

Royal Square @ Novena. Clinic/rooms available for rent. Brand new, tastefully renovated, auspicious unit number, high 18th floor, good facing, easy access (next to lift lobby). Please contact Regina - 6235 0660.

D19 ground-floor shop at Simon Plaza, 2-min to Kovan MRT. 968 sq ft with water point, toilet and 3-phase wire. Within private condominium and landed property enclave. Immediate occupancy, carpark available. Suitable for GP/Specialist clinic. Please call 6348 1680.

Novena Medical Centre 689 sq ft renovated. Only $7.80 psf. Rental owner direct. Available immediately. Call Lee Wah 8200 0622.

25 years medical practice in Bedok Reservoir for takeover including shop house rental. Well renovated and attractive HDB rental. Good mix of private and corporate patients. Facing main road. Near MRT. Doctor retiring. Please call 9844 3247.

• POSITION AVAILABLE/PARTNERSHIP •

(1) Resident / Permanent Locum GP needed at Fernvale / Punggol, incentive available. (2) Visiting Specialist especially O&G etc, etc. Call 9298 9824 or 8125 9850 Etern Medical.

Established medical aesthetic group in Singapore looking for committed & passionate doctors for expansion. Training provided. Full/part-time considered. JV partnerships are welcomed as well. Applicants must have COCs. Experience in medical aesthetics preferred. Kindly email detailed resume to: admin@wen-weng.sg.

An established medical clinic in Orchard Road is seeking a full-time General Practitioner. Interested doctor, please send in your resume or query to: twincitymedical@gmail.com or contact via SMS to 8101 6748.

Established GP clinic in town looking for motivated full/part-time doctors. Able to commit long term with desire to grow with company. Training provided. Applicants fully registered with SMC. An interest in skincare will be a bonus. Email resume to: clinic@wen-weng.com.sg.

Dr Daryl Tan
CLINIC FOR LYMPHOMA, MYELOMA AND BLOOD DISORDERS

Dear Fellow Doctors,

Thank you for all your kind support. I have moved the primary place of my practice.

Effective from 22 April 2019, my practice will be based in Mount Elizabeth Novena Specialist Centre. I manage all general haematological conditions and the core of my practice will involve the treatment of haemato-oncological diseases. I do have a special interest in the following subspecialty fields:

1) Lymphoma
2) Multiple Myeloma
3) Chronic Lymphocytic Leukaemia

Please do not hesitate to contact me and I look forward to the continued privilege of serving your patients at the following practice address:

Dr Daryl Tan
Clinic for Lymphoma, Myeloma and Blood Disorders
38 Irrawaddy Road
#06-47 Mount Elizabeth Novena Specialist Centre
Singapore 329563

Tel: 6262 6058
Fax: 6262 0672
Email: appts@dcltan.com

Thank you once again.

Sincerely,

Dr Daryl Tan Chen Lung
MBBS(S'pore); MRCP(UK); MMed(Int Med); FAMS(Haematology)
Specialist in Haematology

A.M aesthetics
亚联盛医疗

ACCRELIST MEDICAL AESTHETICS

Previously known as Refresh Laser Clinic, we have been recently acquired by Accrelist, a public listed company in Singapore, and it is our plans to grow more aesthetic & laser clinic outlets in Singapore and in the region.

We are looking for a Resident Doctor (registered with the Singapore Medical Council) position in one of our clinics.

Requirements

- Medical qualification registrable with Singapore Medical Council
- You must have keen interest and passion in aesthetic practices
- Good communication and interpersonal skills
- Strong drive to improve your personal aesthetic skills and grow the practice

Job Summary

You are required to perform/operate ablative and non-ablative lasers, IPL, RF, Chemical Peel, Botox, Fillers and Thread Lifts.

We provide

- Competitive salary package with commission scheme, a wholesome career plan with options of profit sharing and equity ownership
- $18k to $25k basic + % commission (depending on seniority)
- Good career prospects
- Positive environment
- Comprehensive training will also be offered through a mentorship program with a seasoned doctor of 14 years' aesthetic experience locally and also internationally with doctors from Korea, Japan, Malaysia, Thailand and Taiwan. It is our vision to make you a master of fillers, botox and threadlifting

If you are a doctor with no prior experience but has a strong passion for aesthetics and good attitude to learn; OR

If you have prior experience in aesthetics but wish to expand your training in injectables or threads or wish to grow your practice, we welcome you to join us in our vision to grow Accrelist into a regional force.

If that fits you, do write to us by emailing to: **recruit@refresh.com.sg** .

Please indicate your expected salary and date of availability. We regret that only shortlisted applicants will be notified.

Singapore National Eye Centre
SingHealth

The Singapore National Eye Centre (SNEC) is the national centre for ophthalmology in Singapore and an internationally recognised tertiary centre for eye care. We offer a broad spectrum of subspecialties and ambulatory services to our patients.

Visit our website at **www.snec.com.sg** for more information.

OPHTHALMIC ANAESTHETIST

We invite motivated anaesthetists (doctor) who have the leadership skills to pioneer a new department, have the mentoring heart for the training of junior doctors and nurses, have a keen mind for innovation/ research and to help implement new standards for patient safety and comfort, join SNEC as full-time clinicians.

Responsibilities

- Provide high quality anaesthetic services that include general anaesthesia/blocks/sedation and intraoperative monitoring.
- Preoperative risk assessment, patient preparation for general anaesthesia and management of post-operative care.
- Supervision and training of junior doctors and anaesthetic nurses.

Requirement

- Accreditation by the Specialist Accreditation Board, MOH, Singapore.
- Specialist Medical Registration in Anaesthsiology by the Singapore Medical Council (SMC).

RESIDENT PHYSICIAN (PRIMARY EYE CARE PHYSICIAN)

The PEC physician will monitor and assess patient with stable eye conditions relating to diabetic retinopathy, glaucoma and cataracts and also assist the Consultants in other complex cases. Together with the senior medical staff, the PEC physician will be involved in the running of outpatient clinic and reviewing treatment cases from time to time. The incumbent will also supervise and teach optometrists in the PEC and drive the creation of new clinical pathways to heighten the clinic's performance and case management.

Qualification Standards:

- MBBS or equivalent basic medical degree recognized by Singapore Medical Council (SMC).

RESIDENT PHYSICIAN, OPHTHALMOLOGY

The Clinical Services department is seeking candidates who are highly motivated and willing to join us for a fulfilling career as Resident Physician. The incumbent will be responsible for the daily running of clinics and any other ad-hoc duties assigned by his/her Supervisor or Head of Department.

Requirement:

- MBBS or postgraduate qualification registrable with the Singapore Medical Council.
- At least 3 years of ophthalmology practice experience.
- Must be able to do call.
- Please note that the role does not have surgical privileges.

Interested applicants, please email your curriculum vitae including details of work experience, qualifications, present and expected salaries and contact telephone number to: ***chong.kai.xian@snec.com.sg***

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