Tan Tock Seng
HOSPITAL

A PUBLICATION FOR PRIMARY CARE PHYSICIANS

GP BUZZ

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JANUARY-MARCH 2017

FOSTERING CLOSER CARE PARTNERSHIPS

AN INTERVIEW WITH DR MARK CHAN

HEALTH SUPPLEMENT IN OLDER ADULTS: DO THEY WORK? ARE THEY SAFE?

FOR A BETTER TOMORROW

6 IDEAS TO IMPROVE SUCCESS WITH YOUR HEALTHCARE TEAM

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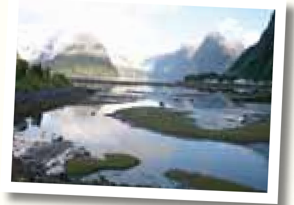
JANUARY - MARCH 2017



About the Cover Page:

For a Better Tomorrow – Teamwork in the Healthcare Setting

Healthcare is a field that requires close teamwork. Robert Cialdini's book, Influence: The Psychology of Persuasion, helpfully provides 6 scientifically based ideas you can try using, to encourage teamwork amongst your team members.

1) LIKING
People prefer to work with others who are similar to them. Spending time discovering each other's interests enhances the likelihood of reaching successful agreement.

2) RECIPROCITY
People tend to return favours for acts of personal kindness. When the cost to you is low, give first.

3) SOCIAL CONFIRMATION
People tend to choose behaviours consistent with the majority. Focus on highlighting how a desired behaviour is actually the new norm. This creates motivation for outliers to see common ground.

4) AUTHORITY
People tend to follow the advice of respected authorities. You can help your colleagues be more persuasive if you personally highlight their expertise when introducing them.

5) SCARCITY
Scarcity creates demand. It is useful to highlight the queue for a resource or the impending deadlines for something you want to promote.

6) CONSISTENCY
People like to be consistent in what they say and do. Work towards visible expressions of small commitments as stepping stones towards bigger behavioural changes. GPBUZZ

References
Influence: The Psychology of Persuasion, Robert B. Cialdini PhD
Science Of Persuasion - YouTube

ZIKA VIRUS: WHAT YOU NEED TO KNOW

By **Dr Monica Chan**, Deputy Head and Consultant, Department of Infectious Diseases, Institute of Infectious Diseases and Epidemiology (IIDE), Tan Tock Seng Hospital

FACT Zika is a viral infection transmitted through the bite of infected Aedes mosquitos. Patients with Zika virus infection cannot spread the infection to others through contact. However, other uncommon routes of infection include sexual intercourse, blood transfusion and from an infected mother to her unborn child.

FACT Zika symptoms are similar to mild dengue infections with fever, rashes, joint or muscle aches and headaches. Conjunctivitis is more common in Zika. However, about 80% of people infected may not display symptoms.

FACT Zika virus infection can be diagnosed by testing either the urine or blood by Zika PCR. Patients with confirmed Zika virus infections do not need to be admitted to hospital unless clinically indicated. Advise patients on safe sex (i.e. condom use) for a period of time after recovery from Zika virus infection. Refer to the latest Ministry of Health (MOH) circular for guidance.
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ACTIVATING PATIENTS AND FAMILIES FOR BETTER CARE

The annual Singapore Patient Conference (SPC) held its 4th and largest edition in October, with up to 1,400 participants in attendance for a range of events and activities, which included photo exhibitions, community partner exhibitions, a hospital conference, and the main conference on 28 October 2016. The theme for this year's SPC was 'Activating Patients and Families' — inspired by the correlation between strong patient activation, and good health outcomes.

During the conference, we launched a Memorandum of Understanding (MOU) between Tan Tock Seng Hospital's Families for Care Programme and the Families for Life Council — witnessed by Dr Amy Khor, Senior Minister of State, Ministry of Health. This MOU provides a crucial stepping-stone for building social support for patients and their families.

This year's Singapore Patient Action Awards Ceremony saw a total of 11 individuals and groups who were recognised for their significant contributions in enhancing the healing journey of patients. GPBUZZ

TTSH'S COMMUNITY LOCUM PHYSICIAN SCHEME

General Practitioners (GPs) who wish to expand their skillset may join TTSH's Department of Continuing and Community Care (CCC) as locum physicians for the opportunity to manage complex geriatric patients in community settings.

Working alongside TTSH Consultants and Family Physicians, GPs under the locum scheme will be guided to put into practice skills they have learnt at courses, and participate in case discussions with the hospital's multidisciplinary team.

Dr Kareen Lui, a locum physician managing end-of-life patients in nursing homes, shared, "Since the completion of my diploma in palliative medicine, working as a locum for TTSH has given me an opportunity to apply new-found knowledge while juggling regular commitments." GPBUZZ

Dr Kareen Lui joined TTSH's Department of CCC locum physician scheme, which allowed her to apply newly-gained palliative knowledge in caring for end-of-life patients in nursing homes.

Interested GPs can contact **Ms June Tan** at **june_la_tan@ttsh.com.sg**.

CRiSP – Our Partners for Better Health

CRiSP GP partners together with CMB and TTSH Clinical Heads.

Our speakers taking queries from our GP partners during a panel discussion.

The event offered plentiful opportunities for interaction between GP partners, TTSH clinical and operations leads.

Another milestone for CRiSP was achieved, during the first TTSH CRiSP Specialist-GP Get Together and CME session on 27 August 2016. The event saw attendance by 50 CRiSP GP partners, TTSH clinical and operations leads, as well as Chairman of the Medical Board, A/Prof Thomas Lew, who opened the event.

The event created a platform for TTSH Clinical Heads and Specialists to get to know our GP partners and cross-share new ideas for closer collaborations.

Our partners also enjoyed an enriching afternoon learning about the clinical aspects of warfarin management, titration, and how to handle its complications, presented by TTSH speakers Dr Pankaj Kumar Handa (Department of General Medicine), Ms Kng Kwee Keng (Principal Pharmacist), and Dr Tang Dilin (Department of Emergency Medicine) respectively.

On behalf of TTSH, the Primary Care Partners Office would like to thank our partners and TTSH Senior Management for the success of this event! GPBUZZ

CME (JANUARY – MARCH 2017)

TITLE	CME POINTS	DATE	TIME	VENUE	REGISTRATION DETAILS
GP Seminar – General Neurology	2 core points	18 February 2017	1.00pm to 3.45pm	Neuroscience Clinic, Level 1, National Neuroscience Institute	**Ms Denise Lim 6357 7541 Denise_LIM@nni.com.sg**
Infectious Disease Workshop for Primary Care Physicians	To be confirmed	27 & 28 May 2017	1.30pm to 5.00pm	Theatrette, Level 1, Tan Tock Seng Hospital	**Ms Chloe Ho / Mr Frank Ng iide_cme@ttsh.com.sg**
Singapore International Infectious Disease Conference 2017	To be confirmed	22 – 24 August 2017	3 days conference with 3 parallel symposium tracks	Grand Copthorne Waterfront Hotel	Register at **www.siidc.com.sg**

A confirmation email will be sent after your registration. Kindly email the contact person if you do not receive any confirmation after your registration. Thank you.

HEALTH SUPPLEMENTS IN OLDER ADULTS: DO THEY WORK? ARE THEY SAFE?

Scan this QR code to read the article online.

By **Ms Tan Keng Teng**, Principal Pharmacist (Clinical), Tan Tock Seng Hospital

Health supplements are used to supplement diet or maintain healthy functioning of the human body.[1] They include vitamins, minerals, amino acids or substances extracted from animal or botanical sources. However, health supplements should not be intended as a replacement for a balanced diet.

DO THEY WORK?

Health supplements are effective in treating vitamin and mineral deficiencies. However, epidemiological studies in the United States have found difficulty proving the beneficial effects of health supplements in improving health, due to the association that people who take health supplements are likely to be more health conscious and make better dietary and lifestyle choices. Evidence regarding the effectiveness of health supplements from current literature is conflicting and consumers would be wise to check with their health care provider before starting on a health supplement. Health supplements should not be used to replace medications prescribed for the specific medical conditions that the individual may have.

ARE THEY SAFE?

In Singapore, health supplements are currently not subjected to pre-marketing approvals but dealers are obligated to ensure that the products sold are safe for consumption and adhere to safety and quality standards. For example, the product should not contain other active ingredients except what is stated on the label, and should not exceed pre-defined limits for heavy metals and microbial contamination.

Health supplements also have the potential to interact with prescribed medication to produce adverse effects. For example, ginkgo biloba can interact with medications which inhibit platelet aggregation and increase risk of bleeding. In addition to potential drug-drug interactions, health supplements can also have side effects and consumers should understand and monitor for side effects when they start on a new health supplement. It is important for physicians and other health care professionals to check with their patients if they are consuming any health supplements to monitor for any potential drug interactions and/or side effects. GPBUZZ

Reference:

[1] Health Sciences Authority (HSA) Regulatory Guidance Health Supplements Guidelines. Revised Feb 2015; accessed from http://www.hsa.gov.sg/content/hsa/en/Health_Products_Regulation/Complementary_Health_Products/Health_Supplements.html; Date accessed: 12 October 2016

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FOSTERING CLOSER CARE PARTNERSHIPS

AN INTERVIEW WITH DR MARK CHAN

The TTSH Community Right-Siting Programme (CRiSP) facilitates care collaboration between TTSH and primary care by channeling the care of medically stable patients to GP partners for their continual management. This way, care continues to be accessible and affordable for patients in the community.

GP BUZZ interviewed Dr Chan Peng Chew Mark, Head of Department and Senior Consultant for the Centre of Geriatric Medicine at TTSH, on the importance of forging strong primary care partnerships.

Q: What is the target group of patients that the Centre of Geriatric Medicine is right-siting?

Ideally, we hope for CRiSP to be able to right-site geriatric patients with chronic diseases, who can benefit from monitoring by primary care doctors. There are also other categories, including dementia with stable progression, which are not too complex to tackle. Patients who are post-intervention within the hospital, such as those recently admitted or who have undergone surgery with stable conditions are also among the categories of patients which GPs are already handling, and can take on.

Q: How will geriatric patients benefit through CRiSP?

Having GP or FMC partners located close to patient's homes make care more accessible and convenient for less mobile patients and next-of-kin with logistical issues. Acute and chronic medical conditions are also managed by the same family doctor which makes care more holistic and less-fragmented.

Q: Why is it important to build close primary care partnerships?

These partnerships bolster the learning journey we have embarked on together, and helps us better understand the needs of our Primary Care Partners, and the work performed by specialists. Through this understanding, we are better able to effectively right-site our patients.

Ultimately, our efforts seek to enhance the effectiveness of managing patients within the community setting, without need for un-coordinated multiple specialist care. In the long run, this clears the referral channel of unnecessary referrals to SOCs, in order to help patients in need get the care they require sooner. GPBUZZ

Please contact the Primary Care Partners Office at GP@ttsh.com.sg if you are interested to find out more about TTSH CRiSP.

EYE DISCOVERIES: UPDATES ON THE TREATMENT OF DIABETIC EYE DISEASE

Scan this QR code to read the article online.

By **Dr Nicola Gan**, Consultant, Vitreo-retinal Service, National Healthcare Group Eye Institute, Tan Tock Seng Hospital

The NHG Eye Institute at TTSH continues to address the increasing demand for eye care services, with active participation in ophthalmic research and training. The Institute provides services in the entire spectrum of ophthalmic sub-specialities and delivers quality primary and tertiary eye care to patients in Singapore and the region. In part four of the 'Eye Discoveries' series by the NHG Eye Institute, we take a look at recent global trends in the treatment of Diabetes related eye disease.

Diabetes mellitus is a growing health problem. Recent global estimates show that 415 million people have been diagnosed with the disease.[1] In 2010, 2.5% of the 32.4 million people who were certified blind and 1.9% of the 191 million people with visual impairment worldwide were attributed to diabetic retinopathy, with an increase in numbers since 1990.[2] The main causes of loss of vision in diabetic eye disease include high-risk proliferative diabetic retinopathy (PDR) with tractional retinal detachment, vitreous haemorrhage, diabetic macular edema (DME) and macular ischaemia.

Diabetic Retinopathy (DR)

DR is an end-organ microangiopathy and a marker that other end-organ complications such as diabetic nephropathy or peripheral neuropathy may also be present. The severity of DR varies, ranging from non-proliferative (mild, moderate, severe) to proliferative (low-risk, high-risk) disease. In non-proliferative DR, patients are mostly asymptomatic and fundus features include retinal microaneurysms, intraretinal haemorrhages and hard exudates. By the time patients are symptomatic, DR is usually in the proliferative stage with optic disc and retinal neovascularisation and complications including vitreous haemorrhage and tractional retinal detachment. In these cases, patients may complain of a sudden onset of

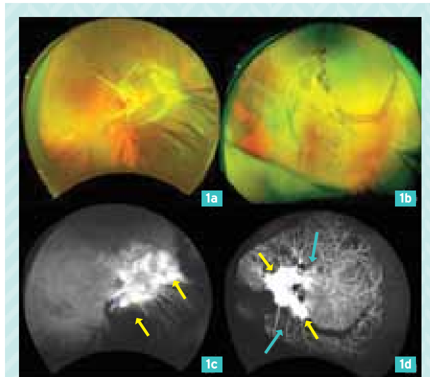

Figure 1 – (a) Optos® wide-field fundus photo of right eye with tractional retinal detachment involving the disc and nasal retina and vitreous haemorrhage obscuring details of the rest of the fundus (b) Left eye with high risk PDR – neovascularisation of the disc and retina with pre-retinal and vitreous haemorrhage (c) Optos® wide-field intravenous fluorescein angiography of the right eye showing leakage from retinal neovascular fronds in detached retina (yellow arrows) (d) Left eye with diffuse capillary dropout (blue arrows) and leaking retinal neovascular fronds around the disc (yellow arrows).

floaters from vitreous haemorrhage, or progressive blurring of vision as the macula becomes involved. The gold standard of treatment for PDR is pan retinal laser photocoagulation to reduce the risk of severe vision loss.[3] In patients with high-risk PDR with tractional retinal detachment involving the macula or non-clearing vitreous haemorrhage, vitrectomy surgery is indicated. *(Figure 1)*

Paradigm shift in the treatment of Diabetic Macular Edema (DME)

Five years ago, clinically significant diabetic macular edema was mainly treated by macular focal or grid laser photocoagulation, which was the gold standard of treatment for two decades.[4] However, laser photocoagulation cannot be used to treat DME involving the foveal centre, as laser scars close to the foveal centre permanently impair central vision. With the advent of multiple international large randomized controlled trials, intravitreal injections of anti-vascular endothelial growth factor (anti-VEGF) has become an important advance in the treatment of centre-involved DME.[5] FDA-approved drugs include Lucentis® (ranibizumab) and Eylea® (aflibercept). A cheaper option is Avastin® (bevacizumab) which has been used off-label to treat DME worldwide. In certain patients, intravitreal steroid injections are also a suitable option but with increased risks of intraocular pressure rise and cataract formation. Different treatment protocols have been adopted by retina specialists including monthly injections, monthly monitoring visits with pro-re-nata injections or a treat-and-extend regimen.

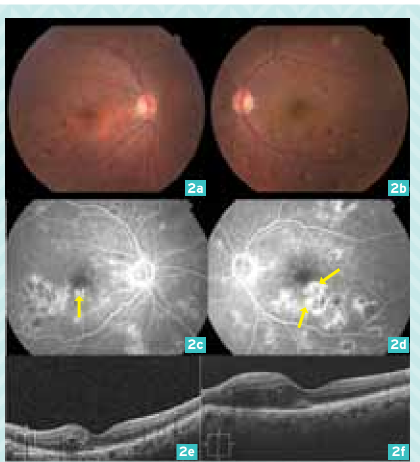

Figure 2 – Fundus photographs of (a) right and (b) left eye showing bilateral moderate non-proliferative diabetic retinopathy and diabetic macular edema. Fundus fluorescein angiograms of (c) right and (d) left eyes show leaking microaneurysms in the macula (yellow arrows) with scattered peripheral dot hyperfluorescence, typically seen in diabetic microangiopathy. Optical coherence tomography scans of (e) right eye showing mild macular edema and (f) left eye showing macular edema involving the foveal centre.

The severity of DME and treatment response can be closely monitored with clinical examination and OCT (optical coherence tomography) scans at each visit. These high-resolution laser interferometry scans show a cross-section of the macula and any intra-retinal fluid present. *(Figure 2)* Personalising treatment by tailoring treatment intervals to the individual's response is the key to successfully treating DME. Recent studies on anti-VEGF injections for centre-involved DME have shown that the first 3 years are the most important, with a decline in the frequency of treatment needed thereafter.[6]

Currently, the role of macular focal or grid laser photocoagulation still exists for patients with clinically significant macular edema which does not involve the fovea.[7] New lasers on the market include sub-threshold micropulse diode lasers that can treat even foveal-involving DME due to the enhanced duty cycle technology that minimises macular damage.[8] However, this has not been adopted in many centres worldwide, as larger randomised controlled trials are still lacking.

Systemic control - Optimising care of patients with diabetic eye disease

Eye screening should be performed upon diagnosis of diabetes mellitus, and at least annually thereafter if no diabetic eye disease is found, or more frequently if DR or DME is present. In patients with diabetic eye disease, intensive control of all vascular risk factors including glycaemic control[9], cholesterol levels[10] and blood pressure[11] are essential to reduce the progression of DR. Education on the importance of regular exercise, a healthy balanced diet and compliance with family physician and ophthalmology check-ups is critical in empowering patients to take control of their own well-being. Teaching patients to keep track of their HbA1c levels as a gauge of diabetes control is helpful in involving patients in their own health care.

Communication between the family physician and ophthalmologist is important to ensure holistic care. Patients must be advised that an annual eye screen is essential even if glycaemic control is excellent. DR screening may be in the form of diabetic retinal photography (DRP) screening or a visit to the ophthalmologist. Currently, family doctors may refer patients to polyclinics or Community Health Centres for DRP screening. A fundus photo is taken and the photo is assessed by family doctors or sent to ophthalmologists in the public hospitals for grading through the national **SiDRP (Singapore Integrated Diabetic Retinopathy Programme)** system. The NHG Eye Institute at TTSH actively participates in this programme. Patients who are found to have

features suggestive of DR, DME or other retinal problems will be referred to an ophthalmologist for further evaluation.

Learning points

Blindness from diabetic eye disease is preventable. A recent epidemiological review found a decline in the incidence of blindness due to DR in developed countries, with DME overtaking PDR as the increasingly common cause of visual impairment.[2] Annual eye screenings are essential for all diabetics, and early referrals to an ophthalmologist for assessment and treatment before the onset of irreversible visual impairment is crucial for all patients with suspected diabetic eye disease. Optimisation of vascular risk factors and patient education are important areas in which the family physician can work on, in a collaborative effort to reduce the growing burden from diabetic eye disease. GPBUZZ

NHG Eye Institute Direct Access Hotline:

NHG Eye Institute is able to accommodate same-day/next day appointments. Depending on the level of care needed and the requested timing, most patients can be seen by an Eye specialist on the same day especially for requests received in the morning. For appointments, GPs should call 6359 6500.

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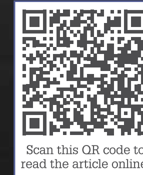

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GET IN SHAPE FOR THE NEW YEAR WITH MENTAL TOUGHNESS

By **Mr Ray Loh**, Exercise Physiologist, Sports Medicine and Surgery Clinic, Tan Tock Seng Hospital

No matter your reasons for wanting to get fit for the New Year, you'll need a long term exercise plan. Most people are able to get started, but maintaining an exercise routine can be extremely challenging – especially with a hectic lifestyle. Without building consistency, many people find it hard to reach their fitness goal. One of the ways to make your plan work this coming New Year is to start cultivating your mental toughness.

Mental toughness is an indicator of an individuals' mental strength, and can be

developed. A good way to build mental toughness is through a habit of applying a systematic and critical approach in planning and handling both positive and negative outcomes, to achieve consistency towards achieving goals.

A systematic approach refers to a structured plan with small achievable short term goals, such as weekly plans (e.g. 300 minutes of physical activity per week), and monthly plans (e.g. able to continuously run 5km without feeling strained). Plan your weekly targets with small progress towards the big goal. Adjust the short term goal monthly and reflect on the reasons for not being able to meet your goals.

Having a critical approach refers to accepting barriers and negative outcomes as challenges. Do not focus only on the negative outcomes, consider the positive outcomes too, and build on them as well. Think and pre-plan a 'Plan B' in cases of ad-hoc events that affect your original plan.

Negative results are stumbling blocks during your journey towards fitness. Approach the problem critically and do not be discouraged by negative results such as not losing weight despite hard work. Do not be afraid to lower your expectations and goals when needed. Work on smaller details and do not make drastic moves. Drastic moves usually increase the perception of difficulty in achieving the goals and are the main cause of dropouts from your plan. Instead, take small steps when dealing with your problems. GPBUZZ

DOS ✓

1. Wake up earlier for the workout.
2. Increase the intensity of your workout to shorten the workout duration required. A short 15 minutes of high intensity workout has been shown to be equivalent to a 30-45 minutes workout in moderate or lighter intensity.
3. Break down your workout into smaller portions such as 30 minutes in the morning and 30 minutes in the evening to get 60 minutes of physical activity daily.
4. Go to nearby gyms for your workout, if the weather is bad.
5. Alternate modes of activity that train the same component (e.g. replace running with cycling) to keep training fresh and effective.

DON'TS ✗

1. Do not be afraid to lower your short term expectations and goals to a more achievable level.
2. Do not make sudden changes. Select a lighter snack in the afternoon instead of completely refraining from snacks.
3. Do not make big increments of activity such as a 20 minutes' walk home from the MRT station. Instead increase manageable activities such as using the stairs instead of taking the lift or escalator.
4. Add just 1 exercise such as 20 repetitions of shoulder presses at home daily. Do not do more just because you feel good on a day. Keep to a plan and adjust or increase only when it monthly adjustment of the plan is required.
5. Add 15 minutes of stretching before bed daily. Remember to keep to 15 minutes and not do more just because you feel muscular tightness. Increasing the duration might make the stretching sessions feel more tedious and time consuming, discouraging consistency. Select a comfortable duration that you can do daily.

MULTI-DISCIPLINARY SPECIALIST CARE

TTSH PEARL's suite of clinics and services is guided by the four pillars of care through **Evidence Care, Destination Care, Team Care and Personalised Care**. We remain committed to delivering a higher level of patient care as *We Value Our Patients Most*.

For the full range of services in Tan Tock Seng Hospital, please visit our website at www.ttsh.com.sg.

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  Email: **ClinicB1B@ttsh.com.sg**
- **Rheumatology, Allergy and Immunology**
  Tel: **(65) 6889 4027**
  Email: **Contact@ttsh.com.sg**

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