

THE DENTAL SURGEON

DECEMBER 2015 ISSUE

SG50 COMMEMORATIVE EDITION



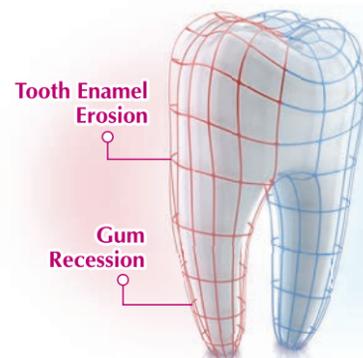
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Looking Back

“2015 bookends a chapter of Singapore's history. For half a century, this tiny island persevered through nation building. Our narrative has culminated in the grief at the passing of its chief architect Mr. Lee, the jubilation of SG50, and the landslide of the recent elections. Internationally, Singapore struggled to define itself on the world map, and it was through the grit and foresight of those who came before us that has allowed this country to achieve excellence – especially so in the field of dentistry.

As someone relatively young, I did not have the privilege of knowing Professor Edmund Tay Mai Hiong. Like others my generation, I entered dental school on a burgeoning tide of public dental awareness, riding the wave that has now raised us to the same standing as our medical colleagues. It was not always so; only through the efforts of our dental “pioneers” such as Dr. Edmund Tay, was the groundwork laid for dental education and the practice of dentistry to truly flourish in Singapore over the past half a century.

I thus dedicate this SG50 issue to him. These pages hold a touching tribute to his life and contributions, written by his own son Dr. David Tay, with kind words from friend and colleague Prof. Loh Hong Sai. In the spirit of commemoration, I have featured the outgoing SDA Council members who have laboured tirelessly towards the furthering of our profession during their term. Leaving no stone unturned, I also wish to recognize the unsung and often overlooked heroes of SDA - the secretariat staff we have come to know dearly and without who the Association would not be able to function. To tie this all in, I have included coverage on the recent Dental Pledge Ceremony with a message from our Health Minister.

On behalf of Dr. Sapphire Gan and her selfless Nepal team, I extend my heartfelt thanks to all those who have contributed to aid the people struck by the Nepal Earthquakes. Your wish to remain anonymous is respected, but it is my hope that in some small measure this publication can help encourage the spirit of volunteerism and giving within our community. Lastly I am most delighted at our current mix of contributing writers both young and old. Bit by bit, the amalgamation (as it may) of all our thoughts will eventually realise the dream of this publication to be not only a reflection of our times, but also a constant reminder that we have chosen to walk a noble profession. To any of you wishing to lend your voice to this, I ask once again that you don't hesitate to contact us.

Dr. Terry Teo
Editor-in-Chief
The Dental Surgeon

Terry is a paediatric dentist at The Dental Studio, and part-time tutor at the Faculty of Dentistry at NUS. When he was young he loved reading and writing, until life and dentistry got in the way. He thus relishes this opportunity to have his cake and to eat it at the same time.

[^]INTAGE SRI, Systema is No.1 Brand in Toothbrush Category, Value Sales, CY2014. [^]INTAGE SRI, No.1 Company in Oral Care Category, Value Sales, CY2014.

THE DENTAL SURGEON

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CREW

Assistant Editors



Dr. Tong Huei Jinn is currently teaching at the Faculty of Dentistry in NUS, and works as a Paediatric Dentist in NUH and School Dental Services, HPB. Huei Jinn is delighted to return to *The Dental Surgeon* after her stint as its Editor before leaving for post-graduate studies in 2007, and hopes to continue to do the magazine and our profession proud. When time permits, Huei Jinn loves travelling.



Dr. Ivan Koh is an endodontist at NUH, and a part-time tutor at the Faculty of Dentistry in NUS. Ivan has been with *The Dental Surgeon* since 2005, starting off by contributing an article or two per issue. He then took on the role of layout editor for 3 years before taking a hiatus for his MDS studies and he is now back as Assistant Editor. Ivan likes to read in his free time and that has been one of the driving forces for him to rejoin *The Dental Surgeon* team. He hopes readers find joy in this publication, not looking at it merely as a "dental newsletter", but perhaps, as a magazine worth its weight to leave on the coffee table at the reception area of their clinics!

MAKING SINGAPOREANS SMILE WITH CHAS



The **Community Health Assist Scheme (CHAS)** is a scheme by the Ministry of Health (MOH) that enables Singapore Citizens from lower- to middle-income households to enjoy subsidies for medical and dental care at CHAS General Practitioners (GPs) and dental clinics near their home.

More than 500 dental clinics and 800 GPs are participating in the scheme, providing healthcare services for over 1.2 million CHAS beneficiaries. With more clinics signing up for CHAS, Singaporeans will have better access to dental and medical care.

HERE ARE A FEW COMMON QUERIES ON CHAS.

What types of dental treatment can be claimed under CHAS?

Your CHAS patients can claim subsidies from the Government for selected non-surgical dental services. Dental services covered under CHAS range from basic procedures such

as scaling, polishing and filling to more complex procedures such as root canal and dentures. Complete documentation of the treatment is required to substantiate a claim (eg: date of procedure, tooth surfaces involved and radiograph where applicable).

What information should be conveyed to CHAS patients during financial counseling?

Dentist should explain the treatment required and the charges to patients including the amount of CHAS subsidies and patient's payable.

Is there any document which my patient needs to sign before according CHAS subsidies?

The Patient Consent Form (PCF) should be signed by patients on their first visit to the clinic. Patients who are below 21 years will require their parent or guardian to sign on their behalf. The original PCF provided should be used and should not be modified for legal purposes.

Do I need to submit the claim immediately after the treatment?

No. Clinics have 30 days from the day of the patient's visit to submit a claim. While there is no restriction to the number of procedures done in one visit, do note that procedures done in a single visit should be submitted under one claim. For procedures requiring multiple visits (eg: dentures), claims should be made only when the procedure is completed.

When will the subsidies be reimbursed?

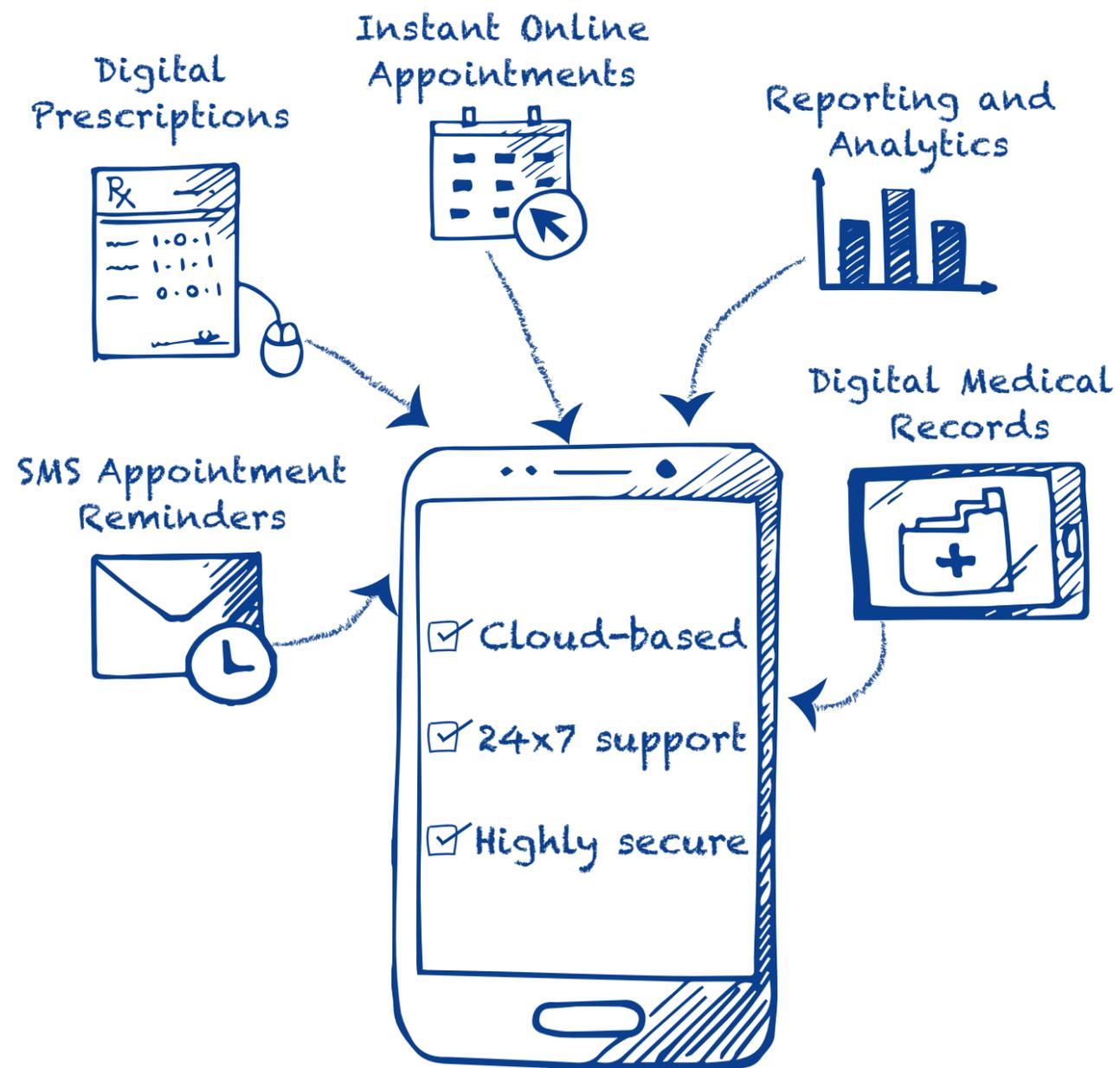
You will be reimbursed within one month from the receipt of your claim if there are no queries. If there are queries relating to your claim, payment will be made to you in the next payment cycle.

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A Farewell Salute

BY DR. KUAN CHEE KEONG



Singapore Dental Association Council 2014 - 2016

Standing (Left to Right): Dr. Shawn Goh, Dr. Kuan Chee Keong, Dr. Seow Yian San, Dr. Kelvin Chye
Seating (Left to Right): Dr. Tang Kok Siew, Dr. Su Shengle, Dr. Lim Lii, Dr. Terence Jee, Dr. Tang Panmei

DR. KUAN CHEE KEONG

President

Private Practitioner at Q&M Dental Surgery (Serangoon North) Pte Ltd

Stepping forward to serve in the Singapore Dental Association is not something everybody would aspire to. I started volunteering due to the influence of Q&M Dental Group CEO, Dr. Ng Chin Siau. He was the first among our group of Q&M dentists to serve in the Association. I have benefited from Singapore's education system and society, so it is natural that I give back to the profession and the public. Though I am not a citizen of Singapore, I am determined to be an active and useful part of this country, which is more of a home than my country of birth.

As President for the last four years, I am very grateful to the past two Councils who have served with me. Many members have voiced their approval of our collective efforts, as I set out to achieve a few important goals for SDA, with the primary objective being to maintain harmony. With unity, we can then achieve success in our various projects. I credit my Council for this success.

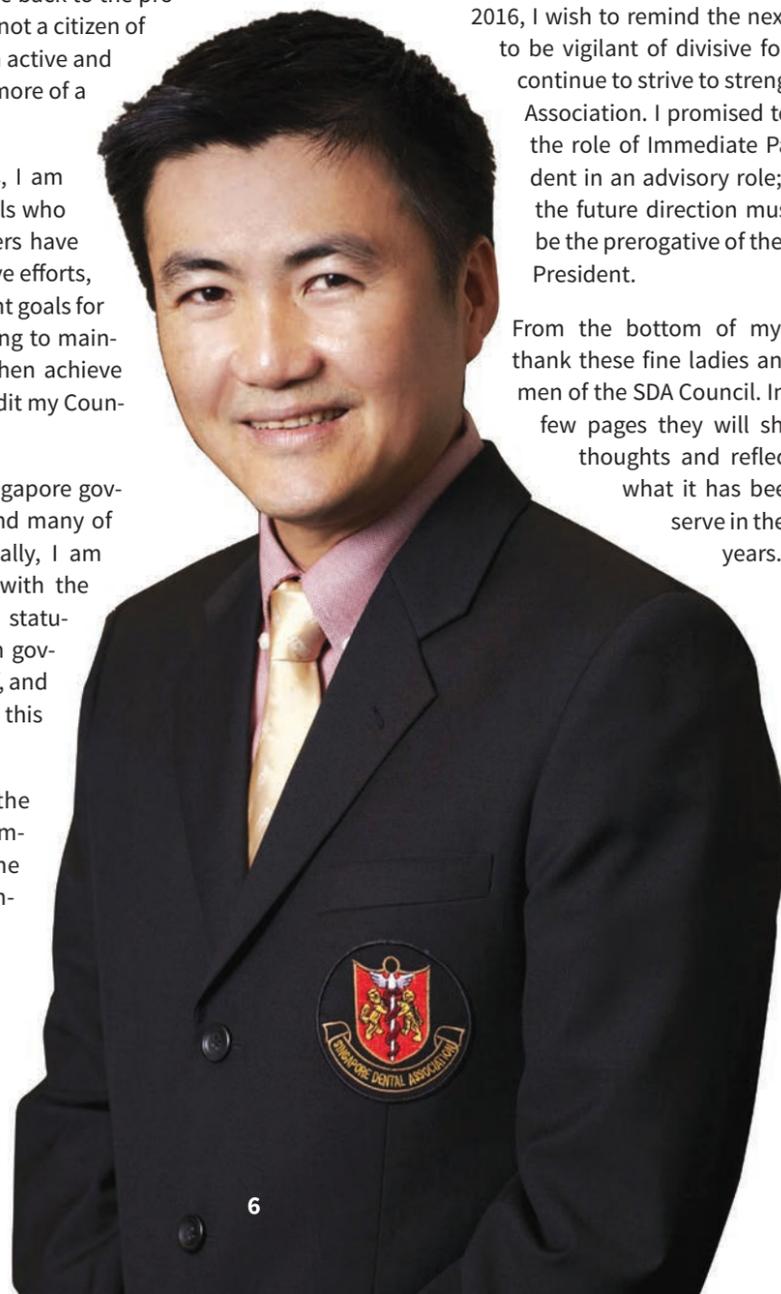
I have learnt so much about the Singapore government, the background of SDA and many of our members. As President especially, I am privileged to be actively involved with the various government branches and statutory boards. The efficient and clean government is something to be proud of, and I always remind my children that this should not be taken for granted.

I also got to know more about the history of SDA and our Pioneer members. The turbulent struggles of the early years are a reminder to contin-

uously strive towards SDA unity, yet not be constrained by our past. Finally, I have learnt that our administrative staff forms the backbone to our efficient functioning. They are the "civil service" of SDA, whereas its Councils come and go.

As my current Council steps down in April 2016, I wish to remind the next Council to be vigilant of divisive forces, and continue to strive to strengthen our Association. I promised to take up the role of Immediate Past President in an advisory role; I believe the future direction must always be the prerogative of the new SDA President.

From the bottom of my heart, I thank these fine ladies and gentlemen of the SDA Council. In the next few pages they will share their thoughts and reflections on what it has been like to serve in the past few years.



DR. KELVIN CHYE CHUAN HEE

Vice-President

Private Practitioner at Victoria Dentalcare Group

Dr. Ng Chin Siau and Dr. Raymond Ang recruited me into SDA back in 2006 shortly after graduation. Without any expectation, I joined purely because I wanted to contribute to the dental profession as a young newly graduated member of the fraternity. Through the years, it had been a humbling experience for me as I assumed various roles in the Council and subsequently became the Vice President for 2 terms since 2012.

Eventually, I found a niche in the role of Chairman of public relations and strategic communications, and became involved in both the internal and external public relations for SDA, both locally and internationally.

Being a Council member of SDA carries great responsibility as we have the potential to shape dentistry in Singapore. Policy-making sometimes involves input from SDA, and through this we see how dentistry is related to the broader aspects of public health including medicine, nursing and allied health.

A deeper understanding of these interrelations spurred me on to enrol in the Masters of Public Health program in NUS. I hope to be able to use the experience and knowledge I have gathered, to continue contributing to the dental profession and fraternity. I also hope to share my experience and enthusiasm with like-minded colleagues or younger dentists, so that more will step forward and do our bit for the profession.

Last but not the least, I have learnt to be thankful and grateful to all who have supported me all these years, and to the friendships that I have made.



DR. TANG PANMEI

Treasurer

Orthodontist at Sainte Chapelle Clinic

I volunteered for SDA Council because it provided me with a platform to give back to the dental community. Working with a fantastic group of people who had the same goals in mind, has resulted in a great opportunity for me to learn about the various aspects of dentistry outside the clinical setting. Having followed through on many successful projects and seeing the fruits of our labour, it certainly has been a rewarding experience.

During my term as Council Member, I have seen that there are many seniors and colleagues out there who are very kind to impart their wealth of knowledge and experience to you. Also, although we are unable to satisfy everyone, we just have to stay united and make the best of things in accordance to our ideals with the hope that we can effectively convince the rest. Having said that, I would like to thank my fellow Council members and all those who have been through this journey with me.



DR. LIM LII

General Secretary

Private Practitioner at Dental On The Bay and Supreme Dental Surgery

I volunteered for SDA Council because I wanted to give back to the Association that had given me much help in the early days of my working career. I came back to Singapore to work in 1997 and as I was not a local graduate, I had very little knowledge of the working environment, much less the dental fraternity. Out of loneliness and curiosity, I decided to answer the call for volunteers for SDA's Ethics and Practice Management Committee. There, I made new friends and I was very touched to be accepted openly into the dental circle.

My SDA fellow volunteers made me feel like one of them, even when I did not share their gruelling dental school days, nor did I share their interesting government attachment days. The sense of belonging was of utmost importance to me. The rest is history, as I increased my involvement with SDA over the years, and I look back at the past 11 years serving SDA with no regrets.

During my current term as Council Member, I have learnt a lot from the younger volunteers. This has been very helpful for me to bridge the generation gap, allowing me to be more aware of staying relevant to the ever-changing times. At the same time, I also had many senior volunteers who were happy to share their wealth of experience with me. Indeed, this term has been very enriching for me. I thank my fellow Council members for being supportive and united.



DR. SEOW YIAN SAN

Assistant General Secretary

Orthodontist at Khoo Teck Puat Hospital

I've been an active member of SDA since graduating from BDS. Friends and colleagues often asked why I spent so much time on SDA activities, even during my hectic postgraduate studies. I guess having a fervent interest to serve the dental community and making it better for each and every member is what keeps me going.

This year marks my 10th anniversary with the SDA. I started off by joining various subcommittees, making regular contributions. I have served as convener, chairperson and member in several committees: Ethics and Practice Management, Oral Health Awareness, Editor-in-Chief of The *Dental Surgeon*, IDEM and other events.

I especially gained a lot experience and knowledge from the Ethics committee when I first started as a fresh graduate. Trained by professional mediators at the Singapore Mediation Centre, I learnt to channel my mediation skills into helping two unhappy parties arrive at a fair and amicable solution. My experience in mediation certainly helped me in my day-to-day communication and management with patients.

Leading and organizing these various activities and events, as well as my work as a Council Member have also given me valuable friendships that I will always treasure and cherish.



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References:

1. Akwagyiam I, et al. Poster 174485 presented at the International Association of Dental Research, Seattle, WA. March 2013.
2. Yankell SL, et al. *J Clin Dent* 1993;4(1):26-30. 3. Data on file, RH01530, January 2013.

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DR. TERENCE JEE

Council Member

Endodontist at Q&M (Orchard) Pte Ltd

I volunteered for SDA Council because during my time as an undergraduate, I was already an active participant in some of the SDA events. The experience was very enjoyable and motivated me to contribute to the fraternity after I graduated. In the first few years upon graduation, I was involved in various committees such as Welfare, Ethics, NITEC in dental assisting, and OHM. The time spent was very rewarding. This further spurred me to apply whatever I had learnt towards a leadership position, so that I could serve the association better.

During my term as Council Member, I have learnt much more things than I could ever have imagined, definitely more than just routine dentistry. They range from events management, organisation of conferences, corporate communications, and even insights into dental public health policy-making. I would like to take the opportunity to thank our association members for allowing me to serve in the Council together with the rest of my dedicated and capable Council members.



DR. SU SHENGLE

Council Member

Private Practitioner at SMG Dental

As a member of the CDE committee, I had many memorable experiences working closely with the Council members. What had started out as a pursuit of knowledge through getting involved with CDE events, eventually evolved into friendships forged and unforgettable memories made. This encouraged me to volunteer for the SDA council.

During my term as Council Member, I have come to respect many of those who have been serving for many years in the Council. It truly takes much commitment and can be trying to juggle work, family and Council responsibilities. However, I managed with the support and guidance from my seniors.

Being a Council Member calls for many overseas trips to promote our Council and events. From these trips, I have gained further insight into dentistry, had the opportunity to travel to places I would never have imagined, and truly broadened my horizons. Council meetings have become like mini “family meetings”. Undoubtedly, I have thoroughly enjoyed serving in the capacity of a Council member and am grateful to be a part of this wonderful team.



DR. SHAWN GOH

Council Member

**Oral and Maxillofacial Surgeon at
The OralMaxillofacial Practice**

I volunteered for the SDA Council because of a good friend who had suggested I contribute something back to our dental fraternity. I joined without much idea of what I could possibly do. However, during my term I have learnt so many things from both fellow Council members as well as the people we work with. As CDE Chair, I have found organizing continuing dental education talks and workshops very fulfilling and meaningful as it moves the dental profession forward in learning and innovation.

Attending overseas conferences to make new contacts regionally and to collaborate on joint projects is rewarding with the many new friendships forged, and also helps to increase the international standing of our Dental Association.

It has been an exciting and rewarding past three years and I would not hesitate to continue serving in the Association. Just as my friend had started me off on this journey of discovery, I would strongly encourage more fellow dentists to step up and serve our very own Singapore dental community and push our profession to new heights of excellence.



PEOPLE HAVE PRIORITY

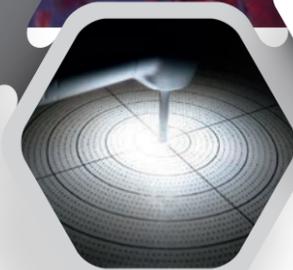


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DR. TANG KOK SIEW

Council Member

Paediatric Dentist

at National University Hospital

I volunteered for SDA Council because it provided a great opportunity for me to give back to the profession. Inspired by past and present council members, I have often reflected and asked myself how I too could contribute to the dental fraternity.

During my term as Council Member, I have learnt more about the history of the Association and how our predecessors had devoted their time to raise the profile of the dental profession in Singapore. I have also started to appreciate the relentless effort that our committee members and administrative staff have put into the planning and execution of the various initiatives for the benefit of the profession. I wish to sincerely thank all those who have helped me along the way. 🙏



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Dr. Edmund Tay

1925 – 2014

- Demonstrator – University of Malaya, Oct 1952
- Founding Dean - Faculty of Dentistry, University of Singapore, Sep 1966
- Full Professor – University of Singapore, Jan 1972
- Retirement – National University of Singapore, Dec 1986
- Founding Chairman, Chapter of Dental Surgeons, Academy of Medicine (Singapore) 1978-1980
- Third President, Singapore Dental Association, 1979
- Bestowed awards include:
- Honorary Fellowship of the International College of Dentistry
- SDA’s Roll of Honour
- NTUC’s ‘Friend of Labour’ Award

His Life and His Dreams

BY DR. DAVID TAY

My father was a passionate man.

He came from humble beginnings. Born to a planter in Sapong, a small town about 100 miles from Jesselton, British North Borneo (now Kota Kinabalu, Sabah, East Malaysia), he was sent to Singapore at the tender age of thirteen to continue his education in English.

At St. Anthony’s Boys’ School, he met a kind and dedicated teacher, Mr. Leslie Woodford, who took him as his own ward. My dad’s adolescence naturally revolved around the early Scout movement as Mr. Woodford, or ‘Black Bear’ as he was better known, went on to become the first Scout Commissioner of Singapore. I discovered from my old ‘uncles’ that my father was amongst the first to earn the King Scout badge and that his scout name was ‘Wadaga’ (the swimmer) - I thought that was oh-so cool!

The outdoor survival skills he honed through scouting proved useful during the Japanese Occupation, when he was relocated to an agricultural settlement in Bahau, Malaya, that was specially set up for Eurasians and Chinese Catholics. However, Fuji-Go or ‘beautiful village’ turned out to be a malaria-infested swathe with soil that could not sustain farming. Sanitation was also poor and many succumbed to dysentery, malaria or malnutrition. It was estimated that some 500 settlers (about one in six) lost their lives there!^{1,2}

I remember he once dug out a section of my mom’s flower bed to plant tapioca and sweet potato for my sister and



I to sample; to tell us how these easy growing roots/tubers had been his staple for two years and to remind us how privileged we were! It was there in God-forsaken Bahau, amidst unimaginable human suffering and death, that he first embraced Christianity. When the war finally ended, he was treated as a prisoner of war and specially flown back to Jesselton by the British forces.

The war, in many ways, forged his character and the strong views he held about life. He understood, firsthand, what it was like to have no food in his stomach, yet he harbored no lasting bitterness but instead was able to draw strength

from the experience. You see, my dad was my hero when I was growing up and I’d always wanted to be like him. For him to be proud of me.

He was a gifted all-rounder; a high achiever with a never-say-die attitude – a real tough act to follow! He secured a place as a medical student in 1947 in King Edward VII College of Medicine, University of Malaya, where he met my mother. Unfortunately, during the first term of his first year, his father passed away and he had to go back to Borneo where, as the eldest son, he was expected to look after the family estate. On his return, he switched his course of study to dentistry so he could graduate a year earlier to support his family.

He was an outstanding sportsman during his undergraduate years; receiving commendations in field hockey, swimming and long distance running. He was active in the University Students’ Union Executive Council and was

¹ Tay Mai Hiong Edmund on the Japanese Occupation of Singapore & Medical/Dental Services in the early years. Oral History Centre, The National Archives of Singapore. http://www.nas.gov.sg/archivesonline/oral_history_interviews/multiple-records

² Hodgkins, F. From Syonan to Fuji-Go: The story of the Catholic settlement of Bahau in WWII Malaya. Select Books (2014)



Inaugural opening of the Faculty of Dentistry (1966)

Dean Tay (extreme right) with the Minister of Education, Mr. Ong Pang Boon (second from left), and Deputy Vice-Chancellor, Dr. Reginald Quahe (third from left)



My father (extreme right) when he was a King Scout with other patrol leaders and the legendary Black Bear, the first Scout Commissioner of Singapore (third from left)



Professor Tay (extreme left) with our First President Yusof Ishak and the First Lady, Puan Noor Aishah, at the Istana

also the President of the Catholic Students' Society. Because he was consistently one of the top students in his cohort, he was selected by the late Professor R.J.S. Tickle to join the dental department. He began as a demonstrator in October 1952, a job which paid a measly monthly salary of \$400!

"Dentistry in the post-war years was considered a very poor second choice to medicine. One reason for this was when you graduated as a medical person, you were addressed as 'Doctor' while dentists were merely 'Mister'. The title 'Dr' carried a lot of weight in the community back then. Many unqualified dentists were also practicing at the time and this tarnished the image of the dental profession."

"When Dentistry first started we were a school within the King Edward VII College of Medicine. Later, we became a department within the Medical Faculty of University of Malaya in Singapore. Throughout this time we were subservient to the Medical Faculty. My aim was for Dentistry to get equal status as a Faculty. If you are master of your own house you can plan your development. It took us almost seven years agitating the Senate to grant us faculty status. Ultimately, we got this in 1966."³

When the Academy of Medicine (Singapore) was first conceived, my father and others lobbied successfully to put our dental specialists on par with their medical counterparts. He assumed leadership roles in many professional societies and was, notably, the founding Chairman of the Chapter of Dental Surgeons (1978-1980) and also the third President of the Singapore Dental Association.

Dr. Edmund Tay Mai Hiong spent his entire working life in academia. He was elected Dean of the Dental Faculty in September 1966, a position he held for 19 years. He was the longest serving dean in the history of our University and had the distinction of working under five different Vice-Chancellors. As the founding dean, he visited dental faculties in UK, Denmark, Canada and USA, and incorporated their best practices when redesigning our dental curriculum, including the shortening of the undergraduate course to four years. He was also responsible for the planning and supervision of the Faculty's move to Kent Ridge from Sepoy Lines. He retired in 1986 after having dutifully served the University for 34 years.

He was a devoted teacher, husband, father and grandfather. A distinguished gentleman! We miss him dearly.

³. 'The Acci-dental Pioneer'. pg.176, *Imagination, Openness & Courage: The National University of Singapore at 100.* (2006)



Words in Memoriam by Professor Loh Hong Sai (BDS 1972)

“Edmund was my teacher, peer and friend. He was a gentle giant in his tall but slim frame, with a broad smile and very easy personality. As his student, he was kind and understanding. As my peer, he was encouraging and forgiving. And as a friend, I found a father figure with a caring and kind soul. He was well liked by staff and students alike. As the longest serving Dean in the Faculty of Dentistry (NUS) and a distinguished long career, he will be remembered with fondness by many generations of graduates. He was active in the Singapore Dental Association and served as its President. He was a popular figure in the medical fraternity too, especially in the Medical Alumni Association.

He was a bright student himself, who qualified for medicine but chose dentistry instead. An outstanding sportsman in his younger days, he had a fruitful undergraduate career, which I think contributed immensely to his desire to teach and transform dental education and practice in the formative years of independence of Singapore. He spearheaded the inauguration of the Faculty of Dentistry in 1966 and became its first ever Dean, a position he held for 19 years, which was a record for the history of not only its Faculty but the university at large!

I joined the Faculty as a trainee in 1973, and he was responsible for my attainment of a scholarship to pursue the Fellowship in Dentistry (FDS) in UK. The tenure was only for a year, and as I could not complete both the Part 1 and 2 of that examination, he kindly extended my tenure for another 3 months so as to allow me to sit again for the Part 2 FDS examination. What was more touching was a personal letter from him to inspire me to do well and overcome my difficulties. I cannot forget his kind action and warm words – ever. He had a big heart for all his staff members.

In our days at the Singapore General Hospital campus, we had a common room, whereby he would be there at tea-break, and we had the opportunity to interact with him – on all matters. Such interactions between Dean and staff members are not a frequent feature in our present times. There was a bond, a sense of togetherness and purpose, and a great sense of belonging. He would be present at most student events and faculty functions, and it was like one big, happy family each time we met.

He was responsible for the Faculty’s Golden Jubilee in 1979. He led us to a new era of dental facilities, curricula and goals to meet the new challenges in dentistry. He completed his deanship in 1985, and I had the privilege to succeed him as Dean. I was grateful for his advice and guidance for the transition of the Faculty from its campus in SGH to NUH in 1986. He stayed on with the Faculty for another year before his retirement.

Even after that, he was in close contact with us, providing the pillar of support whenever we needed his presence in important faculty and university functions. He was honoured by the faculty with a scholarship under his name. Whenever we had class reunions in different parts of the world, we always recalled Edmund as a kind, warm and friendly teacher. We are all proud to be taught by him, moulded by him and to owe him our career in dentistry. Edmund, we salute you, and will always have you in our hearts.”



Continuing A Legacy

The *Dental Surgeon* interviews Dr. David Tay on what it means to carry on his father’s vision.

BY DR. TERRY TEO

Your father was the longest serving dean in the history of our University. Why do you think he was so successful?

First, he must have had a very clear idea of what he wanted to achieve in his life and was not afraid to dream ‘Big Dreams’. He believed our Dental School could one day be the best in Asia, if not the world! And, he was prepared to spend his whole life chasing his dream. The dental school is one tangible legacy that both of us, as beneficiaries, have already experienced.

He wanted the dental surgeon to be equal to his medical counterpart. A worthy professional who is proud and fully aware of his significant contribution to the total wellbeing of his patients; someone highly valued by the community.

Second, he knew he could not achieve his dream working alone. It was not serendipitous that he found a team of very talented people who shared his vision. Perhaps one of the secrets to his success was not trying to always be the smartest person in the room but instead to surround himself with committed people who were much smarter than him. “A dean must achieve success vicariously!”

Third, he was an extremely generous person who was genuinely invested in people. He often went out of his way to open doors for others, especially those under his charge. Some have opined that dentistry’s high status in our society today would not have been possible without his skillful organizational maneuvering and prowess in tapping upon his large network of per-



With his son, David, and daughter, Denise (1957)

sonal contacts. He was more influential than most, perhaps because many of the doyens in the medical community at that time were his peers when he himself was a medical student, therefore they respected him and treated him as their equal. His 1947 Medical Class, to which my mother, along with Tun Dr. Mahathir Mohamad (the former Prime Minister of Malaysia) and his wife also belonged, was a closely-knit bunch of ‘movers and shakers’ that still enjoy celebrating their annual reunions up till today!

Since his passing in June 2014, many of his contemporaries have come up to me to tell me how driven, passionate, persuasive and politically adept he could be when lobbying for his causes. I guess I never saw this aspect of him as a son, but realistically, he couldn’t have been the longest serving dean in the history of the University, the founding chairman of the Chapter of Dental Surgeons, Academy of Medicine (S’pore), and SDA president if he didn’t possess some of these qualities.

Everyone I’ve spoken to has told me Prof. Tay was a great clinical teacher; soft-spoken, kind, patient and very well-liked. He was a caring father figure to the many students who had the privilege of being taught by him. You were also a full-time faculty member and taught for nine years in the dental school. Did he offer you any tips or helpful career advice?

He was the epitome of humility! He respected people no matter their status. One of the junior academic staff once told me that when Dean Tay set up a meeting with

you, it was the Dean who walked to your room and not the other way around! He was a very good listener and never dismissed another's viewpoint. He carried a big stick called 'reason'.

"The main responsibility of an educator was not so much to impart but to inspire. The main purpose of discussion was not so much to prove but to improve."



With his family (1993)

When I first became a member of the faculty in 1984, he reminded me that teachers should always treat their students with respect and that there was no such thing as a stupid question. Education to him was a journey. The knowledge gap between a teacher and his student was nothing compared to that which they collectively did not or will not know. Even what we teach today has a half-life, so there's never a place for arrogance!

Many dental colleagues have told me that when they were students coming up to him to get their work checked, he always saw the best in them and that motivated them enough to try even harder just to live up to his opinion of them. He always gave them encouragement and the benefit of the doubt, and they seldom disappointed him. He derived the greatest satisfaction when his former students did well in their careers.

Looking back, his second best advice to me was that I should invest the early part of my career in academia and set aside enough time not only to consolidate what I've learnt but also to formulate my own ideas about how I can improve dentistry. *Docendo discimus (by teaching, we learn)* - just having to stand before an audience, the obligation to present our research before peers and our constant endeavour to find better ways to dismantle complex clinical concepts in such a manner that even a neophyte could understand, required introspection and rigour. I believe it has made me a better dentist overall and a better communicator.



Enjoying his retirement with his son and grandson

What was it like being a dental student when your dad was the dean?

Dentistry was my first and only choice for University. I was proud that my dad was the Dean but at the same time, it was certainly difficult to fly under the radar. Everyone had an opinion of you.

My father brought us up in an atmosphere of

unconditional love. I never feared trying new things, or failing because I know his love for us would never change. In many ways I was always allowed to explore, to be a rebel, to always reason, question and/or challenge the accepted norms of the day. However as an undergrad, there was more self-imposed censorship than I preferred, and thus it was a difficult period for the both of us!

My dad also made sure that I didn't have any special privileges. In fact, he never once checked or signed a single piece of my work throughout my undergraduate career and I would dread whenever he was on duty in the Prosthetic Clinic as I would have one staff less to consult.

To avoid any insinuation of impropriety, he advised me not to apply for any postgraduate scholarship offered by NUS. My parents decided to personally sponsor my entire graduate studies at Northwestern University in Chicago because they felt it was an academic environment in which I had to prove myself everyday to people who didn't care that I was the Dean's son, in order to gain their respect and, ultimately, my own. He told me much later that it was one of the best decisions he'd made. I agree!

Why are you starting this endowment in his name?

Back in the early eighties, snoring was thought to be a benign, if not laughable, social affliction affecting most men. Few, even in the medical community, made the connection between snoring and a more serious condition called Obstructive Sleep Apnea (OSA).

My dad's snoring was legendary - even the neighbours complained! Some envied how he could sleep anywhere-anytime as if that was a blessing. Nowadays, we refer to this phenomenon as EDS or excessive daytime sleepiness - a red flag signaling latent sleep disorders. The seriousness of his condition was largely ignored until he developed cardiac arrhythmia whilst teaching. Only when he was made to wear a 48-hour halter to monitor his vital signs did they discover episodes during his sleep when he wasn't breathing for periods > 2 minutes, and this went on repeatedly throughout the night!

Despite these objective findings, his cardiologist continued to only prescribe antiarrhythmic drugs but never once addressed the sleep-related breathing issue that probably caused it in the first place! This carried on until he had his first minor stroke in 2006. Whilst in the high dependency ward, I finally got the attending neurologist to do a full polysomnographic (PSG) study which confirmed he had severe OSA. We put him on nasal CPAP almost immediately afterwards. He recovered enough to celebrate his 81st birthday in the ward.

He had his second and more massive stroke on September 7, 2012, ironically, while I was conducting a course in Perth, Australia, on Dental Sleep Medicine! Over the years, the disease process progressively took away his intellect, his precious memories, his dignity and, finally, his very life. I vowed I would not let this happen again to anyone under my charge! It is a real tragedy when you realize that the cardiac and cerebrovascular consequences he suffered were preventable if we had addressed the OSA early.

My father's case reminds us that you don't need to be obese or overweight to develop OSA. We are learning that certain characteristics of the craniofacial morphology and airway anatomy make males of Southern Chinese ethnicity more susceptible to the development of sleep-related breathing disorders like OSA and Upper Airway Resistance Syndrome (UARS). We also have one of the highest rates of Vascular Dementia and the possible links need to be explored.

My purpose of establishing the ETMH Endowment Fund is to not only to raise awareness of Sleep-Related Breathing Disorders (SRBDs) but to empower and recruit dentists as front line professionals in its early detection.

I strongly believe the informed dentist, working together with a team of dedicated sleep professionals, has the potential to be a major factor in both initiating diagnostic procedures as well as playing an important supportive role (e.g. in the provision of Oral Appliance Therapy).

Thus, your generous donations will not only honour Dr. Edmund Tay's memory, but help further his life's work to develop "biologically orientated, technically capable and socially sensitive dental surgeons who are fully aware of the significance of their contribution to the total care of their patients."

I think we've been 'punching below our weight' for too long. Dentistry is not only about making teeth straight and white!

What are the specific aims of the ETMH endowment fund?

For the first six years, your tax-deductible gift will be used to engage distinguished speakers to conduct annual lectures and teaching programmes in the fields of dental sleep medicine, airway-centric dentistry and orofacial pain.

We hope the ETMH Distinguished Speaker programme will serve as a forum

- to introduce sleep medicine to the local dental profession
- to raise public and medical community awareness of dentistry's role in the recognition and co-management of sleep-related breathing disorders
- to make dentists more aware of the potential impact of their practice upon the human airway
- to highlight the comorbidity between sleep disorders and chronic orofacial pain & Temporomandibular Disorders (TMD)

These topics are inadequately covered in our undergraduate curriculum unlike countries in Scandinavia where most dental schools have a separate section or department of sleep medicine.

In the future, the endowment fund will also be used to sponsor suitable Singaporean dentists to pursue full-time university-based residency programmes in dental sleep medicine/orofacial pain overseas.

What role do you see dentists playing in the management of sleep-related breathing disorders? How has awareness of sleep and airway issues changed your own practice of dentistry?

First, it's important to reemphasize that dentists are not qualified to diagnose OSA or other sleep disorders. However, we possess the same ability as the physician in questioning patients about their sleep and we already have the added advantage of a well-oiled recall system. The Epworth Sleepiness Scale is one example of a useful



My father (back row, second from left) with my mother (sitting, third from left) and their illustrious Medical Class of 1947

screening questionnaire that all dentists should include for the first patient visit. We regularly peer into the mouths of our patients, and with the growing availability of modern imaging technology like CBCT in our clinics, dentists are well placed to identify compromised upper airways. We just have to learn to look beyond the molars!

Dentists should consciously incorporate the principles of airway-centric dentistry in their daily practice. For example, occlusal rehabilitation of any form (full-mouth prosthodontic reconstruction, orthodontics or orthognathic surgery) should be planned to preserve or improve airway patency rather than compromise it. There's reliable research showing that the default flat plane occlusal splints you learnt to make in dental school can actually worsen the apnea-hypopnea index (AHI) in susceptible patients. Likewise, the age-old dogma of advising elderly patients to remove their dentures when they sleep may no longer be a sound one!

Today, I would not manage patients specifically referred to me for TMD, without first enquiring about their sleep. Many female patients with chronic orofacial pain or 'persistent' TMD also suffer from another sleep-related breathing dis-

order called Upper Airway Resistance Syndrome (UARS) - a condition which puts them in a constant state of pre-arousal throughout the night. They basically don't get sufficient restorative sleep and if you don't resolve their sleep issues conjointly, you're not going to have good treatment outcomes.

Unlike what I was taught in dental school, I no longer look upon sleep bruxism (SB) as an occlusal disorder. SB is, instead, a sleep-related movement disorder that mostly occurs in Stage 2 Non-Rapid Eye Movement (NREM) Sleep as a consequence of microarousals. Dentists graduating today should be made aware of this well-established scientific fact. How else are we, as responsible restorative dentists and prosthodontists, able to abide by the universal dictum, *Primum Non Nocere* ('above all else, do no harm') when we are called upon to manage patients who come to see us for their tooth wear problems.

In summary, sleep medicine has taught us that a patient who may appear fine when he is awake could be significantly unhealthy when asleep. Trouble is, he's usually awake when he consults you! 🤔



Dr. David K. L. Tay is a certified prosthodontic specialist and former full-time faculty member in the Department of Restorative Dentistry, Faculty of Dentistry, NUS. He has special interests in full-mouth occlusal rehabilitation, the management of temporomandibular disorders & chronic orofacial pain, dental sleep medicine and golf.

He is presently the Clinical Director of the Specialist Division, T32 Dental Centre at Camden Medical Centre.

"Dear Alumni and friends,

People used to think that snoring was a 'benign' if not laughable social affliction affecting most men. How wrong we were!

My dad's early medical problems and ultimate demise were directly related to a not uncommon malady called Obstructive Sleep Apnea (OSA). In the early eighties, this disorder was not well recognized and the seriousness of its cardiac and cerebrovascular consequences was often overlooked.

Today, the realization that we as dentists are in a uniquely privileged position to play a significant role in the early recognition and co-management of this potentially devastating condition is simultaneously humbling and empowering.

We hope the Edmund Tay Mai Hiong Endowment Fund, will serve as a platform:

- to introduce sleep medicine to the local dental profession*
- to raise public and medical community awareness of dentistry's role in sleep-related breathing disorders*
- to make dentists more aware of the potential impact of everyday dental practice, both positive and negative, on the human airway, and*
- to highlight the comorbidity between sleep disorders and chronic orofacial pain (including Temporomandibular Disorders).*

On behalf of my family, I appeal to your generosity and thank you in advance for honouring him.

*Sincerely,
 Dr. David K. L. Tay"*

ETMH Endowment Fund officially launched on 16 August 2015

Raising community awareness	Sponsorship of local candidates	Your donation enjoys
Initially, the gift will be used to fund expenses to engage distinguished speakers to conduct annual lectures and/or teaching programmes in the fields of dental sleep medicine, airway-centric dentistry and orofacial pain	In addition to the distinguished speakers programme, the endowment will also offer full or partial scholarships to suitable Singaporean dentists to pursue full-time university-based residency programmes in dental sleep medicine/orofacial pain	Government matching grants and SG50 300% tax deduction



A High Calling

The Singapore Dental Council (SDC) Dentist's Pledge Affirmation Ceremony was held on the 28th of August, 2015, at the College of Medicine Building. This year, the pledge was taken by 127 dentists, 74 of whom were graduates of overseas universities. The Guest-of-Honour for the event was Minister for Health Mr. Gan Kim Yong, while SDC President, Professor Chew Chong Lin, was the Presiding Officer. Dr. Sarah Chua, Valedictorian for the National University of Singapore (NUS) Dentistry Class of 2015 shares her experience of the event.

BY DR. SARAH CHUA

Graduation marked the completion of arguably one of the most grueling courses of study, but taking this pledge was a milestone that marked our initiation into the profession. It was interesting to see the number of foreign-trained dentists registering in Singapore, especially as many of them were not returning Singaporeans but foreigners of various nationalities, and

some had even been practicing overseas for a number of years. The diversity they bring with them into the local dental scene is a microcosm of the cultural hot pot that is Singapore, and promises that the scene remains exciting and competitive. As Singaporeans become increasingly educated and affluent, the demand for dental treatment will continue to rise. The surge in the number of dentists

will thus ensure a better dentist-to-population ratio such that the dental needs of every resident of this island can be met.

In this present age where the dental profession is constantly coming under increasing scrutiny, the pledge was a solemn reminder of what it means to be a dentist. To be a dentist, as the pledge states, is to "treat [our] patients with compassion and respect and in a manner consistent with the best interests of the patient's health, welfare and safety." This is not merely a hackneyed, lofty ideal, but an expected standard for any dentist. As we treat our patients, we should constantly apply the golden rule: do to others as you would have them do unto you. Furthermore, we must never forget that the one who sits in our chair is not merely a tooth, nor an ATM, but a human being.

Underpinning it all is the notion that we must "uphold the honour and noble traditions of the dental profession." This reminded me of the dental anthem we sang as freshmen when we first entered the Faculty of Dentistry at NUS: "With spirit and with fervour we strove on, to



do our profession proud... glorious dentistry, mighty dentistry, with a heritage that's old and true, we will strive on to be loyal to our name and members too." Perhaps, as freshmen, we weren't fully cognizant of the weight of the words we were singing, but now,

those words resonate as I remember that Rome wasn't built in a day, but it was destroyed in one. Likewise, each of us must strive to uphold the integrity of our profession and not allow any disrespect to come upon it, for the foundations of this glorious profession, painstakingly built up over many centuries, can easily be chipped away if any of us decide to make a mockery of this noble oath we made.

A brand new journey has begun for us newly registered dentists, and for those who have gone before us, your pledge affirmation ceremony years ago may be but a hazy memory. Regardless of when we took the pledge, let us not make this modified Hippocratic Oath a "hypocritical oath." May we always remember the words of, and strive to treat every patient in accordance with, the Dentist's Pledge.

Excerpt of speech by Minister for Health Mr. Gan Kim Yong

"The practice of Dentistry is a high calling. As dentists, you are entrusted to draw from evidence-based practices to deliver the most appropriate treatment for your patients to the best of your abilities. You should practise with care and compassion and always place the interests of your patients above your own."

The Pledge signifies your commitment to uphold the values essential to the dental profession – integrity, honesty, care and compassion. The solemn promises you make today must become a steady compass to guide your decisions and conduct.

Over the past few years, the Ministry has put in place measures to ensure that dental services continue to be affordable and accessible. For example, the Community Health Assist Scheme (CHAS) enables middle to lower income Singapore Citizens to receive subsidies for medical care and dental services at participating private clinics near their homes. Since September last year, we have also honoured our Pioneer Generation by extending additional healthcare subsidies to them, including special CHAS benefits.

For patients to benefit from these schemes, we need the support of the doctors and dentists in the community to provide appropriate care and keep charges reasonable."



Dr. Sarah Chua reciting the Dentist Pledge



Health Minister Mr. Gan Kim Yong greets Singapore Dental Association President Dr. Kuan Chee Keong



Singapore Dental Council Members on stage

Personal Message from Chief Dental Officer Clinical Associate Professor Patrick Tseng

“The pledge ceremony is an important reminder to all dentists of their responsibilities to the dental profession and to affirm them before they embark on their careers.

The Dentist’s Pledge also signifies a commitment to uphold the values essential to the dental profession – integrity, honesty, care and compassion. The fundamental ethos and personal values detailed in the pledge also embodies the principal tenets of our profession and the solemn promises made should guide all dentists in making ethically and medically sound professional decisions in their daily practice.

It is hoped that the pledge will seal a dentist’s commitment to their professional responsibilities towards their patients and to the development of the dental profession.”

Personal Message from Professor Chew Chong Lin, President of The Singapore Dental Council

“The dental profession is a well-respected profession. Patients who see us for their dental needs trust us to fulfil our responsibilities to them in a professional and ethical manner. We must all be committed to this and help keep our good reputation.

The Dentist’s Pledge was introduced in 2004 as an affirmation of the basic code of conduct and ethical values that each dentist in Singapore is expected to uphold professionally at all times. Some of the statements in the pledge include: “dedicate myself to render the highest standard of oral health care, practise my profession with conscience, honesty and integrity, uphold the honour and noble traditions of the dental profession”. In a speech by then Minister for Health, Mr. Khaw Boon Wan, in 2004, he stated that “This ceremony serves to emphasise the importance of professionalism which is a commitment we must make to our patients. It is the hallmark of good clinical practice which means that the dental services should be patient centred”.

In taking this pledge, the dentist is also making a commitment to uphold the Ethical Code and Guidelines set by the Singapore Dental Council. Let us all remember our pledge to our patients and profession.”



5 things to know about the Dental Pledge Ceremony

1. The first dental pledge ceremony was held in 2004. It was advocated to mirror the significance of the Physician’s Pledge ceremony that was first held in 1995. This event is now held at the College of Medicine building at the Singapore General Hospital campus in August each year following the graduation of new dentists from the National University of Singapore Faculty of Dentistry.
2. At the inaugural Dentist Pledge ceremony held in 2004, there were 31 new dentists who took the pledge. All were local graduates from the National University of Singapore. In 2015, 127 dentists, 74 of whom were graduates of overseas universities, took the pledge.
3. The Dentist Pledge is presided over by the SDC Chairperson, and the SDC Council members. Other people who are invited to attend and witness the ceremony include family members of the pledge takers, members of the Faculty of Dentistry, support members of the Singapore Dental Council and guest of honour from the Ministry of Health.
4. The author of the pledge is Dr. Yip Wing Kong, first President of SDC. The current SDC President who presides over the event is Prof. Chew Chong Lin.

Singapore Dental Council’s Dentist Pledge

“I, as a member of the dental profession, solemnly pledge to: dedicate myself to render the highest standard of oral health care; practise my profession with conscience, honesty and integrity; uphold the honour and noble traditions of the dental profession; conduct myself with honour and dignity that shall merit the respect of patients, colleagues and my community; treat my patients with compassion and respect and in a manner consistent with the best interests of the patient’s health, welfare and safety; not allow the considerations of race, religion, creed, gender, social standing, financial status or disability to intervene between my duty and my patient; maintain the confidentiality of my patients; behave considerately and courteously towards my professional colleagues; constantly strive to add to my knowledge and skill in the art and science of dentistry; abide by the laws and regulations governing dental practice and comply with the provisions of the code of ethics of the profession; I make these promises solemnly, freely and upon my honour.”

Dr. Sarah Chua graduated from NUS in 2015 as Valedictorian of her class. She is currently working at Geylang Polyclinic.

In her free time she enjoys self-studying Japanese through copious amounts of dramas, variety shows, and manga.



SDA Secretariat Team – our Unsung Heroes

BY DR. LIM LII



High tea at Carousel, clockwise from top left: Jon, Jerry, Tracy, Laura, and Jana

In the President's message from the 2015 Annual General Meeting report, Dr. Kuan Chee Keong gave credit to the unsung heroes of the Singapore Dental Association - the SDA Secretariat Staff. Indeed, these wonderful people have been supporting the Association day in day out, but often go unnoticed.

Recognizing their indispensable contributions, the Council organized a team-bonding day in November 2012 at Universal Studios. Everyone had a good time, screaming unglamorously as we rode the Transformer Ride. Tossing out notions of office hierarchy and decorum, we clung to each other as we were hurled off the

rapids at the Jurassic Park Rapids Adventure.

More recently, for their hard work at both IDEM 2014 and APDC 2015, the staff was treated to an afternoon high tea this May. They spent a leisurely afternoon partaking of delicious morsels at Carousel Restaurant.

In this issue, I would like to turn the spotlight on these quiet "worker bees". For the years I have served SDA as Assistant General Secretary and later as General Secretary, I have had the good fortune to be their "direct" supervisor. Hopefully, I will be able to do credit to them as I give you all a brief insight into the background and lives of these unsung heroes.

MR. LEE JON YANG Assistant Manager (Operations)

Jon is in charge of SDA office computing and IT needs.

Provision of support for the Membership, Conference Management, and Continuing Professional Education Committees.

Jon, the steadfast stalwart of the Secretariat, has been with SDA from May 2002, and has supported almost all subcommittees and administrative roles since. He

is the one and only staff familiar with the running of the entire association. Jon has always given 110% of his best to SDA. Always with a smile and never one to reject any request from both members and colleagues, Jon has become the go-to name whenever anyone needs anything. Truly, Jon is the hero of the Association.

Despite his hearing impairment from a young age, Jon has been determined to live life to the fullest. His varied hobbies include cooking, gaming, meditation, and reading with special interest in metaphysical and spirituality topics. He also lives an active lifestyle and enjoys sports like swimming, running, and weight lifting. Prior to joining SDA, Jon worked in computing and network solutions, and was also a freelance web designer.

MDM. LAURA CHIA Assistant Manager (Administrative)

Provides support for overall Council matters, as well as support for the following committees: Oral Health Awareness, Public Relations and Strategic Communications. Laura previously supported the Ethics and Practice Management Committee.

Laura joined the SDA in April 2008, following her previous career as a regular in the Republic of Singapore Navy (Logistics). As the Assistant Manager (Administrative), she plays a significant role in caring for the well being of the entire SDA office. The staff are happy to have Laura to turn to for advice both work-related and otherwise. This has led to much stability and harmony in the office.



Jon with Dr. Kuan Chee Keong at Universal Studios

Laura is married and is a very dedicated mother to her husband Andrew and sons Nigel and Justin, aged 18 and 12. Laura embraces Buddhism and the simple pleasures in life, including visits to parks, listening to music and reading. Being an extremely neat person, her office desk is always kept tidy and she ensures that the SDA office is kept clean as well.

"The committee owes much to Laura for the smooth running of committee events.

Laura has always been fair and committed in her work, and is known for not taking sides in any disputes," said Dr. Raymond Ang, ex-Chairman of the Ethics and Practice Management Committee.

MS. TRACY OOI Accounts executive

Apart from looking after SDA's accounts, Tracy also assists the following subcommittees: Accreditation, Investment, Internal audit and Property management.

Tracy has been working with SDA since April 2009. Tracy brings with her a wealth of experience from her diverse work experience in the areas of manufacturing, shipping, trading, food and beverage and property management. Tracy is very passionate about her work and wholeheartedly places the financial status of SDA in the highest regard. Being honest and straightforward, Tracy has been known to voice out her concerns about unnecessary expenditures from staff or council, regardless of office hierarchy. This is an invaluable asset in someone who takes care of SDA's monies. With Tracy around, we can all sleep well knowing that SDA's finances are in good hands.

Being super-efficient is Tracy's forte, and indeed, she is notable for finishing her task well within the expected time frame. Originally from Kedah, Malaysia, Tracy proudly became a Singaporean Citizen in 2010. She still has family (parents and four siblings) back home, and lives in Singapore with one of her brothers. Tracy is a Buddhist and she enjoys reading and watching television to unwind.

MS. NORJANA TAIB

Norjana is in-charge of Publications, Circular & Newsletters, Welfare, IDEM committees, and also assists with events management.

Norjana, or better known to all as Jana, joined SDA in April 2011. In the relatively short 4.5 years working with SDA, Jana has been a dedicated administrator in numerous important subcommittees. Her ability to multi-task well has led to the Council's confidence in her to juggle a large variety of roles.

This is reinforced by the fact that Jana takes pride in her work and often goes the extra mile with work matters. All active SDA members will be familiar with Jana, who has spent many after-office hours to ensure the smooth execution of their projects. Petite in stature, Jana is no push-over. She is a true "chilli padi" who is not shy to ensure that SDA gets the best deal with external vendors. Bringing with her the wealth of experience from her previous employment in publishing, she is an invaluable asset to the publication of The Dental Surgeon.

Jana has shown much initiative and often, her ideas and suggestions have led to much improvement for the subcommittees that she is involved in. Ever a team player, Jana has always been happy to help others with work outside her job-scope.

Jana embraces the Muslim faith and lives with her mother. Given her friendly disposition, she has a large circle of friends, and enjoys traveling, watching movies, and checking out food haunts with them. She is also a



With Dr. Lim Lii at Universal Studios outing

fan of Korean variety shows. Jana has, and will always be, a dependable member of our Secretariat.

MR. JERRY CHOO

Jerry assists in the following subcommittees: Ethics and Practice Management, NITEC in Dental Assisting, and Singapore Dental Health Foundation (SDHF).

Jerry is the latest member to join the SDA Secretariat and has been with us since August 2013. Although his presence was especially welcome by Jon, who for the longest time was the only thorn among the office roses, Jerry

has assimilated seamlessly into the rest of the team.

Jerry's work experience in the retail line has been an asset to SDA, and to the Ethics and Practice Management Committee. Exuding calmness and patience, Jerry has been the perfect voice of reassurance with members of the public who call in with complaints.

Jerry has shown quiet confidence in his work and dealings with both colleagues and members, and has lent a sense of calm and stability to the office. Dependable to the core, Jerry can be counted on to be there when you need him, even on weekends, where he has on many occasions had to sacrifice his church time.

Jerry is married with an adult son who is currently studying in Australia. He stays fit with sports activities, like cycling and jogging. He also likes to relax by watching television and movies. 



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"Great conference, good venue and I caught up with all distributors and new technologies out there."
- A delegate from Australia

"Really nice event with a lot of new things like the mobile app they have added. They have also added scientific programme targeted at the whole team: for dentists, dental hygienists and dental technicians."
- A delegate from Cambodia

"My purpose for visiting IDEM Singapore was to know more about the dental market; what new products and innovations are available. It's also a very good chance to meet face-to-face with many suppliers."
- A visitor from Vietnam



Speaker Highlights:



Paolo Casentini

Providing Quality of Life with Dental Implants 1: How to Reach Clinical Long-term Success in the Aesthetic Area

Providing Quality of Life with Dental Implants 2: How to Reach Clinical Long-term Success in Totally Edentulous Patients



SDA Masterclass Speaker

Carl F. Driscoll

Taking on the Challenge of the Complex Denture Patient... and SURVIVING



Hugo De Bruyn

Long-term Success for the Implant Patient - Appropriate Treatment Planning, Maintenance and Patient Compliance



Linda H. Greenwall

Success Strategies for the Aesthetic Dentist



Walter Dias

Clinical Excellence in Aesthetic Restorations - Hybrid and Indirect Techniques Using Smart Composites



Adrian Lussi

Erosive Tooth Wear - From Diagnosis to Therapy



Serge DiBart

Piezocision™ for Rapid Orthodontic Therapy: A Multi-disciplinary Team Approach



Hien Ngo

Chairperson Full Day Symposium: Towards the Post-Amalgam Era

Invitation to Roundtable Discussion



Free Admission for All to Two Roundtables

Exhibition visitors and conference delegates are invited to join two roundtables on April 8 and 10. A panel of speakers will discuss the topics of professional development and how attendees can apply new knowledge gained at IDEM Singapore. Audience participation in these roundtable discussions will be highly encouraged and facilitated by the latest in interactive mobile technology, turning the roundtable into an interdisciplinary conversation and evaluation of the journey to excellence.

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IDEM Singapore Strives to Help you Achieve Clinical Excellence in 2016

CONTRIBUTED BY KOELNMESSE PTE LTD



The International Dental Exhibition and Meeting (IDEM) Singapore 2016 returns for its 9th edition from April 8 – 10, 2016 at SUNTEC Singapore Convention and Exhibition Centre. With a bigger exhibition space, world-class scientific conference and supporting forums for new dentists, technicians and oral health therapists, IDEM Singapore will be the cornerstone event in the region that cannot be missed.

The conference theme this year, “**Striving for Clinical Excellence**”, is built upon the common goal of all dentists – both general and specialist, acknowledging the professional journey, that learning is never finished and that each practitioner can always do better for a patient’s oral

health. “It is vital for every dentist to keep pace with the advances in dental technology and treatment modalities, so that we can continue to offer the most up to date treatments that are evidence-based and safe for our patients. This is why attending highest quality conferences, like IDEM Singapore, is essential,” said Dr. Kuan Chee Keong, President of the Singapore Dental Association.

“Previous editions of IDEM Singapore have brought dentists the latest advances in technology and world-class speakers, elevating the event to become the leading exhibition and conference in the region. The upcoming edition of IDEM Singapore will strive to continue this successful formula and help all attendees in their journey of achiev-

ing excellence.” said Dr. Eugene Tang, Chairperson of the IDEM Singapore 2016 Organizing Committee.

The upcoming edition of IDEM Singapore will help all attendees in their journey of achieving excellence by creating different learning environments such as lectures, roundtable discussions and hands-on workshops for general and special interest groups. One particular new feature - the Roundtable Discussion – has been added to the conference programme on Day 1 and 3. Open to all attendees of IDEM Singapore, a panel of speakers will discuss the broader topics of professional development and how attendees can apply new knowledge gained at IDEM Singapore. Audience participation in these roundtable

discussions will be highly encouraged and facilitated by the latest in interactive mobile technology, turning the roundtable into an interdisciplinary conversation and evaluation of the journey to excellence.

Singapore Dental Association Masterclass – Carl F. Driscoll

After the outstanding success of the 2014 SDA Masterclass, the Singapore Dental Association has invited Professor Carl F. Driscoll to speak at the 2016 Masterclass. “Dr. Carl Driscoll will be speaking on topics related to management of implant complications as well as best techniques in the management of denture cases. There is a global trend where dental implants have become the treatment choice

for patients with missing teeth, and as more and more patients are receiving dental implants, it is crucial that dental practitioners are well versed with the up-to-date and evidence-based management protocols of implant complications.



approximately 8,500 participants, an increase of 8% from the number of attendance in 2014. "Since its inception in 2000, IDEM Singapore has grown by leaps and bounds. There has been a steady increase in the number of participants for this biennial event and as the world's top

Faced with a greying population in most countries and as edentulism remains a key oral health problem for the elderly, Dr. Driscoll will also share with the audience the fundamentals of making a good prosthesis for edentulous patients, how to recognize all potential problems that may exist in various cases and offer a management strategy for these cases," said Dr. Kelvin Chye, Vice President of Singapore Dental Association.

Exhibition

The scientific conference complements the extensive trade show as the world class faculty can teach about the broader application of new products and technologies featured on the exhibition floor. Taking up a total of 18,000sqm, IDEM Singapore 2016 is expected to draw in 550 exhibitors (dental manufacturers, distributors and traders) and

trade fair organiser, Koelnmesse is proud that our organisation has played a key role in bringing dental healthcare professionals, manufacturers and distributors into a converging point for those who are aiming to become a player in the Asian markets. Asia, as a region, with the growing affluence of its population continues to attract interests from various stakeholders and we will strive to continue providing outreach opportunities for dental professionals," said Mr. Michael Dreyer, Vice President, Asia Pacific, Koelnmesse Pte Ltd, organiser for IDEM Singapore 2016.

Continuing professional education points are available for the scientific conference and selected supporting forums. Online registration for trade visitors and conference delegates is now open. Detailed session and speakers' information can also be found online. Please visit the website www.idem-singapore.com for more information.



Carl F. Driscoll - SDA Masterclass Speaker

Carl F. Driscoll currently serves as a Professor at the University of Maryland Dental School and as Director of the Prosthodontic Residency. Dr. Driscoll is a Diplomate of the American Board of Prosthodontics and a Fellow of the American College of Prosthodontists (ACP). Dr. Driscoll has served as President of the American Academy of Fixed Prosthodontics, President of the American Board of Prosthodontics, and currently serves as President of the American College of Prosthodontics. Dr. Driscoll has given over 300 presentations nationally and internationally and has authored over 60 publications.

Carl Driscoll will be speaking on the following two topics:

SDA Masterclass 1 on April 8: 1100-1230hrs

Achieving Clinical Excellence with Implant Restorations and What to Do When That Excellence Starts to Fail

SDA Masterclass 2 on April 9: 1715-1845hrs

Taking on the Challenge to Achieve Clinical Excellence of the Complex Denture Patient...and Surviving



International Dental Exhibition and Meeting April 8-10, 2016

Suntec Singapore Convention & Exhibition Centre



Infection Control - Yesterday, Today and Tomorrow

by Dr. John Molinari

Friday, April 8, 2016
2:00 PM - 3:30 PM
Level 4, Hall 406

Infection Control for the Dental Team

by Dr. John Molinari

Saturday, April 9, 2016
9:00 AM - 11:00 AM
Workshop 2A

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The Very Point of Surgery

In this issue's Clinical Feature section, The **Dental Surgeon** invites specialist Endodontist Dr. Leslie Ang to shed light on the mysterious field of Endodontic Surgery.

WORDS BY DR. TONG HUEI JINN PHOTOS COURTESY OF DR. LESLIE ANG

What are the various types of endodontic surgical procedures that are routinely carried out by endodontists?

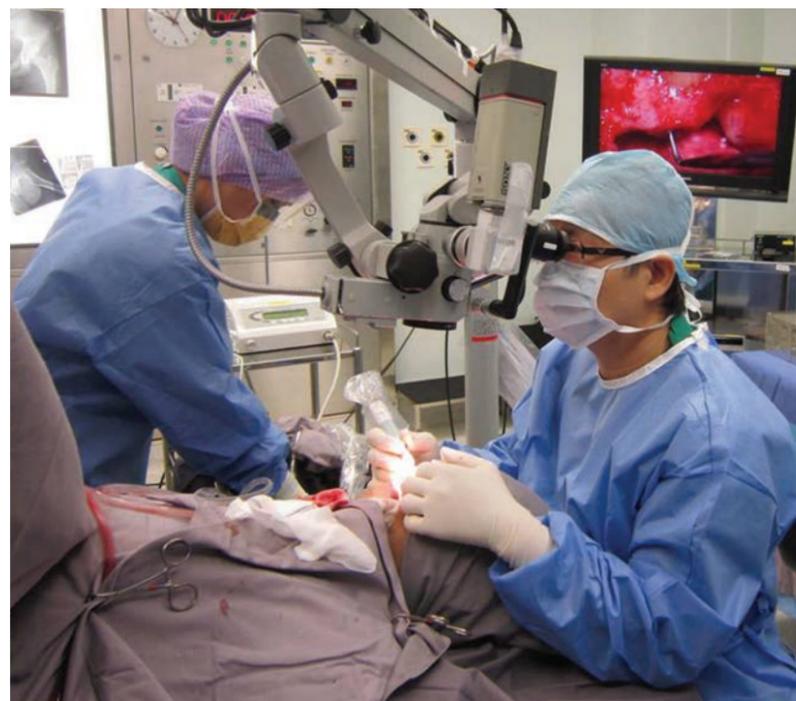
LA: Today's apical surgery is more correctly termed endodontic microsurgery. Other than apicoectomies, endodontic microsurgery in our current day and age may also incorporate guided tissue regeneration procedures where collagen membranes are placed in cases with complete buccal bone dehiscences. Other types of surgery being done by endodontists today also include intentional replantation, autotransplants, reconstruction of lost tissue of a perforated tooth, trephination, and cervical root resorption elimination. This empowers the endodontist with more ways of treating a larger variety of clinical diseases.

Are there any special equipment and advancements in the field of endodontics which are required for endodontic surgical procedures?

LA: Endodontic microsurgery is fundamentally different from the "apicoectomy" practised in Singapore in the 1990's. Technological innovations and new discoveries supported by research over the last 25 years or so have led to fundamental changes of these traditional techniques, materials and instruments. For example the surgical operating microscope, surgical ultrasonic tips and microsurgical mirrors, pluggers and probes have been incorporated into current apical surgery to improve the success of an apicoectomy. Research into biomaterials has also produced superior results. For example MTA has been used as a retrofilling material and is superior in terms of its biocompatibility with the surrounding tissues. Other newer materials currently being advocated are the calcium silicate based materials.

So what exactly is an apicoectomy and how is it performed today?

LA: An apicoectomy is a surgical treatment performed on the root apex of an infected tooth where the apex is resected, followed by placement of a retrograde filling to seal the root end. In the past, this surgical procedure was performed using the then traditional techniques of preparing the canal space with a round bur attached to a straight handpiece followed by amalgam as the retrofilling material.



Endodontic Microsurgery being done under general anaesthesia

The 5 essential steps in today's microsurgery apicoectomy are:

1. Create a small osteotomy over the root apex by removing the overlying bone.
2. Resect the root apex to eliminate lateral canals and other aberrations. Keep the level of the resection bevel close to 0 degrees to minimise leakage.



Root apex being resected. Note the separated file around the buccal root filled canal

3. Use the microscope and microsurgical probe to scrutinise the periapical and surrounding regions for cracks, isthmuses and other anatomical anomalies.



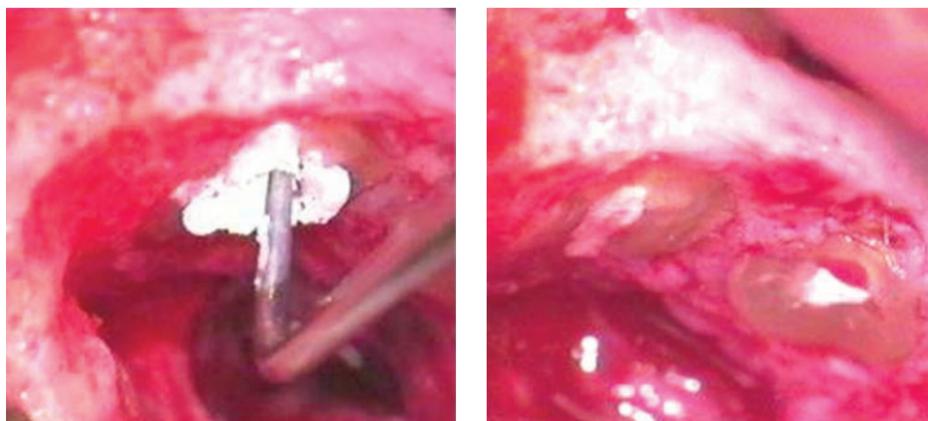
In endodontic microsurgery all isthmuses or fins in the root canal system are thoroughly treated

4. Use the microsurgical ultrasonic tips to do at least a 3mm retropreparation in the longitudinal axis of the canal space.



Advances in tip design now allow the surgeon to make retropreparations that are up to 9mm into the root canal

5. Retrofill the prepared canal with MTA, IRM or SuperEBA. Randomised controlled clinical studies have shown the same clinical effectiveness between the three cements.



Microsurgical pluggers make it easier to pack retrofilling materials into the prepared root canal as these pluggers are narrow enough to pass into the canal space

When is endodontic surgical procedures indicated or contraindicated?

LA: The general indications for endodontic microsurgery (as indicated by the American Association of Endodontists Endodontics for Excellence, Fall 2010 issue) are as follows:

1. Adequately executed endodontics but failed with a persistent periapical radiolucent lesion
2. Adequately executed endodontics with constant pain with or without swelling
3. Apical transportation, ledges and other iatrogenic problems with persistent pathology and symptoms
4. Tooth with a large post and crown restoration completed, especially maxillary anterior teeth
5. Calcified canals with or without symptoms and periapical radiolucency
6. Broken instrument in apical half of the root
7. Failed traditional surgery
8. Overfilled canal with periapical radiolucency
9. Complex/compound apical curvatures that are inaccessible from an orthograde approach.

Is there a reference as to how many times a tooth needs to be re-treated before it should be referred for surgery?

LA: Noteworthy is the fact that the success of microsurgery is closely related to the how well the previous root canal treatment was done. For example, a poorly previously carried out root canal treatment is associated with poorer prognosis of microsurgery, as most microsurgical failures are a result of persistent infections within the canals after root canal treatment.

In view of this, some endodontists may prefer to non-surgically retreat root canals prior to microsurgery if this retreatment can improve the quality of the root canal treatment or decrease the bacterial population within the root canal system without lowering the restorative prognosis. Today with the advent of titanium niobium ultrasonic tips and ad-

vances in microscope technology (like the introduction of the varioscope) endodontists now have the means to confidently remove coronal obstructions safely in order to retreat canals.

Additionally, the endodontist has to weigh the risk that non-surgical retreatment may pose by further weakening tooth structure hence causing a fracture. If it is determined that non-surgical retreatment will not significantly improve the prognosis of failed root canal treatment, microsurgery can proceed without the retreatment.

How long should periapical (PA) pathology post-orthograde root canal treatment be monitored before endodontic surgery is indicated?

LA: There are no hard and fast rules concerning how long does one monitor PA pathology post-RCT before surgery is indicated. In about 20 percent of endodontic cases with periapical lesions, nonsurgical endodontic treatment may not be successful due to the large cystic nature of the lesions, and hence microsurgery may be necessary. However, there are endodontists who do advocate that cystic lesions can heal by nonsurgical root canal treatment. This still largely remains a controversial issue.

According to the European Society of Endodontology (ESE) Quality Guidelines (2006), based on radiographs taken 1 year post-treatment, if a lesion has remained status quo or has only diminished in size, the outcome is considered uncertain. In this situation, it is advisable to review the lesion for a minimum period of 4 years and assess the lesion further for resolution. Should the lesion persist after 4 years, the root canal treatment is usually considered to be associated with post-treatment disease. In this situation the ESE recommends that the tooth require further treatment. The exception to this is in the event that the defect is deemed as being scar tissue formation instead of persistent apical periodontitis.

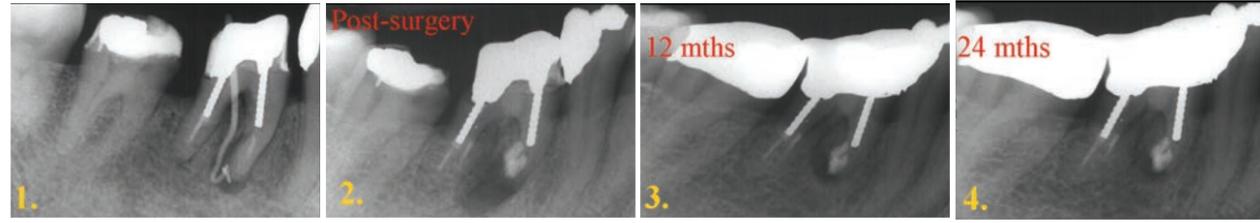
This guidance statement however, is controversial. Some endodontists are of the opinion that a PA lesion that has diminished in size only and stayed the same after 4 years is considered “incomplete healing”. However, since these incompletely healed PA lesions have been clinically asymptomatic after 4 years, they may not need further treatment and can be monitored periodically. In these cases, they may advocate further treatment only if the PA lesion enlarges or if there are symptoms or clinical manifestations of disease.



Endodontic microsurgery was done in the mesial root. Note the isthmus between the MB and ML canals was retroprepared as well

If the surgery is successful, how long does it usually take to determine evidence of periapical healing?

LA: Typically endodontists will recall the patient up to at least 1 year after microsurgery to get a reliable measure on the amount of periapical healing. The success rates of endodontic microsurgery with a recall period of at least 1 year is over 90%. This success rate is high



Endodontic microsurgery was done in the calcified ML and MB canals of tooth #46. Note the MB canal was totally calcified.

What are some of the potential post-surgical complications that can arise from endodontic surgical procedures that patients need to be counselled about?

1. Perforation or nicking of the greater palatine artery during palatal microsurgery of the molars resulting in haemorrhage.
2. Perforation or nicking of the Schneiderian membrane (maxillary sinus) during microsurgery of the maxillary posterior teeth, resulting in an oro-antral communication.
3. During a transplant or an intentional replantation using a microsurgical approach the tooth being treated may be inadvertently cracked or fractured during the procedure.
4. Damage or mechanical agitation of the inferior alveolar nerve, mental nerve or lingual nerve during microsurgery on the mandibular posterior teeth resulting in paraesthesia, dysaesthesia and in some rare cases, dysgeusia.
5. Inadvertent devitalization of the neighbouring teeth immediately next to the tooth having microsurgery.
6. Gingival recession or loss of the interdental papilla after microsurgery, thereby making the crowns of the teeth look longer.
7. Scarring, bruising, post-surgical bleeding, swelling, pain and increased mobility of the treated tooth.

References for further reading:

Results of endodontic retreatment: a randomized clinical study comparing surgical and nonsurgical procedures. Kvist T, Reit C. J Endod. 1999; 25: 814-7.

Risk score algorithm for treatment of persistent apical periodontitis. Yu et al. J Dent Res. 2014; 93: 1076-82).

Strategic considerations in treatment planning: deciding when to treat, extract, or replace a questionable tooth. Zitzmann et al. J Prosthet Dent. 2010; 104: 80-91.

Restoration of the root canal treated tooth. Eliyas et al. Br Dent J. 2015; 218: 53-62.

The mysterious appearance of enterococci in filled root canals. Zehnder M, Guggenheim B. Int Endod J. 2009; 42: 277-87.



Dr. Leslie Ang was a Senior Consultant at the National Dental Centre, and formerly a Senior Clinical Lecturer at NUS. He is on the Scientific Advisory Board of the Journal of Endodontics and Specialist Member of American Association of Endodontists. He is also the International Editor for the Italian Journal of Endodontics, Editorial Board Member of the Journal of Dentistry, and Reviewer for Annals, Academy of Medicine Singapore.

Currently Leslie is in private practice at Twin City Endodontics Pte Ltd.

Agenda

Time Topic Speakers

08h30	Registration	
09h00	Welcome	
	Symposium I - Diabetes and its Complications Moderator: A/P Thai Ah Chuan	
09h10	The Epidemiology of Diabetes and its Complications	A/P Tai E Shyong
09h40	Mechanisms of Diabetic Complications: Role of Insulin Resistance and Hyperglycemia	Prof King George L.
10h10	Optimizing Treatment to Prevent Complications	A/P Lim Su Chi
10h40	Coffee Break	
	Symposium II - Diabetes and Oral Health Moderator: Dr Goh Bee Tin	
11h00	Current Understanding of Association Between Periodontal Disease and Diabetes Mellitus	Prof Genco Robert J.
11h30	Diabetes and Periodontal Disease: The Impact on Oral Health Care	A/P Lim Lum Peng
12h00	Impact of Oxidative Stress on Susceptibility of Type 2 Diabetic Patients to Bacterial Infections	Dr Tan Kai Soo
12h30	Navigating the Therapeutic Options for Managing Type 2 Diabetes Mellitus	Dr Doddabele Srinivasa Deepak
	Symposium III - Patient's Role in Diabetic Control Moderator: Prof Karl Tryggvason	
14h00	Diabetes in Asian American	Dr Hsu William C.
14h30	Mobile Phone Health Applications for Diabetes Management	Dr Bee Yong Mong
15h00	Behavioral Economics in Diabetes Management: Activating and Engaging Patients for Better Outcomes	A/P Yoong Su-Yin, Joanne
15h30	Diet in the Management of Diabetes: Opportunities and Challenges	Prof Christiani Jeyakumar Henry
16h00	Closing Remarks	

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The Matter of Informed Consent

In this issue of our Practice Management series, The *Dental Surgeon* revisits the tenets of one of the most fundamental processes of clinical patient management.

BY DR. ASHA KARUNAKARAN

Much of dentistry is elective

Patients expect more from an elective procedure than from an emergency procedure. The dentist has the important role to help the patient elect to do a procedure based on information that is right and relevant for them.

What is informed consent?

Informed consent is a process whereby a patient voluntarily agrees to proposed treatment after a discussion of advantages, disadvantages, risks, and alternatives.

The informed consent discussion

The purpose of informed consent is to ensure that the patient has a full understanding of proposed treatment and can make a relevant health-care decision based on the information provided by the health-care professional.

The informed consent discussion represents the first step in managing the patient's expectations for treatment outcomes and reducing the possibility of a misunderstanding.

Patients are less likely to file a lawsuit if they are fully informed about risks and possible outcomes

There are several components of the informed consent discussion. They are:

1. The nature of the proposed treatment, including necessity, prognosis, time element, and cost.
2. Viable alternatives to the proposed treatment, including what a specialist might offer or the choice of no treatment.
3. What are the foreseeable risks, including things likely to occur and risks of no treatment.

When obtaining informed consent, the dental professional should:

1. Use language that is easily understandable.
2. Provide opportunities for patient questions, such as "What more would you like to know?" or "What are your concerns?"

3. Assess patient understanding by stating, "If I have not explained the proposed dentistry clearly or if you have difficulty understanding, please tell me so we can discuss anything you do not understand."

When should Consent be obtained?

In non-emergency cases the emphasis should be on ensuring that a patient has sufficient knowledge, in advance of treatment, of:

- The purpose
- The nature of the treatment (what it involves)
- The likely effects and consequences
- Risks, limitations and possible side effects
- Alternatives and how they compare
- Costs

When receiving treatment under general anaesthesia or sedation, it is undesirable for the consent process to be carried out immediately prior to the administration of the anaesthesia or sedation, because patients are likely to be preoccupied with or anxious about what lies ahead. Ideally, the consent process should take place at a prior visit, giving the patient time to reflect upon the information provided, and to raise any further questions when they arrive for the procedure to be carried out.

Consent is more than a signature on a form

Many dentists hold the firm, but mistaken, belief that they have secured proper consent to dental treatment by obtaining the patient's signature on a consent form. The fact that a patient has signed a form does not mean that the treatment proposed has been understood or accepted.

The quality of consent can never be determined solely by a signature on a paper.

More important than a signature on a consent form is a properly documented patient's record, which show clearly that all the necessary pre-treatment steps have been taken, including explanations and agreements.

Consultation and Consent

Consent is essentially a process of communication, of a transfer of knowledge and understanding from dentist to patient.

When the patient first presents to the dentist with a problem for a consultation, the consultation process would include the education of the patient of the nature of the problem as well the treatment options – the procedures, costs, and risks.

Hence, if the consultation process is carried out well – and documented – the process of consent would be shorter, comprising largely a summary of the discussion made earlier and ensuring the patient has understood what was conveyed.

It has been argued that "taking consent" is a tedious, repetitive process – and the time spent on it cannot be charged. Dentists holding this view may naturally assign "consent taking" to a non-clinical staff member, or make it a mechanical procedure of getting a signature on a form.

However, much of the communication that is involved ensuring informed consent can be done during consultation. And consultation and patient education is a professional service for which fees are charged. Dentists should not allow themselves to fall prey to the patient expectation of a "free consultation".

Dental Protection stresses that consent forms serve only to confirm some of the details of the information provided; they tell us little or nothing about the communication process, the questions asked, the replies given and the level of understanding achieved by the time the 'consent' was eventually given.

This is why a detailed contemporaneous record often will be far preferable to a signed consent form alone.

For more information, download the *Dental Advice booklet* on "Consent" from the DPL website. 

Dr. Asha Karunakaran is a long-time volunteer of the SDA currently serving as Chair of the Ethics & Practice Management Committee. She is a general dentist in her own practice in Novena Medical Center.



The Narrow Road of Service

BY DR. TERRY TEO

Many of us know Dr. George Soh Yi-Wei as a frank and outspoken orthodontist who takes a keen interest in matters concerning our dental community. What some may not know is that Dr. Soh set up and operated a free dental clinic at The Home for the Aged 30 years ago, and currently serves as Chair of the Board of Visitors for the Ministry of Social and Family Development (MSF), responsible for conducting checks on welfare and old-age homes. For his tireless efforts in philanthropy, Dr. Soh was awarded the Outstanding Volunteer Award by the MSF in 2014.



of service to many governmental organizations.

Can you elaborate on your role in the various sub-committees of the Council? Many of us only have a vague and nebulous idea about Council Members duties, so it would be great to gain some insight into this.

There are several working committees comprising of SDC members, members of the dental profession, as well as laypersons. Their tasks range from evaluation of credentials for registration, courses and continuing education, to regulating the

professional conduct of registrants. Basically, all the committees work together to enforce the Dental Act.

Every SDC member needs to serve on the Complaints Committee. In addition, I was appointed to the Audit Committee as I have a penchant for facts and figures, and an obsession with fiscal effectiveness and efficiency.

I have also volunteered for the Review Dental Registration Act Committee which will evaluate and recommend amendments to the Act. The Act needs to keep abreast of developments within the dental profession arising from changes to our societal operating environment.

With regards to such changes in the operating environment, we are not only seeing an expanding population but also a subsequent increase in the number of dental professionals both local and foreign in Singapore. What are some of the challenges this may present going into the next term, and how do you prepare for this?

The SDC is responsible for the registration and regulation of dentists and oral health therapists in Singapore, in line with the Dental Act. SDC is assisting the Ministry of Health in determining the optimum number of dental

professionals in Singapore. Availability of empirical data on utilization of dental services from ongoing survey research will be helpful.

As you mentioned, the needs and expectations of the public have changed because of an ageing population, as well as increased attention towards those with special needs as a reflection of our maturing civil society. The direction of training and education of dental professionals may need to take into account these needs.

The number of foreign applicants, as well as the circle of dental schools they graduated from, has increased. Training received and clinical exposure may consequently vary to a greater extent. Being foreigners, these graduates also bring along with them different ideals, values, hopes and aspirations.

One of SDC's tasks is to evaluate the adequacy of those programs to ascertain the competency of foreign registrants, and to issue the appropriate type of practice certificates. This is to ensure that safety and standard of care is maintained. Going forward, the requirement for all foreign dental graduates to take a qualifying examination of equivalent standard to our local graduates will offer a more transparent platform which is also easier to implement and administer.

Exposure to social media and liberalization of marketing by dental professionals have resulted in dental professionals testing the sanctity of professional ethics by misrepresenting themselves to the public, and by making conflated claims about their abilities. I do not condone any form of misrepresentation concerning such professional conduct and ethics.

You have been involved for decades with volunteer work for the elderly, even setting up a dental clinic in an elderly home. How did this come about, and how you would like to see the spirit perpetuated in our professional community.

I saw the need for dental care of the aged and the desti-

tute in the former Woodlands Home for the Aged. In 1986, I surveyed their dental needs and rallied support from the government as well as the private sector to set up a fully-equipped dental unit. I was not alone because Fred Schnetzer, formerly from Siemens Singapore, organized a free dental unit to be installed. Many members of the Singapore Dental Association came forward to provide services, to which I am most grateful.

Together, we detected several cases of early-stage oral carcinomas, besides preventing many episodes of pain and sepsis. More importantly, the setting up of that dental unit identified the dental needs of institutionalized individuals, resulting in numerous welfare homes setting up dental units of their own.

Subsequently, the government invited me to serve on the management committees of welfare homes and later, on the Board of Visitors. I am thankful for all the opportunities I have been given to serve the underprivileged and those in need. As professionals, we have the ability and the means to serve the community, and to give back to society, especially those who may be forgotten or left behind. I appeal to my professional colleagues to "Do What We Can and Give What We Can Afford".

You established the George Y. Soh Scholarship for an outstanding Final Year dental student at NUS FOD as a means of nurturing the next generation of dental leaders. Why is this important to you?

I see the potential of NUS FOD to be the best in the region and, perhaps, in the world. To be the best requires a lot of effort and financial support. The government cannot and should not be the one to do it alone. Most of the world's great schools have lifelong commitment and support from their alumni. I am just doing my part, as an alumnus, by supporting one talented individual annually. I hope for my little contribution to soon have a multiplier effect where each recipient, in turn, supports one or more persons in our fraternity. 

Dr. George Soh graduated from dental school at the University of Singapore and did his graduate orthodontic training in Orthodontics at Baylor College of Dentistry, Texas.

Dr. Soh is a Diplomate of the American Board of Orthodontics and he limits his private practice to orthodontics. He has served in the leadership of national and international professional organizations. He has delivered more than 160 presentations and seminars in international meetings, and published more than 120 journal articles and abstracts. For the past 30 years, he is a volunteer worker in welfare homes for the aged and the destitute.

World Heart Day Screening

BY DR. VICTOR LEE



It gives me a tremendous sense of pride and joy when I see young dentists and dental students working together to promote welfare and community dentistry!

The Singapore Dental Health Foundation (SDHF) took part in the recent World Heart Day health-fair organised by the Singapore Heart Foundation at the open field next to Chua Chu Kang MRT Station. It was a warm and hazy day, but spirits were high as we examined the mouths of more than 200 men, women and children. They came from all walks of life, and just kept streaming in from 9am to 4pm.

The main objective of the SDHF is to promote dental health to the public. Through the screening, we have identified the dental needs and demands of a section of our population. By taking part in this health-fair, we showed that dentistry is an important part of overall health. By working with the Heart foundation, we showed that we are part of the health team that works together to contribute to the wellbeing of our people. And by volunteering our time and efforts, we showed compassion to the less well-off in our society, proving that dentistry goes beyond just dollars and cents.

We are grateful to all the volunteer dentists, dental assistants, recep-

tionists and dental students who sacrificed a large part of their time to be with us.

Special thanks to our volunteer Drs. Yong Chee Weng, Cheryl Lee, Richard Loy, Kimberly Yip, Mabel Chan, Ng Wee Hsuan, Shirley Lau and Chua Yoke Kwan, for giving of themselves wholeheartedly. And not forgetting our very enthusiastic dental students Sriya Verkat, Abigail Koh, Mabel Chek, Isabella Lee, Lee Su Lynn, David Chng, Low Xin Ting and Tan Hui Peng. We are also indebted to the dental supplier GSK Sensodyne, who generously donated the equipment and the oral hygiene products.



Dr. Victor Lee is a private practitioner at Lee and Ong Dental Surgeons. He has been an active volunteer in SDHF for years.

A Very Special Day

WORDS BY DR. FAISAL BIN ABDUL AZIZ AND ILLUSTRATION BY DR. SABRINA ONG



The team of volunteering dentists

The Tzu Chi International Medical Association (TIMA) organises a dental treatment day for the beneficiaries of the Movement for the Intellectually Disabled Singapore (MINDS) annually. This year's event was held on Sunday 11th of October 2015 at the Tzu Chi Free Clinic located in Redhill. A total of 82 volunteers from TIMA, Tzu Chi Foundation (Singapore), and 15 dentists spent a Sunday afternoon providing free dental treatment such as scaling and polishing, simple restorative work and oral hygiene instruction to 23 MINDS beneficiaries age 20 - 50 years old.

The volunteers led by Sister Jennifer Ee and Dr. Eugene Tang Kok Weng were involved in various roles to ensure the smooth running of the event, which included responsibilities such as logistics and also food preparation. The team of dentists were led by Dr. Terry Teo, a paediatric dentist.

On a bright Sunday morning, it was heartening to see a large group of volunteers sacrificing their weekend for a common purpose, which was to provide dental care to the less fortunate. When the beneficiaries and their caregivers arrived, we were armed with animal hats and warm smiles,



Dr. Faisal treating a MINDS beneficiary with the help of dedicated volunteers



Alex the Lion offering reassurance



Magic show to entertain the beneficiaries in the waiting area

as we lined up outside the clinic and sang a welcome song. Being able to volunteer and serve the needy is a privilege, and I felt that this simple act of welcome was a way for us to thank them for providing us with the opportunity to serve.

The beneficiaries comprised mainly of patients with Autistic Spectrum Disorder (ADD), Global Development Delay (GDD) and Trisomy 21 (Down's). Terry who also volunteers regularly at The Rainbow Centre, provided us with useful tips on how to manage such patients with special needs. For instance, patients with autism are often unable to decipher the emotions of others, and the best way to communicate is to be direct and clear with instructions, even curt. Trisomy 21 patients, on the other hand, may require constant words of assurance and tender loving care to get their cooperation.

I began by treating the first patient, a woman with severe autism. This was my first time being involved in dental volunteering, and also my first time treating a severely autistic patient. Initially, it was challenging to persuade her to even enter the operator. It was a new environment for her, and she was fearful. However, together with her caregiver and volunteers a group of dedicated volunteers, we managed to coax her into the dental chair.

With protective stabilization from the team of volunteers I managed to undertake a quick intraoral examination where I noticed two carious lesions on her lower central incisors. I then proceeded to do a quick scaling, following which I had to restore her carious central incisors under local anaesthesia. It was admittedly a challenging environment to work in, with a lot of noise and movement all around. I had to be quick. With the final polishing of the restorations completed and perspiration beading down my forehead I was finally done. She immediately bounced out of the chair and just before she darted for the door, she turned to look at me and gave me a smile and a wave, in a gesture of appreciation. It made my day, and I felt the hard work that all of us had put in together had paid off.

Throughout the course of the day, we took turns being operator, assistant and encourager. With only two chairs available it was fast-paced, with a quick turnover rate, but I could feel the energy and enthusiasm emanating from all the volunteers. While all of this was happening in the clinic, our patients in the waiting room were being entertained by the mascots, Alex the Lion and Minion. Magician Billy Bonkers then took to the stage to wow the audience with his illusions. Following the magic show, the volunteers then played games such as bowling with the patients. The programme was therefore designed to not only address their

TIPS FOR MANAGING SPECIAL NEEDS PATIENTS

(by Dr Sabrina Ong)

BE PATIENT & KIND

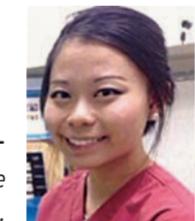
dental needs, but to also create a positive environment to minimize fear and anxiety.

As a first-timer volunteering for such an exercise, I was moved by the dedication and effort that all the volunteers put in, and the sheer amount of planning involved. All 82 of us worked together, united by a common purpose which was to serve. Not only did we address these patients' dental needs, we also ensured that they had a special and enjoyable time. At the end, the beneficiaries presented us with handmade cards to show their appreciation before leaving. It was at this moment that I felt great satisfaction in knowing that I made a positive impact on someone who normally would not have access to the care which he or she may need.

Terry mentioned earlier during his briefing that "the work will be tough but it will be worth it", and I could not agree more. I wish that all the needy in Singapore could experience what the beneficiaries experienced that day, and I am certainly looking forward to participating in more dental volunteering work in the future.



Dr. Faisal Bin Abdul Aziz graduated from King's College London in 2014 and is a dental officer currently under MOH Holdings, practising at the National Dental Centre Singapore. Besides dentistry, Faisal enjoys music and spends his free time volunteering at different organisations. Faisal has a strong interest in public health and hopes to one day be able to reduce dental inequalities in Singapore.



Dr. Sabrina Ong, a Queensland graduate, is practicing at Dental Werks. She would love to contribute her artistic talents to future issues of **The Dental Surgeon**.

How to Train Your (dragon) Boss

WORDS AND ILLUSTRATION BY DR. TAN WEE KIAT

I don't know how I ended up as the author of the first opinion piece in *The Dental Surgeon*. Maybe it's my big mouth for mooring this column, or maybe it's my good relationship with the editor. But whatever the reason, the horse has bolted the stables, and I am committed.

In my many years of public service, I have been led by many bosses, some of whom I have had the good fortune to outlive. I must say there is not a single one I did not learn anything from. In fact the type of boss I am today is an amalgamation of the lessons I learnt from all of them. So I have tried to model the good habits of good bosses, and avoid the negative examples of the bad.

As a "subordinate" it is easy to complain about your boss, but now that the shoe is on the other foot, I am less critical and more forgiving of their failings. Even if you are self-employed, the customer or patient is your boss. And since we will always have bosses, I told the editor (of whom I was once boss) that I would share my few cardinal rules on how to manage them, but now that he is my boss, can he be generous on the deadline and easy on the editing?

Be kind to people on your way up

As you climb the corporate ladder, you never know if your subordinate could one day end up your boss. The bigger the corporation, the easier it is to be kind or at least neutral, because the chances of interacting with all and sundry is small and correspondingly, so the chance of friction. Being kind is progressively easier as you age and mellow, because you will need all your energy to sustain your vital functions and so you can "let it go". In my experience it is the people at the bottom of the hierarchy who have been the greatest help in my work life: the health attendant who



buys my lunch not out of duty, but because she likes me, the security guard who lets me park in the boss's lot and escorts me to my office when I forget my keys, the maintenance guys who help me hang the decorations in my surgery and the boss's secretary whom I have commandeered as mine. These people are the lubricant to my day.

Your boss is human too

Bosses are constantly under stress. They too have targets and often these are echoed in yours. The more vertical your corporate

structure and chain of reporting the further away you will be from the Head Honcho, so smart corporations flatten their corporate structure to no more than three levels. As you climb up the corporate ladder, the more dealings you will have with him or her. Where possible, give them positive strokes if they do something right. A sincere "thank you" goes a long way and increases the likelihood that the behaviour will be repeated. So if they give you a generous bonus, you know what to do.

Heavy is the head that wears the crown

For goodness sake, where in dentistry does it teach you bossing skills? Most bosses are plucked from our peers and then sent on business school short courses and quickies from management gurus. Be patient with them. Everyone has a learning curve. Sometimes the boss may make what seems to you the most stupid decision. Remember bosses have access to information you do not have, and had you been privy to this information, you may have made the same decision. Therefore it takes a lot of trust to "align" and follow the boss. I have always found this to be extremely difficult, not being a lemming by nature or breeding. Thus some people may find this to be easier than others.

Never bite the hand that feeds you

Though people can be disloyal, they will be the first to balk at disloyalty. People who complain on social media about their bosses and corporation make themselves unemployable. You demonstrate that if you can do it to your company, you can do that to any other company you work for. By the law of equal suffering, griping to fellow sufferers within the workplace is allowable; griping to parents is your prerogative but other than that it is not kosher. You owe your company and boss some loyalty, and if you are so unhappy, does it not show you are silly to still hang around? As Cassius said, "the fault, dear Brutus, is not in our stars, but in ourselves that we are underlings."

Make your boss look good

You may be smarter, better looking and have wittier comebacks, but keep those for the light hearted moments with your boss. When in a crowd, do not show boss up. The rule of do unto others prevails. Give boss some credit if you achieve success at work. It is much better to say "thank you for allowing me to do this, I won first prize," than "yay, I won first prize!". The latter makes you a braggart, the former makes you gracious.

Our training does not make us good bosses

For goodness sake, where in dentistry does it teach you bossing skills? Most bosses are plucked from our peers and then sent on business school short courses and quickies from management gurus. Be patient with them. Everyone has a learning curve.

Train your boss to get the best out of you

In the Dreamworks animation "How To Train Your Dragon" a young Viking rescues a wounded dragon. All his life he was taught dragons are evil and powerful. He finds this to be untrue as he trains and befriends this dragon, who in the end saves his life. This story exemplifies that:

1. Bosses are powerful but not necessarily evil. In fact

some have good intentions, although they may have strange ways of showing it.

2. You have to train your boss to get the best out of you. Bosses have different management styles. Some are micro managers whereas others just delegate. If you hate people breathing down your neck and telling you what to do, then tell your boss you will deliver the outcomes he wants, but leave you to hack the path yourself. Of course this means you must actually deliver. If you are this sort of worker, then you need to keep your boss posted on your progress. Having chosen this path you may find your "parang" may not quite clear the obstacles you encounter, and you may need boss to use his bull dozer. By all means ask your boss for help. This is not an admission of failure, but a sign of smarts.

Step up to the plate

Employees complain when non-clinical duties are doled out to them calling it "sai kang". You can hardly blame boss if you do not step up to the plate and say "I can do this job," and choose whatever appeals to you. Of course there are occasions I have regretted these moments of pro-activeness, but my logic is if you know work is going to be parcelled out you might as well choose the one you are most suited for. And if none exists, then design one that does.

Believe nothing and trust no one

There is no reason to hold true what I say. There is no randomised controlled trial, no sample pool to prove my theories, but we deal with human relationships and such things cannot be substantiated with hard science. If you have enjoyed this article, send a note to the editor; if you take issue you are also free to do so. Thus we have entered a new era of open discourse and we have upped the ante of *The Dental Surgeon*. That is good enough for me.

This article is dedicated to the late Mr. Chan Yee Wing, Chief Dental Officer of Singapore, and my good friend who taught me many things and whose wisdom is reflected here.

Dr. Tan Wee Kiat is Senior Consultant of Paediatric Dentistry at NDCS, where she is Head of Unit and will shortly step down in 2016.

Known for her unique lecturing style, she is a popular speaker in the local circuit and you will hear her at the upcoming IDEM 2016. Dr. Tan is multi-talented as artist, writer, drummer and hopes to form a rock band. Interested parties can contact her to audition.



Sugar Exposed

BY **DR. SURINDER POONIAN**

That sweet taste of sugar - so good! A delicious dessert, a sweet kopi or fruit juice. Sugar seems to be everywhere and is in most of the foods and drinks we consume on a daily basis.

According to the Health Promotion Board (HPB) if you've drunk a 250ml fruit juice today, it is 4 teaspoons of sugar that will take 13 minutes of jogging to burn off. If you drink a single canned soft drink every day in the week, it amounts to 49 teaspoons of sugar and equates to 2 hours of jogging. The average Singaporean consumes around 11 teaspoons of sugar a day - that's a 28-minute jog to burn off!¹

The HPB launched a campaign earlier this year named 'Life's Sweeter with Less Sugar' to raise awareness island wide about the importance of reducing sugar in our diets. Dr. Robert Lustig, a paediatric endocrinologist from the University of California, elaborates in his infamous lecture, 'Sugar - The bitter truth' about the detrimental health effects of ingesting sugar.²

Other than being cariogenic, it seems as though many of us have no idea how the 'white stuff' actually affects our bodies. As it is in most processed foods (sometimes in hidden form), we may not be consciously aware that we are actually eating or drinking it. While you may strive to avoid chocolate and cakes, hidden sugars in tomato sauce, fat-free or low fat dressings and bread may be unknowingly affecting your body. You may find it surprising to hear that a 330ml can of 'Coca-Cola' contains 35grams of sugar (9 teaspoons), which is double the World Health Organization's recommended daily intake.³



What is sugar?

A sugar is a carbohydrate that is soluble in water. Monosaccharides are 'single' unit sugars or simple sugars (glucose and fructose) and disaccharides consist of molecules where two monosaccharides are joined together (sucrose).

There are two types of sugar in our diets. Naturally occurring sugars are found naturally in foods such as fruit (fructose) and milk (lactose). Added

sugars include any sugars or sweeteners added to foods or beverages during processing or preparation. These may also include natural sugars such as white sugar, brown sugar or honey.⁴

The Oxford dictionary defines sugar as: 'A sweet crystalline substance obtained from various plants, especially sugar cane and sugar beet, consisting essentially of sucrose, and used as a sweetener in food and drink.'⁵

Sugar in this form goes through a lengthy processing or refining system. Starting out as raw sugar cane or beet, it is collected, shredded and squeezed to extract the natural juice, which is then boiled until it thickens. The mixture is next sent to a rapidly spinning centrifuge to remove molasses and leave pure naturally white sugar crystals. The sugar crystals are finally dried resulting in refined sugar.

The bottom line is that sugar is sugar no matter what the form. White sugar is essentially pure sucrose (a disaccharide made up of glucose and fructose) and is used as table sugar, caster sugar, icing sugar, sugar cubes and condensed milk. Brown sugars and syrups also come in many different forms.

Is sugar addictive? Yes. The cycle of addiction goes like this:

1. **You eat sugar** - you like it and crave it.
2. **Blood sugar levels spike** - dopamine is released in the brain and mass insulin is secreted to reduce insulin levels.
3. **Blood sugar levels fall rapidly** - high insulin levels cause immediate fat storage and the body craves another sugar 'high'.
4. **Cravings and hunger** - low blood sugar levels increase appetite and sugar cravings.

The cycle starts again. As sugar causes a large release of dopamine in the brain, it can cause addiction in many people.²

How does sugar affect my body?

As mentioned, sucrose is made up of glucose and fructose. The body produces glucose and there is a physiological

need for it. However, this is not the case for fructose; there is no need for it in the body. Sugar is metabolized in the liver. Glucose is utilized by the body and is usually 'burned up' immediately after consumption whereas fructose if not used is converted to fat in the liver and is stored in our bodies. This process leads us to understanding how sugar can have harmful effects on metabolism and contribute to all sorts of diseases. Here are just a few:

How much sugar should I be eating?

We seem to be eating more low-fat food than ever before, are exercising more but are still putting on weight. 'Low fat' basically means 'high sugar'. When fat is reduced, the taste is reduced so manufacturers add more sugar to provide flavour. There has been a huge increase in the average person's sugar consumption over the last 30 years.

Effect of sugar	The details
Sugar does not make you feel full and contributes to obesity.	The way sugar affects hormones and the brain is a recipe for fat gain. Sugar can lead to leptin resistance. Leptin is a hormone that tells you when you've had enough food. We often ignore this brain signal and for some people, leptin does not work. This leaves you with no signal that you have eaten enough (satiety) and leads to over consumption of food and consequently, obesity. Foods rich in fibre, fat and protein all have been associated with increased fullness. Sugar will give you the calories, but not the feeling that you've had enough. Many studies have examined the link between sugar consumption and obesity and found a strong statistical association. ⁶
Sugar can cause insulin resistance leading to metabolic disorders and diabetes.	Insulin is a very important hormone in the body. It allows glucose (blood sugar) to enter cells from the bloodstream and tells the cells to start burning glucose instead of fat. Having too much glucose in the blood can lead to the cells becoming insulin resistant. This is a driver of many diseases including metabolic issues, obesity, cardio-vascular disease and in particular type II diabetes. ⁷
Sugar causes inflammation.	When insulin levels 'spike', there is a burst of inflammation through the body, which produces enzymes that break down collagen and elastin, resulting in wrinkles. Thus, the pro-inflammatory nature of sugar exacerbates pimples and acne. ⁸
Sugar is cariogenic.	This is something we are well aware of.
Sugar can damage your heart.	The molecule glucose metabolite glucose 6-phosphate (G6P) found in sugar and starches can change the muscle protein of the heart and affect the pumping mechanism of the heart. These changes could eventually lead to heart failure. ⁷

¹ www.hpb.gov.sg/HOPPortal/programmes-article/HPB065606 'Life is sweeter with less sugar' Health Promotion Board, Singapore, 2015

² 'Sugar: The Bitter Truth' University of California Television, Robert Lustig, 2011, 'The skinny on obesity' University of California Television, Robert Lustig, 2012

³ www.who.int/mediacentre/news/releases/2015/sugar-guideline/en/ WHO calls on countries to reduce sugar intake in adults and children, World Health Association, March 2015

⁴ www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/Sugar 'Sugar 101' American Heart Association, June 2015

⁵ www.oxforddictionaries.com/definition/english/sugar Oxford University Press 2015

⁶ Bray et al, Consumption of high fructose corn syrup may play a role in the epidemic of obesity Am J Clin Nutr April 2004 vol. 79(4) 537-543

⁷ Grundy S The American Journal of Cardiology Vol.83(9):25-29 Hypertriglyceridemia, insulin resistance and metabolic diseases May 1999

⁸ The American Journal of Clinical Nutrition 'Low to moderate sugar-sweetened beverage consumption impairs glucose and lipid metabolism and promotes inflammation in healthy young men: a randomized controlled trial vol 94 no.2 479-485

The American Heart Association recommends no more than 6 teaspoons (24grams) for women, 9 teaspoons (36grams) for men and 3 teaspoons (12grams) for children.⁴ The World Health Organization now recommends that a maximum of 10% of total energy intake is from free sugars (glucose, fructose and sucrose) and has set 5% intake (25grams) as a 'target'. Although fruit is also high in sugar, its fibre content makes it more nutritious and simple sugars from milk (in the form of lactose) do not display the same negative health effects as refined sugar.³

Glycemic Index

This index is carried out on foods relating to their impact on our blood glucose levels. The ranking is from 0 to 100 according to the extent that they raise blood glucose levels after eating. If there is a higher raise in blood glucose, insulin is also produced more quickly in the body. Over time if this leads to increased tolerance by the cells, resulting in insulin resistance. White table sugar has a GI index of 80.⁹

Alternative	What is it?
Stevia	Stevia is a natural sweetener made from the leaves of the stevia plant (<i>Stevia rebaudiana Bertoni</i>), which is native to Paraguay, and mostly grown there and in Brazil. It has zero calories and GI, but is 250-300 times sweeter than sugar.
Fruit	Fruits are naturally sweet and can be a great substitute for sugar - to eat or to cook with. For example, dates are rich in vitamins, mineral and fibre, and have a GI of 42.
Raw Honey	Honey is a naturally sweet liquid made from the nectar of flowers and collected by honeybees. It comprises 80% natural sugars, 18% water and 2% minerals, vitamins, pollen and protein. Honey has antibacterial properties and a GI of 35-58 depending on the source.
Coconut palm sugar	Made from coconut sap (the sugary circulating fluid of the coconut palm). It has a GI score of 50 and is also high in iron, zinc, calcium and potassium. It is a slow energy releasing properties, which sustains the body through your daily activities without regular sugar "highs" and "lows" and can be a desirable sugar substitute.

Alternatives to refined sugar

There are a reasonable number of non-processed natural substitutes that are available on the market at present.¹⁰

Keen to find out more?

These alternatives can be sourced either at most health food stores, the 'organic' section at Cold Storage or NTUC Finest, or online (www.iherb.com). There are many sources out that give further information on the health implications of sugar. See the references section and check out Robert Lustig's 'You Tube' clip for more information. You may wish to scroll through the tasty recipe ideas on this great website, www.naturalkitchensadventures.com. Our health is in our hands. 

³ www.who.int/mediacentre/news/releases/2015/sugar-guideline/en/ WHO calls on countries to reduce sugar intake in adults and children, World Health Association, March 2015

⁴ www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/Sugar/Sugar_101_American_Heart_Association, June 2015

⁹ www.glycemicindex.com Glycemic Index, accessed Sept. 2015

¹⁰ www.health.harvard.edu/healthyeating/glycemic_index_and_glycemic_load_for_100_foods Harvard Health



Dr. Surinder Poonian is a general dental practitioner in Singapore taking a holistic view on healthcare. In her spare time she enjoys travelling, outdoor activities, karate and has a keen interest in general well being. Surinder has also been involved with various volunteering projects including dental mission trips, teen retreats and public education on oral health.

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The Indomitable Travelling Gourmet™ in Liechtenstein and Germany

WORDS AND PHOTOS BY DR. MICHAEL LIM



Land-locked Liechtenstein is a principality like Monaco, surrounded by Germany, Austria and Switzerland. Marvellous hospitality, service and most excellent gourmet delights await in Parkhotel Sonnenhof high up on its mountains.

Fruehstueck (Breakfast) is a gourmet's delight here. From freshly squeezed juices, to a lovely selection of assorted cheeses, to a range of hams from around the Europe, to cereals with a wide variety of fruits, one is spoilt for choice. I however, completely adore the salmon omelette with onion brunoise. This, enjoyed at my favourite table in the far corner by the colourful stained glass window with a panoramic view of the majestic snow-capped Alps, was a perfect start to a gastronomic adventure!

Remarkable Ristorante Maree

Having made my way about Liechtenstein after breakfast, I topped the day off with a fabulous eight-course haute cuisine dinner specially prepared by Chef Hubertus Real; Hubertus is the son of Emil and Jutta



Real who own Parkhotel Sonnenhof. To dine well while watching the sun slowly set over the Swiss Alps bathing the capital Vaduz in shades of rose is something to always remember. There, outstanding food like *sous-vide* wild salmon on a ragout of mango from South America is well presented and impeccably served.

The start of my meal was a delectable white asparagus, carrot and wild garlic soup, followed by moist, flavoursome and tender veal filet surrounded by a clear consommé of fresh spring vegetables. Each brilliant course was matched with wines from Liechtenstein selected by the Italian sommelier Jacopo from Milan. I could not have asked for more.

It was a dinner most certainly to remember, a testimony to a great chef whose cuisine is extremely flavoursome, yet light and not stodgy. Ristorante Maree has one Michelin Star, but I hope Chef Hubertus gets a second Michelin Star next year. It will be well deserved! Off then to Berlin for the next leg of my trip.

Splendid Sky Kitchen

Before 1989 and the fall of the infamous Berlin Wall, "affectionately" known as *Die Mauer* (The Wall), most people wanted to flee East Germany. Not anymore. Just a short drive from the luxurious Grand Hyatt Berlin is the über-modern Andel's Hotel. Founded in what was then the totalitarian *Deutsche Demokratik Republik* or East Germany, just 3.4km from Alexanderplatz, the Andel's 60-metre high tower presides over Landsberger Allee. Certainly, on this trip, no officers of the notorious *Ministerium von Staatssicherheit*, better known as the Stasi, followed me as I made for the restaurant on the very top floor of the hotel, Sky Kitchen. An eclectic, warm and cheerful decor plus a panoramic view of Berlin provided the discerning gourmet with an amazing ambience. I was most definitely looking forward to trying the cuisine because the restaurant has been awarded one Michelin Star.

And the feast begins...

Louis Roederer Champagne served in a Stoezle flute set the stage for a fabulous meal. *Chef de Cuisine* Alexander Koppe began with his degustation menu. The soup piqued my gourmet instincts. It was presented in a crystal clear Bodum glass from Sweden usually used to serve vodka. Nothing close to mundane, it was an Asian corn soup spiked with aromatic Asian spices like cumin and cinnamon. On the side, king crab on a spicy Asian ratatouille of mixed summer vegetables brunoise. I must also mention the wonderful selection of freshly baked breads in the bread basket; *kaese brotchen* (cheese roll), salted butter and chives brioché, bacon pretzels and *roggen brot* (rye bread) which I love.

This was followed by a fish dish of tasty Lapkrait with crispy fried potatoes and chives paired with a pleasing 2014 Riesling from the Wachau region of Austria. Then a spicy and colourful chicory salad of lobster with marinated fennel. The garnish of pea sprouts, pine nuts and paprika crème completed this gourmet's delight!

With every dish, a gastronomic symphony delighted my taste buds and enticed my every bite. I crunched into a crispy spring roll filled with minced quail. It was plated with a piece of quail breast, sweet baby garden peas, chanterelle mushrooms and white asparagus. The quail meat was so tender and moist, yet it complimented perfectly the spring roll. There was also the roasted pork with a crunchy caramelised crust. The sound of the crunch filled the room with every bite I took. This was well matched with a balanced and yet flashy Pinot Noir.



Chef Alexander Koppe of Sky Kitchen and The Travelling Gourmet



Extraordinary Quail Spring Roll with Pea Shoots in Sky Kitchen Berlin



Hors d'oeuvres in Sky Kitchen Berlin

My olfactory senses were not ignored in this meal too; white and black garlic mousse with tomato rolled in Chinese cabbage brought delightfully pungent (there can be no better way to describe garlic than so) aromas up my nose.

Next up, pike fish and beef short rib with creamy caramelised cabbage mousse. The beef melted in my mouth and intense *umami* flavours were released to further pleasure my eager tastebuds. Perfectly rounded with a 2013 Leitner Burgenland Zwiiegelt.

Beetroot, orange and carrot sorbet with exotic kaffir lime leaf yoghurt in a Japanese bowl was then served with flair to cleanse my palate before dessert.

Incredibly good was the elderflower and strawberry mousse cubes with holy basil ice cream and chunks of cheesecake laced with cheesecake crème. The *piece de resistance* though, was strawberry sauce encased in a dome that exploded like a grenade in my mouth. With dessert came a splendid Sommer Donnerskirchen Gewuerztraminer Spaetlese 2013 with lively acids.

As I savoured the innovative and fabulous food, paired with great wines, my eyes feasted on the impressive skyline of Berlin. I could not help but to give my compliments to the chef in his kitchen.

“How did you like the food?” he asked.

“*Es war erlesen!*” was my reply, “super delicious”.

Chef Alexander Koppe is a talented and skilful chef. I highly recommend Sky Kitchen for an amazing gastronomic experience when you are in Berlin. This is contemporary cutting-edge German cuisine at its best!

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and

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 Andel's Hotel
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 Germany Bundes Republik Deutschland
 Tel: 0203 564 4407

Stay Healthy, Drink Wine!

The Intrepid and Inspiring Travelling Gourmet™ and International Wine Judge

Dr. Michael Lim tells you about the Elixir of the Gods.

We dental surgeons, as highly trained health-care professionals, appreciate good wines and fine food. Terry has asked me to start this new column on wine and how to appreciate them. The plain truth is that without food and water we would all be dead. They are essential to life. However, why stick to plain water when you can drink wine?

In our daily life and work we are subjected to incessant stressful stimuli: patients, CDE courses, BCLS-CPR courses, persistent sales reps, bills to pay, family and friends among others. One excellent way to cope with the stresses of our noble profession is to have some nice wine with a lovely meal, be it a gourmet meal or a simple one. For

instance, wanton noodles pairs well with a nice Riesling or Gewürztraminer (sweet whites) or Pinot Noir or Merlot (easy-to-drink reds); simple food made great. On the other end of the spectrum, foie gras marries sublime with a Ben Ryé Moscato (sweet/dessert white) of the Passito di Pantelleria region. A perfect way to relax, unwind and recharge!

Do we then need to explain why more Singaporeans are becoming wine lovers? In 2014 there was a 5% total volume growth to 11 million litres. Good movement in the right direction I say.

It has been scientifically documented by numerous studies that wines and spirits in moderation are actually good for our health. It is not often that you can have your cake



The lovely Zonin wines from Italy

and still drink it. Way back in 1995, the scientific journal of the American Heart Association “Circulation”, reported that two glasses of red wine a day may have a protective effect against coronary thrombosis and heart attacks. The beneficial substances behind these effects are naturally occurring compounds called flavonoids.

White wines are good too. Professor K. Jung of Johannes Gutenberg University in Mainz, Germany, found that drinking white German wines also protects patients from heart disease. White wine reduces the amount of the coagulant fibrinogen, and also helps to protect against the hardening of the arteries. It also has anti-oxidants that help shield the body against wear and tear. Moderate and regular wine consumption reduces a person’s heart attack risk by 60%! Did you know that wine can also prevent cancer? Yes, it is true. A polyphenolic compound called resveratrol in wine has been shown to reduce cancer risk.

Why are some wines red and some white? Grape juice from red or white grapes is colourless. Reds are made with the juice in contact with the skins of the red grapes thereby giving the characteristic colour; white wines however are white because they are fermented from the grape juice alone. This explains why though Champagnes are made from two illustrious red grape varieties, namely Pinot Noir and Pinot Meunier, they are whites.

The number of days of skin contact determines the colour extraction. Rosé wines are given a shorter period of skin



The only International Wine Judge from Singapore in the Concorso Enologico Internazionale 2015 in Italy

contact. Rosé Champagnes however are different. Red wine is added to the blend to give it that characteristic copper, rose or salmon colour. This is permitted in the AOC (Appellation d’Origine Contrôlée) Champagne region.

So yes. With that, we have merely scratched the surface of the wonderful world of wine. A simple start to a new column in *The Dental Surgeon*. More next time.

For now, *Zum Wohl* (a traditional German toast to health)! Have a Merry Christmas, crack open a bottle of Champagne, Cava, Sekt or Prosecco (sparkling wines) and enjoy. 🍷

Dr. Michael Lim is The Travelling Gourmet™ Travel, Food & Wine Writer/Editor/Educator extraordinaire.

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The New Volvo XC90

BY DR. KEVIN CO

Some observers were worried that when the Chinese-owned Geely motors took over Volvo from Ford it was going to be a disaster. However to the tune of 11 billion dollars, the injection of cash for development of a better product was certainly a good thing when it comes to acquisitions.

The sheer number of older model Volvo XC90 cars on the roads of Singapore attests to how popular the older make was. Does the new model have what it takes to retain that fan-base? What is the appeal?

Technically the XC90 is an SUV that is also an MPV. This car possibly has everything that most families want: 7 seats that can fit adults comfortably, child-seats that are easy to install, loads of new safety features and definitely the ease of driving. Its simple off-road capability is valuable for a road trip up north and the occasional ponding in Singapore as well as giving it astounding road presence. Add to that, everyone knows that Volvos are built like tanks.

Volvo has had to be really careful when they went about making the entirely new XC90. For the past decade, the old recipe had been a resounding success. The new XC90 therefore had to mark the beginning of a new chapter in Volvo's history, encapsulating its future design direction and incorporating its own range of new technologies.

Let's break it down.

Appearance

Gone are the boxy looking headlights. The new T-shaped "Thor's Hammer" DRL lights put together with chrome

grilles give a more polished look, and the whole front end of the car looks sporty and handsome. It is the first Volvo to carry the company's new, more prominent iron mark; the iconic arrow elegantly aligned with the diagonal slashes across the grille, introducing an entirely new, distinctive and confident face for Volvo's forthcoming generation of cars. The 20-inch rims fit perfectly with the look of the car; any smaller and they will not look proportionate. Yet the ride heights (like all SUVs) are higher than any MPV. Overall though, the lines of the car are more streamlined and sexier.

Interior

Volvo practically placed an iPad in the centre console. A new digital touch screen replaces clunky buttons, no more analogue speedometers, odometers... basically, no more analogue. Yes. The instrument cluster is a digital screen - in fact, even climate control on the second row is touch screen technology. Volvo's CleanZone air purification system, one of the most efficient on the market, has been further improved by adding a new carbon filter for more efficient capture of small, harmful particles and pollen in the incoming air, particularly useful in the current haze situation.

Other new technologies to boast about include built-in world-first Run-off Road Protection and Auto-braking at intersections. A sensor that automatically unlocks the boot when you wave your foot under the car is a great idea if you are carrying too much to reach for your key.

What is the downside? The reliability of the digital inter-

face is dependant on an onboard computer, thus its worth can only be proven in a few years.

The finishing of the materials in the car is much better than the old version. The quality wood finish and the double stitched leather are details that buyers would want to look out for. Finally, its third row seats are spacious enough for adults, making it a genuine 7-seater; too many other MPV's seem to come with third row seats that are unfortunately only big enough for children or pets.

Performance

The new Volvo XC90 comes with two engine options. The first is a T6 petrol 2-litre engine with supercharger and turbo with 320 bhp and a maximum torque of 400 Nm. The second, a D5 twin turbo diesel 2-litre engine with 225 bhp, 470 Nm of torque boasting efficiency and economy in its class with fuel consumption of 5.7l/100 km.

These engines are less thirsty than the previous version, especially so with the diesel variant. That said, the petrol engine will still sell better due to the less intrusive engine noise.

The drive is smooth and not that exciting but that is what we expect of a family car. The steering is really light, some will love it, and some will hate it - but nothing that we cannot get used to. Overall, visibility is better than the older version of the XC90.

Final say

This model is definitely one of the best 7-seaters in the market. Price wise however, it is not as competitive as its predecessor. With a listed price of \$330k, it may take a longer time to see a significant number of new XC90s on the roads. Or are Volvo fans already bought? 🙄



Dr. Kevin Co is a full-time private practitioner at his clinic TLC Dental Centre. Cars remain his lifelong passion.

“Fireworks to dazzle - a fitting tribute to SG50”

A Touch of Red for SG50

PHOTOGRAPHS BY DR. CHUA EE KIAM



The *Dental Surgeon* is delighted to showcase these stunning photographs, contributed by Dr. Chua Ee Kiam.

The first picture is a vivid impression of Singapore’s 50th National Day Parade on 9th August 2015, set against the backdrop of the nation’s iconic skyline. With these red bursts of fireworks, it encapsulates the spirit of Singapore’s pride and prog-

ress after half a century of independence.

No less important, the second and third pictures provide us with a rare glimpse of the delicate and beautiful wildlife that still inhabit our small island. It is heartening that in the midst of such progress and change, efforts to preserve the natural ecosystems of our island have borne fruit, allowing future generations to enjoy its nature and biodiversity.

For those who wish to see more, Dr. Chua is the winner of the following photo awards:

1. “City in a Garden” Photo Competition 2012 – **Grand Prize winner (+ trip to Burkina Faso)**
2. Nikon / Fox Channel Photo Competition 2013 – **First Prize Winner (+ trip to Galapagos)**

He has also written 7 books, 4 of which are award-winners:

1. Nature in Singapore – Ours to Protect (1993)
National Development Book Council Award, 1994
2. Pulau Ubin – Ours to Treasure (2000)
3. Chek Jawa – Discovering Singapore’s Biodiversity (2002)

4. Borneo’s Tropical Eden – Sabah (2004)
Honorable Mention (Independent Publishers), 2005
5. Singapore’s Splendour – Life on the Edge (2007),
Gold (Living Now Evergreen Medals, 2015)
6. Wetlands in a City – Sungei Buloh Wetlands Reserve (2010)

7. Rainforest in a City (2015)
**Bronze (Independent Publishers ‘Environment/Ecology/Nature’, 2015);
Honorable Mention (Green Book Festival ‘General Non-Fiction’), 2015**

A new coffee-table book on Pulau Ubin has been planned for release in 2016.



“Thirteen is my lucky number. This Black and Scarlet Cicada (*Huechys sanguinea*) is found in the Central Catchment Nature Reserve and Pulau Ubin. It took just 10 minutes for the nymph to emerge from its shell and transform into an adult.”



“This Common Flameback Woodpecker was once common. It is always a delight to spot - its vivid colours sums up its beauty.”

Dr. Chua Ee Kiam is a Senior Consultant Prosthodontist with the National Dental Centre and Clinical Associate Professor with NUH. He has special interest in Temporomandibular Disorders. His full-time work consumes him but he still finds time to excel in his favourite past-time – nature photography, where he finds meaning in sharing with others what he sees.

He has always been concerned about the constant degradation and devastation of the rainforests and coral reefs in the region. He would like to share his vision of a better tomorrow by highlighting the beauty of Singapore’s natural heritage.

Dr. Chua is also active in community work, often donating the proceeds of the sales of his books to charities, and supporting fund-raising activities by putting his prize-winning photography up for auction.



What Is Your Fitness Motivation?

BY SAMUEL PHUA AND PEARLY NG



How many of us have had the experience of saying to ourselves, ‘the time is now. I have it in me and I’m going to start working out.’

The momentary motivation, often a result of looking oneself square in the mirror, kick-starts a cascade of emotions: guilt, vanity, pride - whatever gets us going. We find ourselves in a gym, buy a membership package and in a few weeks, the steam is lost. What was once every two days becomes once a week, then once in two weeks, and then... well, that’s just too depressing to even think about.

Perhaps we missed out on answering a fundamental set of questions before we bought that gym package. Considering that there are a variety of gym packages for a whole

range of classes and activities in any one gym, have we thought it through from the perspective of what motivates us rather than what we think we need? Or worse, what we were told we might need?

All of us appreciate the necessity of exercise. And rather than letting fear drive that movement towards the gym, would it not make more sense for us to go because we want to? Looking forward to exercise. Well, let us all be honest here, how many of us really look forward? Is dread a more accurate word?

It does not take a degree in psychology to know that we respond more emphatically to the positive than the negative. So rather than forcing ourselves to the gym, creating

in ourselves a real desire to workout may be the better way to a healthier lifestyle.

Take a moment to answer these questions. See what it tells you of your personality. And then use that to decide on the next gym package you buy.

1. I’m motivated to do something when:

- A) I want to achieve the best amongst my peers
- B) I made specific goals and I feel a sense of accomplishment when I achieve them
- C) Knowing that I will have a fun time doing it
- D) I know that I need a distraction from my daily stress

2. What is the most exciting thing about working out?

- A) Seeing my body changing and looking better than before!
- B) Getting one step closer to achieving the goals I set for myself
- C) I know that I’ll have a good time working up a sweat!
- D) Having a reason to leave work and focus on the task in front of me instead of my piling responsibilities

3. What is usually on your mind during your free time?

- A) I think about how to improve myself and become better at something I’m currently working on.
- B) I’m going through in my mind to ensure everything is going according to my plan
- C) The next fun activity that I would like to get into
- D) I have too many things on my plate and I’m stressing about my work/ upcoming chores

4. I’ll skip the gym when:

- A) I feel I need to rest my body so that the next time I will do even better
- B) Obligations get in the way, but I always reschedule a replacement workout for the one I missed
- C) I think I’m not going to have much fun and I’m going to be bored
- D) I have too many things on my plate and forgot all about the workout

5. When someone brings up the topic of fitness, I:

- A) Enthusiastically tell them all about my achievements and progress so far

- B) I listen to what they say and if their suggestions benefit my programme I will incorporate it into my plan
- C) I tell them all about the latest fun activity I’ve tried and tell them how it made me feel
- D) I barely pay attention to the conversation while thinking about my upcoming work project

6. I’ll quit working out/following a fitness programme if:

- A) I feel I am not doing as well as others and not progressing fast enough
- B) I usually follow through with the programme unless I’ve passed the timeline. Then I’ll seek professional advice and make the necessary changes
- C) I find it is no longer fun and I’m getting bored
- D) I no longer find it easy to have time for it

7. My relationship with a treadmill machine, if I have one at home, would be:

- A) I use it once in a while and each time taking note to see if I’ve done better than the last time.
- B) I use the treadmill according to my cardio needs based on my fitness plans
- C) I tried it but it was just too boring! It’s now just collecting dust at home
- D) I’m just too tired after a long day at work to even remember its existence

So what personality category do you fall into? Look below and see which form of personal training suits you. Consider this before diving into a new gym package. With this in mind, no longer will you find yourself “wasting away” that gym package, when the money could be better spent on something else. But above all, with a little more thoughtfulness, you will find yourself actually sticking to a gym regime and living that healthy lifestyle you may have been putting off for the longest time.

Mostly As:

You are The Challenger!

You are mostly self-motivated and you don’t really need classes. A workout plan, maybe even one off the internet may be all you will require. You will stick to it and you look forward to seeing the results. A personal trainer benefits you by helping you pick out on areas you have neglected in the regime and advises on a more holistic



exercise plan. His/her role is to keep you in the loop of your progress, reviewing with you and fine tuning that workout programme. You prefer it most for someone who gives a bit of personal space while in training and who simply keeps watch, correcting and intervening only when necessary.

Mostly Bs:

You are The Worker!

You are largely self-motivated. Having a fixed personal trainer who constantly gives feedback, makes minor changes to the workout plan and who keeps tabs on your progress will bring you to new heights in your training. Your regime, if fixed and consistent, gives you reassurance and a means of consistent monitoring of your progress. You thrive on that.

Mostly Cs:

You are the Free Spirit!

You are outgoing and a small group class will suit you best. Small group because you will make friends who would be the draw factor to actually go down for the workout session. What is important for you is also variety in the workout, with your trainer modifying the workout regime regularly and including games that keep you interested.

Mostly Ds:

You are the Busy Bee!

The overloaded lifestyle of yours is what needs to be moderated. You might even question if adding a gym session in that tight schedule of yours is too much of a luxury. It takes low priority in your list of to-dos. What helps is a 3-person personal training session: a trainer who works with just you and your colleague/friend/partner. Training with a partner and a personal trainer to guide both persons along makes it as effective as having an individual personal trainer. Having a friend to bring you down to the gym motivates you to have consistency. 

Samuel and Pearly are a husband and wife team who own The System Gym (<http://www.thesystemgym.com/>). Both of them are trained in Muay Thai and continue to participate in regional competitions. The System Gym is a boutique gym that offers its members a private and cozy environment for an enjoyable and effective workout. Sammy and Pearly are highly qualified, experienced and creative to ensure their members' workouts are efficient, personalized and fun.



“Good dental habits are best initiated at a young age and that is exactly what the School Dental Service is doing. We hope to improve oral health which will, in turn, help to lower healthcare costs.”

- Dr Emilia Yim
Dental Surgeon, School Dental Service

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*Hamlin D, Williams KP, Delgado E, et al. *AM J Dent.* 2009;22(Spec No A):16A-20A

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