The training of surgeons composed of two aspects:
1. Clinical skill and competence
2. The ‘soft’ skill and ‘art’ of surgery

With the gradual introduction of residency programme into the surgical discipline, hopefully our clinical training will be more systematic, closely supervised, monitored, assessed and reassessed, and structured.

We have excellent programme directors and trainers, and the challenge is for us to transform these visions into reality. I have just two requests to make to these people in-charge:

1. Remember the words of Dr Ong Siew Chey, (the 3rd College of Surgeons Lecturer), in his lecture on “Bringing up Surgeons” - “clinical competence with good insight can only come from close and ample exposure to clinical medicine known as PATIENTS……. The importance of DISCIPLINE cannot be overemphasised……” Prof Raj Nambiar in the 4th College of Surgeons Lecture and Prof Abu Rauff in his University lecture had repeatedly stressed these points. (Those are words of wisdom).

2. I would appeal to the Committees to think of measures and concrete ways of making use of talents and experience from the private sector. I hope to see the link between public and private sectors blurred. In the sharing of knowledge, there are no boundaries, in search of expertise, there is no border. Someday I hope to see Mount Elizabeth, Mount Alvernia, Gleneagles, Raffles Medical Centre, etc as faculty centres, the flow of knowledge must be seamless. (Singapore is a small country, we need to gather all resources – not just lip service but active participation).

In the next 25 minutes, I hope to spend some time on the other aspect of training – the molding of the Art and soft skills of surgical training. Aspects like, professionalism, ethical principles, communication skill, compassion, etc.

In William Osler’s words – “Practice of medicine is an art, based on science…understanding science of practice, upholding the art of healing.”

I learnt my lesson when I was a young surgeon. One day, I had to do a mutilating operation on a lady. I explained the procedure and its possible complications to her. When I proceeded to discuss with her life after radical mastectomy, she turned to me and said “its ok, I have read all about it.” So I went home. Next morning before surgery, I told Sister Thangaraju – “this patient is well rehabilatated before I start.” Sister turned to me and said – “Mr Low, you are wrong.. absolutely wrong…last night she was crying…” what will happen after surgery – is there life after mastectomy? What will my husband say…can I do sports again..what about my social life,’ etc.” I had to sit by her side for 30 minutes and held her hand. I realised how inadequate I was – I realised “Surgery is far beyond the scalpel.”

“The art of surgery is difficult to define and learn, challenging to teach, but absolutely essential to practice.”

What are the “Pillars of the Art of Surgery”?

Firstly, let us not forget that “surgical practice must always be patient-centred.” Let us never forget that it is Mr Adam in bed 3 and Mrs Patch in bed 5 – not the ‘gallstones’ and ‘thyroid’ in beds 1 and 2.

Once, a lecturer told me this incident of the story when his immediate relative was warded. He waited for half an hour for the doctor to come. When the team came by, they had with them a Computer on Wheels (C.O.W.). They said ‘Hi’ and talk among themselves, looked at the computer and then just moved on. They hardly examined or talked to the patient. The lecturer’s relative asked “is this the way you train your doctors – just to look at computers?” Technologies are necessary, computers are useful and has made medical advancement. But remember we must be master of technologies and not its slave. “Do not forget the patient, for whom the C.O.W. was pushed.”

Last week, I met a patient who said to the doctors “you doctors just look at the ‘screens’ and forget to examine my painful arm.” Lewis Thomas as early as 1990s reminded us – “we must be master of modern technology and not its slave.” Doctoring is not training to look at machines – we need to return to the caring of sick people.

Training in surgical skill and competence development is most important, but decision-making is an art. There is a saying –

“A good surgeon is one who knows HOW to operate. A better surgeon is one who knows WHEN to operate.
The best surgeon is one who knows WHEN NOT to operate.”

Many years ago, I was attached to overseas well-known cancer centres. I saw some of the most brilliant surgery. However, I also saw a few ‘dramatic’ surgeries which were rather controversial. Debulking 'toilet' mastectomy is useful, and improved quality of life. But sometimes extensive mutilating surgery can have terrible deformity with residual tumor. (This is more debatable). I have occasion to “look” into the pharynx, and no more neck, etc. Sometimes I asked myself to “what purpose”. There is no right or wrong – the surgeon has only his belief and conscience to guide him. To me as a rough guide, a surgery must give a patient at least 3 to 6 months of good quality life, otherwise it is debatable.

Surgery is “not a challenge to our ego” – first, let us always remember it is patient’s well-being first. “It is not just the longevity of existence but the quality of living”, and let us also remember that surgeons must be careful when they take the knife - “underneath the scalpel stir the culprit called life.”

The next challenge in “the Art of Surgery” is how to keep “professionalism, integrity, ethical principles alive in the challenging world of business.” “There is nothing wrong in wanting to make money – but how you make it is important.” Even in public hospitals, we always need to look at financial bottom line. I recalled many years ago, we wanted to train and setup a cancer follow-up rehabilitation service (such as stoma club, mastectomy, etc). The medical board approved. We went to see the Chief Financial Officer and the first question he asked was “can we make money?” My answer was “of course not.” I did not blame him. We need to look beyond the obvious. If your support services are good, and your medical care is holistic and compassionate, more patients will come and indirectly, you improve your service and reputation and more patients will come. In the ‘dollars and sense’, do not forget the ‘sense’ in the ‘dollar’.

“Compassion” is an essential quality in the art of surgery. Wikipedia Dictionary defines “Compassion is a profound human emotion prompted by the pain of others. More rigorous than empathy – the feeling, commonly give rise to “an active desire to alleviate another’s suffering.”

I learnt my lesson on “compassion” when I was a 3rd year medical student. Our first day at Orthopaedic ward, we were proud of ourselves wearing overall and stethoscope. When we went to the ward, Prof Donald Gunn left a note for us ‘go and examine the patient in bed 21 and I will see you all 15 minutes later.’ When we went to the bed, there was this patient – whose age must be 7 or 8 but looked 2 to 3. The face was flattened, the eyes were at the corner, the bones were all crooked and deformed. I am totally ashamed to say I was frightened and did not know where to begin. We were all stunned. A while later, Prof Gunn came in and said “good morning!”, then he lifted the child and gave him a ‘peck’ on the cheek, and the child ‘smiled’ – a distorted smile. Here was a child so lack of love and care that he was so happy to be carried. At that moment, I felt totally utterly ashamed of myself. I told myself that there was something wrong with me - how can I be a doctor! That afternoon, I purposely went back to the patient and then with bold courage, I held up the child to overcome my own fear. The child smiled – a distorted, but beautiful smile. He was so lack of affection and he needs love. I have forgotten all about ‘Aperts Syndrome’ but I remember my lesson of “compassion” from a giant of a man, Prof Gunn.

About 3 to 4 years ago, I spent a few weeks in the mountains of Kalimanjaro with a hospital 5000 feet up the mountains. It is run by a group of nurses who called themselves the “Ladies of Mount Kalimanjaro”. I was totally inspired by the medical officer assistants and nurses with their total dedication and commitment. They reminded me of the spirit of ‘Florence Nightingale’ and ‘Dr Albert Schwizer’. Often there were nights without electricity except for an emergency generator for the OT. I have never had so many candlelight dinners in my life. I learned the meaning. “Better to light a candle than curse the darkness.” “Years of clinical practice can harden our heart muscles and numbed our souls. We need to lubricate with the milk of compassion.”

The next pillar of “Art of Surgery” is ‘Patience and Humility’. “These are bitter plants that taste sweet.”

We must never stop learning. Aristotle said “retention of knowledge is only five years.” We need to be humble to learn all the time not only from our seniors, colleagues, but from the juniors, the doctors, the healthcare workers, and our patients. As I grow older, I realised I need to learn more and more.

When my patients are badly traumatised – I look for Dr Chiu Ming Terk and Dr Vijayan. On more than one occasion, I seek the help of Dr Ho CK, Dr Chew SP and Dr Liau KH. Prof Walter Tan has just given me a very good lesson on how to interact and care for patient better. The nurses had taught me the meaning of total holistic care. The health attendants can manage OT lights and tables better than me and many patients had taught me a good lesson on how to manage them better. Yes, we need to learn from everybody.

Emerson puts it “every man that I meet is my superior in some ways. In that I learn of him.” Let us remember that every time we succeed, there are people who helped us – our family, colleagues, nurses, juniors, etc – we need each other’s help. There is no harm in saying “I need your help.”

Hospitals and departments must be prepared to help each other. With the introduction of residency programme, the ownership is more institution-based.
However, I hope to see the maintenance of cross hospital exposure. We have locally top expertise in different hospitals. Let us capitalise on this and help each other. Part of the Healthcare Manpower Development Programme (HMDP) training can be achieved locally.

(I remember many years ago when we wanted to start urological service at TTSH, I went to Prof Foo Keong Tatt of SGH for help. He was so kind and so helpful. Not only did he facilitate and guided us on how to start the service appropriately but he also provided the logistic support and expertise from SGH to help TTSH. We had wonderful trainees, among them are Chia Sing Joo, David Consigliere, Heng Ching Tiong, James Tan, Toh KL, etc who became excellent surgeons themselves).

The surgeons at NUH like Profs EC Tan, Tung, E Kesavan and MK Li also helped to train the young doctors from TTSH. There was a great amount of cross hospital training and co-operation. Urological service is an excellent example of this co-operation and collaboration.

Orthopedic community is another example of great inter hospital fertilisation and there are now many disciplines with these close collaborations- ENT, EYE, etc.

I hope to see this spirit continues. Indeed, I hope to see the day that even our trainees can be attached to the experts in private practice for short periods of time. Knowledge and training has no border. Singapore is small. Let us seriously co-operate and make learning borderless.

Communication skill is very important in the “Art of Surgery”. It can never be overemphasised. We need to listen with empathy. We need to respect everyone. We need to be courteous. Good communication – verbal, written, interactive, etc – will help to reduce complaints and litigation. I am learning all the time and still learning. I make mistakes and I need to continue learning. I also remind the young doctors when they talk in the lifts and canteen – the public can hear and may misinterpret what they are discussing (the walls have ears and do hear.)

Somebody once said “no man is an island”. I would like to add “we are all islands” – islands of ignorance separated by seas of misunderstanding! We are all given stones – we can build ‘walls’ or ‘bridges’ – the choice is ours. As healthcare workers, we must be the lighthouse that helps to build bridges across those islands of misunderstanding.

We all need to recognise that each one has different strength and learn to focus on the strength and bring out the best of each. ‘The woods could be silent if no birds sing except those who sing best.’

The last pillar, as surgeons, like all people, must have a balanced life. Steven Covey said that the four important aspects of balanced living are:

1. Physically
2. Mentally
3. Socially
4. Spiritually

(Do Chew Chin Hin in his address to the Academy of Medicine, Singapore on 27 October 2010 stressed the importance of living a balance life including family and loved ones.)

These are the four spokes of the wheel of life. How we want to lead our surgical life depends on each of us – the choice is ours. Steven Covey said between ‘stimulus to response’ is a space. That space is ‘the freedom to choose’. How do you want to live a balanced surgical life – far beyond the scalpels.

In our midst, we have many role models who live a well balanced life:

1. Prof Nambiar – he still exercises and runs 3 times a week. His other hobby is painting. He has a room of collections of his talent. (Someday he will hold a charity show).
2. Prof N K Yong – whose life of surgery is far reaching. His expertise in wine is legendary.
3. Prof S C Ong – who is not only great surgeon but also a literary and cultural expert.
4. Prof K T Foo – Besides being an excellent surgeon, he is so fatherly, calm and peaceful. I have learnt a lot from him. Few people know he is a good artist as well.
5. Dr E C Tan – another role model who is calm, steady and kind. We can emulate from him.
6. Prof Abu Rauff – whose hobby keeps him going. He is a total complete surgeon.
7. Prof Y P Low – who has faced personal challenge, and today he does charity work, collecting alms and giving spiritual food.
8. Dr Swaminathan I and Prof S J Chia – they can outrun many a 20-year old.
9. Profs Kenneth Mak, London L Ooi, Soo KC – they are so good with multitasking, and I wonder where and how they get 26 hours a day.

All these people have proved there is much more life beyond the scalpsels. They made each day count. They are “super” in time management. They practice their lives with the “Art of Surgery.”

Hippocrates puts it – “life is short. ART (medicine) is long. The occasion fleeting, experience fallacious, and judgement difficult.”

So, let us practice surgery not only with competence and skill – but also with a caring heart (the heart of medical education is the education of the heart). Let us never forget the importance of compassion, patience, humility, communication skills, etc. Let us never forget the pillars of the “Art of Surgery” and remember at the centre of it all is our PATIENT – the most important factor. (Service to the patient is ‘our motto and our will’.)
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